

Mr Daniel H. Finch Moray Offshore Windfarm (West) Limited C/O Shepherd And Wedderburn Llp Condor House 10 St. Paul's Churchyard London EC4M 8AL

Our Reference: 012/OW/MORLW - 8

14 June 2019

Dear Mr Finch

#### MARINE AND COASTAL ACCESS ACT 2009

THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2007 (AS AMENDED)

DECISION NOTICE FOR A MARINE LICENCE TO CONSTRUCT, ALTER OR IMPROVE ANY WORKS AND DEPOSIT ANY SUBSTANCE OR OBJECT IN THE UK MARINE LICENSING AREA FOR THE MORAY WEST OFFSHORE WIND FARM, APPROXIMATELY 22.5KM SOUTHEAST FROM THE CAITHNESS COASTLINE

# 1 Application and description of the Works

- 1.1 On 5 July 2018, Moray Offshore Windfarm (West) Ltd (Company Number 10515140) having its registered office at Condor House, 10 St. Paul's Churchyard, London EC4M 8AL ("Moray West" or "the Applicant"), submitted to the Scottish Ministers application under Part 4 of the Marine Coastal and Access Act 2009 ("the 2009 Act") for a marine licence ("the OWF Marine Licence"), to construct and operate the marine renewable works ("the Works") associated with the proposed Moray West Offshore Wind Farm ("the Project").
- The Application was accompanied by an Environmental Impact Assessment Report ("EIA Report") as required under the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) ("the 2007 MW regulations") and a Habitats Regulations Appraisal ("HRA in the form of a Report to Inform the Appropriate Assessment ("RIAA") as required under the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended) and

the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) (collectively referred to as "the Habitats Regulations"). An addendum of additional information ("EIA Addendum Report") concerning ornithology and seascape and landscape visual impacts was submitted by the Applicant on 23 November 2018. A Population Viability Analysis Report ("PVA Report") to amend and update the RIAA was submitted on 31 August 2018. On 18 March 2019, the Applicant also submitted an "Information to Inform HRA – Great Black-Backed Gull" Report ("GBBG Report"). The EIA Addendum Report, PVA Report and the GBBG Report are also referred to as part of the Application.

- 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 works ("the OfTI Marine Licence) associated with the Project. 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. Separate decision notices will be issued in respect of these applications.
- 1.4 The Scottish Ministers carried out four consultation exercises:
  - 1) A consultation on the Application ("the Original Consultation");
  - 2) A consultation on the PVA Report; this consultation was carried out at the same time as the Original Consultation. Responses were included within the Original Consultation. Therefore the PVA consultation is considered part of the Original Consultation;
  - 3) A consultation on the EIA Addendum Report ("the EIA Addendum Consultation"); and
  - 4) A consultation on the GBBG Report ("the GBBG Report Consultation").
- 1.5 The Works comprise of the construction and operation of an offshore energy generating station, within a maximum generating capacity of around 850 megawatts ("MW"). The offshore generating station shall comprise either:
  - 1. No more than 85 three-bladed horizontal axis Wind Turbine Generators ("WTG") each with:
    - a. a maximum rotor tip height of 230 metres (measured from Highest Astronomical Tide ("HAT"));
    - b. a maximum rotor diameter of 195 metres;
    - c. a maximum hub height of 132.5 metres (measured from HAT);
    - d. a minimum blade tip clearance of 35 metres (measured from HAT):
    - e. blade width of up to 6 metres; and

f. a minimum spacing of 1,050 metres crosswind and 1,200 metres downwind.

or

If the rotor tip height of the WTGs exceeds 230 metres (measured from HAT), no more than 72 WTGs each with:

- a. a maximum rotor tip height of 265 metres (measured from HAT);
- b. a maximum rotor diameter of 230 metres;
- c. a maximum hub height of 150 metres (measured from HAT);
- d. a minimum blade tip clearance of 35 metres (measured from HAT);
- e. blade width of up to 6 metres; and
- f. a minimum spacing of 1,050 metres crosswind and 1,200 metres downwind:
- 2. No more than 275km of inter-array cable;
- 3. Monitoring equipment, such as metocean buoys;
- 4. Up to 85 foundations and substructures, and associated fixtures, fittings and protections;
- 5. Scour and inter-array cable protection;
- 6. The design of the WTG substructure will be chosen from the following options:
  - i. Gravity base;
  - ii. Monopile;
  - iii. Jacket Foundation;
  - iv. Suction Caisson;

All as described in the Application.

1.6 The total area within the Moray West Offshore Wind Farm ("the Works"), site boundary is 225km². The location and boundary of the Works site is shown in Figure 1.

This decision notice contains the Scottish Ministers' decision to grant consent for the Works detailed above, in accordance with regulation 23 and 24 of the 2007 MW regulations.

## 2 Summary of environmental information

- 2.1 The environmental information provided was:
  - An <u>EIA Report</u> that provided an assessment of the impact on a range of receptors;
  - A RIAA;
  - A PVA Report to amend the conclusions of the RIAA;
  - An <u>EIA Addendum Report</u> as a result of the responses from Scottish Natural Heritage ("SNH") and the Royal Society for the Protection of Birds Scotland ("RSPB Scotland"), received through the Original Consultation; and
  - A <u>GBBG Report</u> as a result of the responses from SNH, in relation to great black-backed gull ("GBBG"), received through the EIA Addendum Consultation.
- 2.2 In May 2016, the Applicant submitted a <u>scoping report</u> and a request for a scoping opinion in respect of the Works to the Scottish Ministers. Following consultation with statutory and other consultees, a <u>scoping opinion</u> was issued by Scottish Ministers on 15 August 2016, advising on the scope of the impacts to be addressed and the methods of assessment to be used within the EIA Report.
- 2.3 The EIA Report and the EIA Addendum Report assessed the impact pathways identified in the scoping opinion and were prepared in accordance with the terms of the 2007 MW Regulations. As the request for a scoping opinion was made before 16 May 2017, the transitional arrangements within Part 12 of the 2007 MW regulations applied.
- 2.4 A summary of the environmental information provided in the EIA Report and the EIA Addendum Report is given below.
- 2.5 <u>Physical Processes and Water Quality</u>
- 2.5.1 Impacts on receptors, and the associated pathways, during construction, operation and decommissioning phases were assessed. Impacts scoped into the EIA Report were increases in Suspended Sediment Concentration ("SSC") and deposition of disturbed sediments to the seabed; jack-up vessel footprints on the seabed; impacts to designated marine and coastal geomorphological features; impacts to recreational surfing venues; impacts to the Smith Bank; and changes to water quality due to chemical release and contaminated sediments.
- 2.5.2 Changes to water quality due to sediment disturbance were required to be scoped in by the Scottish Ministers only if the Offshore Export Cable ("OEC")

corridor would make landfall at Cullen Bay. The Applicant did not choose this location for the Works landfall, therefore changes to water quality to sediment disturbance were scoped out of the EIA Report.

2.5.3 All impacts assessed in respect of effects of the Works on physical processes and water quality alone and in-combination with the Moray East Offshore Wind Farm and the Beatrice Offshore Wind Farm ("the Moray Firth Developments") were considered to be of negligible or minor significance in the EIA Report. Changes to pathways were not considered to result in impacts on marine processes or receptors.

## 2.6 Benthic and Intertidal Ecology

- 2.6.1 Using information gathered during geophysical, benthic and intertidal surveys, the likely significant effects on benthic and intertidal ecology of the construction, operation and maintenance and decommissioning phases of the Works and OfTI were assessed in the EIA Report. As requested by SNH and Joint Nature Conservation Committee ("JNCC") during scoping, biotope and habitat mapping were included within the EIA Report and this was used to inform the initial wind farm layout.
- 2.6.2 With embedded mitigation, the EIA Report concluded that effects on the benthic and intertidal habitats from the Works were, at worst, of minor adverse significance during construction, operation and decommissioning. Stated embedded mitigation includes avoidance of sensitive benthic habitats/species and species/habitats of conservation importance during construction, with this managed through post consent surveys and plans.
- 2.6.3 The EIA Report also considered the cumulative impact of long term habitat loss from the Works in combination with the Moray Firth Developments and concluded that the cumulative effect of habitat loss caused by these Works is considered to be negligible and therefore not significant in EIA terms. The cumulative effects of scouring of benthic habitats at foundations and around cables was also assessed and concluded to be of negligible to minor significance and therefore not significant in EIA terms.
- 2.6.4 The OEC corridor traverses through the Southern Trench proposed Marine Protected Area ("pMPA") and includes the proposed qualifying features: Seapens and burrowing megafauna in circalittoral fine mud (burrowing mud). Potential impacts upon this biotope may therefore occur as a result of the cable laying, and cable operation and maintenance. Within the EIA Report, the effects on this biotope have been assessed as not significant in terms of EIA. A HRA for benthic habitats associated with the Moray Firth Special Area of Conservation ("SAC") and its qualifying feature of subtidal sandbanks has been undertaken as a separate exercise, within the RIAA.

## 2.7 <u>Fish and Shellfish ecology</u>

- 2.7.1 The following impacts for all phases of the Works (construction, operation and maintenance and decommissioning) were depicted in the EIA Report chapter on fish and shellfish ecology: temporary and long term habitat loss, noise and vibration, increased suspended sediment concentration/deposition, accidental release of hydrocarbons and chemicals from infrastructure installation processes or from vessels, creation of new substrate and habitat, Electro Magnetic Field ("EMF"), seabed sediment heating from subsea cables, removal of structures and hard substrates.
- 2.7.2 For the Works alone, the aforementioned impacts were deemed to be not significant in EIA terms. Similarly, given that there is limited potential for any overlap in construction periods within the Moray Firth Developments, the cumulative impacts were assessed to be not significant.
- 2.7.3 The EIA Addendum Report did not identify any additional significant impacts on fish and shellfish as result of the change of boundaries request.

### 2.8 Marine Mammals

- 2.8.1 In relation to the potential impacts on marine mammals, the following were scoped out of the EIA Report: toxic contamination; disturbance leading to long-term avoidance as a result of operational noise; and stranding due to EMF. The impacts assessed were underwater noise during construction and decommissioning; collision risk from vessels; and reduction in foraging and prey availability during all phases of the Works. The species subject to the study were harbour seal, grey seal, bottlenose dolphins, harbour porpoises and minke whales.
- 2.8.2 The Applicant committed to a range of mitigation measures in the EIA Report to reduce the effects on marine mammals, including the implementation of a Vessel Management Plan ("VMP") to ensure avoidance of high risk areas and a Piling Strategy ("PS") that will incorporate a Marine Mammal Mitigation Plan.
- 2.8.3 The specific effects of the Works were predicted to be not significant on any marine mammal species in terms of the EIA Regulations. No significant effects were predicted for any marine mammal species as a result of the cumulative impact assessment.
- 2.8.4 The EIA Report also considered the impacts of the Works on minke whales. The baseline provided in the EIA Report on marine mammals concludes that higher densities of minke whales have been recorded in the Southern Trench possible Marine Protected Area ("pMPA"), particularly in the summer months. The EIA Report concludes that overall the impacts of the Works on minke whales are not significant in EIA terms.

- 2.8.5 For the Works alone, the RIAA predicted no significant effects on any marine mammal species. The cumulative impacts were also assessed to be not significant.
- 2.8.6 The EIA Addendum Report did not identify any additional impacts on marine mammals as a result of the change of boundaries request. The conclusion of the EIA Report of no significant impacts on marine mammals was still valid.

## 2.9 <u>Ornithology</u>

- 2.9.1 The EIA Report assessed the impacts on ornithology receptors during the construction, operation and maintenance and decommissioning phases of the Works. Effects from the Works in isolation were reported to be of negligible or minor significance. These included impacts from disturbance and displacement, barrier, collision, attraction to lit structures and pollution. No additional mitigation measures beyond the embedded mitigation, were proposed. Impacts during the decommissioning phase of the Works were assessed to be similar or identical to those during the construction phase.
- 2.9.2 The Applicant committed to mitigation measures within the EIA Report to reduce the effects on ornithological receptors including an appropriate EMP and a Marine Pollution Contingency Plan ("MPCP"), a VMP, installation of appropriate lighting on wind farm structures, and a minimum wind turbine height of 35 metres above HAT. Cumulative impacts on disturbance and displacement were considered to be of only minor adverse significance.
- 2.9.3 Cumulative assessment of collision impacts were assessed in combination with the Moray Firth Developments during the breeding season. In addition cumulative impacts were assessed in-combination with the Kincardine Floating Offshore Wind Farm and the Hywind Scotland Pilot Park Offshore Wind Farm. During the non-breeding season, impacts from additional Scottish and North Sea wind farm developments were also considered. The cumulative impacts due to collision with turbines, in both scenarios, were assessed as not significant.
- 2.9.4 The EIA Report concluded that that only minor adverse effects were predicted when considering the Works in-combination with other projects and activities. During the operational phase, cumulative impacts were considered not significant in EIA terms.
- 2.9.5 Within the EIA Addendum Report, the Applicant made a commitment to limit kittiwake collisions to no more that 53 through a reduction in turbine numbers or changes to other design parameters. The EIA Addendum Report did not identify any additional significant impacts on ornithology as a result of the change of boundaries request.
- 2.9.6 In addition to the EIA Report, the RIAA considered the impact of the Works on East Caithness Cliffs Special Protection Area ("SPA"), North Caithness Cliffs SPA, Buchan Ness to Collieston Coast SPA, Troup, Pennan and Lion's

Head SPA, Moray Firth SAC, Dornoch Firth and Morrich More SAC and Moray Firth proposed SPA ("pSPA"). The GBBG Report also considered the impact of collision mortality and the integrity of the East Caithness Cliffs SPA.

2.9.7 The RIAA and the GBBG Report, concluded that the Works would not adversely affect the integrity of these protected sites alone or in-combination with other plans or projects.

## 2.10 <u>Commercial Fisheries</u>

- 2.10.1 Impacts from the construction, operation, maintenance and decommissioning phases were considered within the EIA Report. The construction period is anticipated to last three years of which a period of six months is included for installation of the OEC.
- 2.10.2 Construction phase impacts considered the potential for temporary loss or restricted access to traditional fishing grounds for a range of fish resources, associated with the implementation of safety measures. Safety zones would be implemented around active areas of construction and construction vessels within the Works, along the OEC corridor, and around the installed or partially installed infrastructure prior to commissioning. Due to the temporary nature of the construction phase, impacts on fishing fleets, ranging from six months to three years, were considered to be not significant.
- 2.10.3 Potential operational phase impacts included those arising from the physical presence of the project infrastructure within the Works, leading to a reduction in access to, or exclusion from, established fishing grounds. Specific potential impacts were identified as collision or snag risks, additional steaming to alternative fishing grounds for vessels, and navigational conflict within fishing grounds, arising from changes to shipping routes and maintenance vessel traffic.
- 2.10.4 Permanent loss or restricted access to fishing grounds would may as a result of the presence of the OEC and with the exception of the safety zones around the infrastructure (50 metres) and maintenance works (500 metres). Fishing activity is not prohibited outside safety zones and vessels will have the option to steam throughout the Works site. Impacts during the operational phase were therefore assessed to be not significant and safety issues were assessed to be within acceptable limits where compliance with mitigation is in place. Displacement of fishing activity into other areas was assessed to be minor or negligible.
- 2.10.5 Decommissioning phase impacts were assessed to be the same as for the construction phase.
- 2.10.6 The cumulative impact assessment considered the impact of other relevant projects in the EIA Report:

Area	Project		
	Consented Moray East Offshore Ltd Eastern Works (Telford, Stevenson and MacColl offshore wind farms)		
Moray Firth	Under construction Beatrice Offshore Wind Ltd Wind Farm		
	Active Beatrice Oil Field		
	Consented Caithness Moray Interconnector High Voltage Direct Current cable		
Forth and Tay and wider area	Consented Inch Cape Offshore Wind Ltd Wind Farm (Revised Design)		
	Consented Neart na Gaoithe Offshore Wind Ltd Wind Farm Revised Design		
	Proposed Seagreen Wind Energy Ltd Phase I Wind Farm		
	Operational Aberdeen Offshore Wind Farm Ltd Wind Farm		
	Operational Hywind Scotland Demonstration WTG		
	Operational Kincardine Offshore Windfarm Ltd Floating Offshore Wind Farm		
	Consented Forthwind Ltd Wind Farm Demonstrator Project – Phase 1		
	Proposed Forthwind Ltd Wind Farm Demonstrator Project – Phase 2		
	Operational ORE Catapult Levenmouth Demonstration WTG		
	Consented Dounreay Tri Ltd Floating Wind Demonstration Project		
	Operational Blyth Offshore Wind Farm		
English Wind Farms	Under construction Blyth Offshore Wind Demonstration Project – Array 2		
	Operational Rampion Offshore Wind Farm		

As the same obligations for safety issues will apply to all developments, this was not considered as part of the assessment. Fishing may continue within traditional grounds as a result of the limited area lost during operation. A significant level of fishing activity currently occurs for the most part inshore, coinciding with locations of export cables for the majority of projects. Permanent loss or restricted access to traditional fishing grounds was

therefore found to be minor or negligible and therefore not significant in EIA terms.

## 2.11 <u>Shipping and Navigation</u>

- 2.11.1 The impacts of the Works on shipping and navigation receptors during the construction, operation and decommissioning phases were considered in the EIA Report. The impacts of the Works in isolation were found to be broadly acceptable for all vessels with the exception of oil and gas vessels which were found to be tolerable with mitigation, which includes vessel presence outside the buoyed construction area and the implementation of minimum safe passing distances. Diminishing emergency response resources were also considered within the operational phase due to the potential for an increase in incidents requiring deployment of Search and Rescue ("SAR"). However, the EIA Report concluded that the frequency of occurrence, in circumstances where there would not be emergency response capability, would be negligible and therefore not significant.
- 2.11.2 Cumulative construction and operation effects were considered alongside the Moray Firth Developments, with regards to increased vessel to vessel collision risk, vessel to structure allision risk, and anchor interaction and snagging with export and other cables and pipelines. The EIA Report concluded that the impacts were not significant. Mitigation to reduce vessel to vessel collision risks include the implementation of a VMP and Navigational Safety Plan ("NSP") to ensure that construction traffic does not interact with third party activity. Vessel displacement due to deviation around the Works was also considered within the operational phase. The EIA Report concluded that vessels are likely to slowly adapt to alternative routes over time and considered the impact to be not significant.
- 2.11.3 The EIA Report did not anticipate any cumulative decommissioning effects.
- 2.12 Military and Aviation
- 2.12.1 The EIA Report concluded that the Works would have major significant effects on military and aviation receptors.
- 2.12.2 The EIA Report stated that the Works in isolation would have major significant effects on the National Air Traffic Service Safeguarding ("NATS"), en route Allanshill Primary Surveillance Radar ("PSR"), and Royal Air Force ("RAF") Lossiemouth PSR, from the turbines masking or reflecting aircraft signals and from clutter on the radar system. Helicopter approach procedures to offshore installations, Wick Airport approach procedures and minimum safe altitude requirements were also assessed as significant. Mitigation within the EIA Report, including the necessity to notify the presence of obstructions to NATS for inclusion in appropriate aviation related documentation and aviation mapping, reduced the effects to not significant. Residual mitigation is to be agreed with the Ministry of Defence ("MOD"), when the final locations of the constructed turbines, turbine movement and

maximum height of construction infrastructure is known. Interference with Helicopter Main Route X-Ray, used by helicopters to prevent direct physical conflict with the WTGs, was considered negligible and assessed as not significant.

2.12.3 The EIA Report concluded that no further assessment with respect to cumulative effects was required. Whilst other wind farm developments may be located in close proximity to the Works, the impact on any aviation receptor is a standalone effect and can therefore be considered in isolation. The EIA Report stated that it is necessary for mitigation measures to be carried out under separate arrangements, such as negotiations and discussions with aviation stakeholders.

## 2.13 <u>Cultural Heritage</u>

- 2.13.1 The EIA Report considered impacts on archaeological and cultural heritage receptors, both onshore and offshore, arising from the construction, operation, maintenance and decommissioning phases of the Works.
- 2.13.2 The effects arising from the Works on the setting of onshore cultural heritage and marine archaeology receptors were reported to be of minor or negligible significance where the implementation of mitigation measures are embedded.
- 2.13.3 The EIA Report considered the effects of the Works on cultural heritage during the construction and operational phases, and in-combination with the export cables for the Moray Firth Developments. These effects were deemed to be of negligible or no significance where a Protocol for Archaeological Discoveries ("PAD") is followed.
- 2.13.4 Cumulative effects on the setting of onshore cultural heritage assets and marine archaeology receptors, was also reported to be of minor, negligible or no significance. No cumulative effects were identified during the decommissioning phase.

## 2.14 Seascape and Landscape Visual Impact Assessment

2.14.1 The EIA Report concluded that there would be significant visual effects, during all phases of the Works, as occurring along the coastal area of Caithness, north east Sutherland and the Highlands (between the A9 at Crakaig in the east and Wick in the north) spanning a section of coast approximately 60km in length. Significant effects at night were predicted to be concentrated in the coastal areas between Wick and Navidale. Significant effects related to construction and decommissioning of the OEC were identified in the Sandend area on the Moray coast. Sandend Beach and all potential landfall locations to the west towards Findlater Castle have now been removed from the design. Investigations for the final location are ongoing.

- 2.14.2 Significant effects on landscape and seascape character were concentrated along the coast between north east Helmsdale and Sarclet Head and between the A9/A99 and the coast. This included a small part of the area designated as the Flow Country and Berriedale Coast Special Landscape Area ("SLA"), as well as the Dunbeath Castle Gardens Designated Landscape, as a result of increased extent of open sea views affected by the Works and the scale of proposed turbines.
- 2.14.3 The EIA Report considered impacts upon seascape and landscape of the Works cumulatively with current operational and consented offshore and onshore wind farms. Significant impacts were reported in the Highlands where, when visibility is very good or excellent, there are open sea views towards the Works and the Moray Firth Developments. In some instances, predicted visual effects were the sequential and/or successive visibility of the Works in-combination with onshore wind farms. Along the moray coast in locations where visibility is excellent, significant cumulative visual effects would occur as a result of the Works being seen in the context of the Moray East Offshore Wind Farm.
- 2.14.4 The EIA Addendum Report concluded that mitigation via the removal of the Model 4 WTG, the largest of the proposed turbines from the design and the reduction in the duration of the wind farm operation from 50 years to 25 years could lead to a reduction in impact.

### 2.15 Socio-Economics

- 2.15.1 The EIA Report advised that socio-economic impacts during the construction, operation and decommissioning phases of the Works were positive, with effects that are quantifiable, ranging from minor to major positive effects upon the "Local Study Area" (defined as the combined local authorities of Highlands, Moray, Aberdeenshire & Aberdeen City) to minor to moderate positive Scotland wide effects.
- 2.15.2 Positive significant effects, ranging from minor to moderate, were reported for the construction phase of the Works resulting from direct and indirect employment creation in the construction supply chain for both the Local Study Area and Scotland. Positive significant effects, resulting from indirect and direct Gross Value Added ("GVA") creation in the construction supply chain, ranged from minor to major for the Local Study Area and minor to moderate for Scotland.
- 2.15.3 Positive significant effects, ranging from moderate to major for the Local Study Area were reported during the operational and maintenance phases of the Works from the direct and indirect employment impact resulting from localised high value and long term employment opportunities. Minor positive significant Scotland wide effects were reported due to the localised nature of jobs. Effects during the decommissioning phase were stated to be similar to that during the construction phase.

2.15.4 The EIA Report assessed the cumulative effects dependant on the extent to which the Works and other relevant projects, namely the Moray Firth Developments and the Beatrice Oil Field decommissioning, draw on a similar supply chain and labour market within the Local Study Area. The report also considered whether the construction phase for the Works and other projects are undertaken simultaneously or consecutively and the ability of the supply chain and labour markets to adapt to increased demand. The EIA Report concluded that cumulative impacts were expected to be of major beneficial significance. In-combination effects may be even higher for the Local Study Area, however, this cannot be quantified as it is not yet known which port the Works would use for the operational and maintenance phases.

#### 3 Consultation

- 3.1 In accordance with the 2007 MW Regulations, on 8 July 2018, the Applicant submitted an EIA Report and RIAA describing the Works and giving an analysis of its environmental effects. On 31 August 2018, the Applicant submitted a PVA Report amending some of the results in the RIAA. On 18 March 2019, the Applicant submitted the GBBG Report.
- 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.
- 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.

Document	Date received	Dates of consultation	Publication
EIA Report	5 July 2018	8 July 2018 – 21	The Press & Journal
and Application		August 2018	(10 July 2018 and 18 July 2018)
		8 July 2018 – 12 November 2018 (for Planning Authorities)	The Edinburgh Gazette
			(10 July 2018)
			The Scotsman
			(10 July 2018)
			The Banffshire Journal
			(10 July 2018)
PVA Report	31 August 2018	31 August 2018 – 2 October 2018	The Press & Journal (4 September 2018)
			The Edinburgh Gazette (4 September 2018)
EIA Addendum Report	23 November 2018	23 November 2018 - 7 January 2019	The Press & Journal (23 November 2018 and 30 November 2018)
			The Edinburgh Gazette (23 November 2018)
			The Scotsman (24 November 2018)
GBBG Report	18 March 2019	19 March 2019 – 2 April 2019	The Press & Journal (19 March 2019)
			The Edinburgh Gazette (19 March 2019)

## 4 Summary of statutory consultee responses

- 4.1 Under the 2007 MW Regulations, the Licensing Authority can consult bodies as it considers appropriate. The Licensing Authority considered appropriate to consult SNH, the Scottish Environment Protection Agency ("SEPA") and Historic Environment Scotland ("HES"). The planning authorities whom the Licensing Authority considered appropriate to consult in respect of the proposed Works are Aberdeenshire Council, Moray Council and the Highland Council.
- 4.2 In addition, the Maritime and Coastguard Agency ("MCA") and Northern Lighthouse Board ("NLB") were consulted under the 2007 MW Regulations..

## 4.3 Aberdeenshire Council

- 4.3.1 Aberdeenshire Council responded to the Original Consultation, the EIA Addendum Consultation and the GBBG Report Consultation.
- 4.3.2 Aberdeenshire Council raised no objection to the Application and underlined that there are crossovers between the Application and the Applicant's application for the onshore components of the project.
- 4.3.3 Aberdeenshire Council stated that the Works in isolation would have a non-significant impact on the landscape and seascape. Aberdeenshire Council also underlined that although Sandend village is stated in the EIA Report to have potential significant impacts, these would be short term and temporary. Aberdeenshire Council had no substantial concerns with the potential cumulative visual impacts, of the Works in-combination with the Moray Firth Developments. However, it recommended that any wind turbines should be of an appropriate scale to reduce any potential adverse impacts of this nature as far as possible.
- 4.3.4 In order to ensure that the recreational activities in Sandend are minimally impacted by the construction activities, Aberdeenshire Council requested that the Applicant continues to engage with the affected community and local businesses.
- 4.3.5 Due to the issues raised by the local community of Sanded and sports groups, the Applicant withdrew Sandend as a potential site for landfall by letter to the Scottish Ministers on the same day the Application was submitted.
- 4.3.6 Concerning the archaeology assessment presented in the EIA Report, Aberdeenshire Council accepted the methodology used and agreed with its conclusions. Aberdeenshire Council welcomed the Applicant's commitment to the creation of a Written Scheme of Investigation ("WSI"), albeit the Council requested that the WSI should be appropriately secured.

- 4.3.7 In terms of onshore and offshore works interactions, Aberdeenshire Council requested that, where possible, these should run concurrently and that details of timings of works should be submitted to the Council to ensure that potential disruptions to the community are limited. Aberdeenshire Council also commented on the protection of rocks and cliffs around the shoreline, and that the Applicant should ensure ongoing engagement with the local community as the proposal evolves and decisions are made on cable landfall and installation method. In addition, Aberdeenshire Council recommended that, if Horizontal Directional Drilling ("HDD") is not used, then further intertidal surveys at the exact landfall area should take place.
- 4.3.8 Aberdeenshire Council stated that any proposed impact on the Cullen to Stakeness Coast Site of Special Scientific Interest ("SSSI") running along the coast should be addressed. In addition, it is requested that the Applicant should demonstrate that no adverse noise impact would occur.
- 4.3.9 In its response to the EIA Addendum Consultation, Aberdeenshire Council referred back to the comments submitted with the Original Consultation. Overall, Aberdeenshire Council had no objections to the changes proposed by the EIA Addendum Report.
- 4.3.10 Aberdeenshire Council submitted a response on the GBBG Report. As GBBG are not a qualifying interest for any designated sites within the Aberdeenshire region, Aberdeenshire Council stated that the GBBG Report did not raise any concerns in relation to the Application.
- 4.3.11 Conditions have been attached to the s.36 consent and OWF marine licence to address the concerns raised by Aberdeenshire Council, these mandate that the Applicant prepares, consults on, and adheres to, the terms of a PAD and WSI, a Construction Programme ("CoP"), a Construction Method Statement ("CMS") and a Design and Layout Specification Plan ("DSLP"). Further, conditions will be attached to any marine licence(s) granted, in relation to any cable landfall area and the use of HDD.

#### 4.4 <u>Historic Environment Scotland</u>

- 4.4.1 HES responded to the Original Consultation and to the EIA Addendum Consultation.
- 4.4.2 HES did not object to the Application. HES stated that any consent should ensure that the WSI that includes the PAD should be approved by Scottish Ministers and/or HES before the works are allowed to commence.
- 4.4.3 HES submitted a response to the EIA Addendum Consultation. HES was content that the part 1 of the Addendum (Ornithology and Seascape, Landscape and Visual Assessment, ("SLVIA")) did not relate to its cultural remit, and that Part 2 (the site boundary variation) included an updated baseline and that due consideration has been given to archaeological assets.

- 4.4.4 HES stated that the conclusions of the EIA Report are still valid and that the changes are unlikely to increase the effects on marine archaeological assets. HES reiterated its recommendation to include a condition on PAD and WSI in the s.36 consent, if this were to be granted.
- 4.4.5 A condition requiring the Applicant to prepare, consult on and adhere to, a PAD and WSI has been attached to the s.36 consent.
- 4.5 Maritime and Coastguard Agency
- 4.5.1 MCA responded to the Original Consultation and to the EIA Addendum Consultation.
- 4.5.2 MCA did not object to the Application and confirmed that it was content that all recommendations regarding the Marine Guidance Note (MGN) 543 checklist provided as part of the Navigation Risk Assessment ("NRA") were addressed.
- 4.5.3 The main concerns raised by MCA related to the proximity of the Works to the Moray Firth Developments, in relation to the layout designs affecting the safety of navigation and SAR capabilities. MCA highlighted that there is no designated navigational corridor or sufficient air space to allow SAR helicopters to manoeuvre safely outside the turbine boundaries.
- 4.5.4 MCA requested that the Applicant should discuss the turbine layout as soon as possible and that, prior to construction, the layout must be approved. In addition, MCA requested that the Applicant should conduct a radio survey prior to any construction taking place.
- 4.5.5 MCA requested that conditions should be added to the s.36 consent, including:
  - A lighting and marking plan which includes the use of aviation lights visible at 360°, compatible with night vision imaging systems as detailed in CAP 764 CAA Policy and Guidelines on Wind Turbines and in compliance with the updated MGN;
  - Hydrographic surveys should fulfil the requirements of the International Hydrographic Organisation ("IHO") Order 1a standard;
  - Any consented cable protection works must ensure existing and future safe navigation is not compromised. MCA would accept a maximum of 5% reduction in surrounding depth referenced to Chart Datum. The Beatrice Offshore Wind Farm cables would have to be addressed in the cable burial plans; and
  - Safety zones.
- 4.5.6 MCA highlighted that the Applicant must ensure that its contractors and subcontractors must have the required certification for all vessel operations, and early engagement with the local Marine Office should be undertaken,

- where necessary, to ensure there are no issues with regards to survey and inspections, towage and safety requirements.
- 4.5.7 MCA responded on the EIA Addendum Consultation stating that there was no concern in principle. However, the change in redline site boundary would require a change in security measures to ensure that all the requirements of MGN 543 are fulfilled.
- 4.5.8 The Applicant withdrew the change of site boundary on 25 February 2019.
- 4.5.9 Conditions have been placed upon the s.36 consent and OWF marine licence to mitigation the impacts highlighted by MCA, including the requirement to prepare, consult on and adhere to the Emergency Cooperation Plan ("ERCoP"), Cable Plan ("CaP"), CMS, DSLP, NSP, VMP and Lighting and Marking Plan ("LMP").
- 4.6 Moray Council
- 4.6.1 Moray Council raised no objections to the Application or to the EIA Addendum Report.
- 4.7 <u>Northern Lighthouse Board</u>
- 4.7.1 NLB responded to the Original Consultation and the EIA Addendum Consultation.
- 4.7.2 NLB did not object to the Application. NLB noted that there was no defined number, size or location of the turbines. therefore its response was general in nature. NLB requested that the Applicant should establish a NSP and an LMP. The LMP should cover all phases of the Works. NLB confirmed that the lighting and marking of the Works may require to be altered to reflect developments in the future. During the operational phase the Works shall be marked and lit as per the International Association of Marine Aids to Navigation ("IALA") Recommendations O-139.
- 4.7.3 NLB also required that an emergency response plan should be prepared by the Applicant. NLB stated that all navigational lighting and marking should require NLB Statutory Sanction and that works should be published via Notice to Mariners ("NtMs"), Navigation Warnings and relevant publications. Finally, all turbine locations, cable route and landing points should be communicated to the United Kingdom Hydrographic Office ("UKHO").
- 4.7.4 NLB advised that its Original Consultation response remained valid in respect of the EIA Addendum Report.
- 4.7.5 Conditions have been placed upon the s.36 consent and OWF marine licence to mitigate the impacts highlighted by NLB, including the requirement to prepare, consult on and adhere to the DSLP, NSP, and LMP.

- 4.8 <u>Scottish Environmental Protection Agency</u>
- 4.8.1 SEPA responded to the Original Consultation and to the EIA Addendum Consultation.
- 4.8.2 SEPA did not object to the Application. However, SEPA requested that a condition for a decommissioning plan will be attached to the s.36 consent. SEPA confirmed that if this condition was not applied then the response should be treated as an objection.
- 4.8.3 SEPA requested that a decommissioning schedule and plan, and an active waste management strategy and plan be included as conditions of the s.36 consent.
- 4.8.4 In response to the EIA Addendum Consultation, SEPA raised no objection and advised the Applicant to refer to its standing advice.
- 4.8.5 Conditions requiring the Applicant to prepare, consult on and adhere to CoP, CMS, EMP and Decommissioning Programme ("DP") have been attached to the s.36 consent.
- 4.9 <u>Scottish Natural Heritage</u>
- 4.9.1 SNH responded to the Original Consultation, the EIA Addendum Consultation and the GBBG Report Consultation.
- 4.9.2 SNH objected to the Application based on the Works having adverse predicted effects on the site integrity for kittiwake as a qualifying interest of the East and North Caithness Cliffs SPA, in-combination with the Moray Firth Developments, collision risk being the key impact. SNH raised concerns on the cumulative impacts of the Works on the landscape and seascape of the East Sutherland Coast.
- 4.9.3 SNH stated that the Applicant had provided insufficient information to enable it to conclude whether there would be no adverse effect caused by the Works in isolation on site integrity for kittiwake as a qualifying interest of the East Caithness Cliffs SPA; or in-combination effects on common guillemot and razorbill of the East Caithness Cliffs SPA; and to reach a conclusion for GBBG as a qualifying feature of East Caithness Cliffs SPA.
- 4.9.4 SNH advised that for the Works in isolation and in-combination with the Moray Firth Developments there would be no adverse effect on site integrity of any SPAs with respect to the following qualifying interests:
  - East Caithness Cliffs SPA fulmar and herring gull;
  - North Caithness Cliffs SPA common guillemot, razorbill, puffin, fulmar;
  - Buchan Ness to Collieston Coast SPA- herring gull, common guillemot, fulmar and kittiwake; and
  - Troup, Pennan and Lion's Head SPA herring gull, kittiwake, common guillemot, razorbill, fulmar.

- 4.9.5 SNH also advised that, for the Works in isolation and in-combination with the Moray Firth Developments, there would be no adverse effect on site integrity for all of the qualifying interests of the Moray Firth pSPA.
- 4.9.6 SNH advised that there would be no adverse effect on the site integrity of the Moray Firth SAC, with respect to the bottlenose dolphin qualifying interest, provided appropriate mitigation is implemented through s.36 consent and/or marine licence conditions.
- 4.9.7 SNH advised that there would be no adverse effect on site integrity of the Dornoch Firth and Morrich More SAC with respect to the harbour seal qualifying interest, provided appropriate mitigation is implemented through s.36 consent and/or marine licence conditions. SNH advised that the Works, both in isolation and in-combination with the Moray Firth Developments, had no significant long term effect on the population trajectory of harbour seals.
- 4.9.8 In relation to noise modelling, to inform assessment of effects on marine mammals, SNH stated that although it would be more accurate to conduct noise modelling using a conversion factor of 1%, SNH accepted the assessment conducted in the EIA Report with a 0.5% conversion factor.
- 4.9.9 In relation to the potential impacts of the Works on the Southern Trench pMPA, SNH advised that the Works was unlikely to have an impact on the minke whale qualifying interest when the animals are within the pMPA. Potential impacts on the Southern Trench pMPA from the OfTI will be considered in the OfTI decision notice.
- 4.9.10 SNH agreed with the EIA Report conclusions that there would be no significant effects on physical processes caused by the Works. However, in relation to the landfall area, SNH stated that it is preferable to avoid the Cullen to Stakeness coast SSSI and that a detailed landfall plan should be agreed with SNH and Marine Scotland in advance of the works.
- 4.9.11 SNH supported the conclusions of the EIA Report, that the Works would be unlikely to have significant impacts on the benthic environment. However, considering that details on the landfall area are unclear, SNH indicated that further work to assess potential impacts would be necessary, in particular by way of intertidal surveys.
- 4.9.12 SNH welcomed the commitment of the Applicant to bury cables to one metre depth and, where not possible, protect the cables to reduce the impacts of magnetic fields on diadromous fish. SNH also welcomed the commitment of the Applicant to submit a PS.
- 4.9.13 SNH underlined that if Marine Scotland is to recommend approval of the Works, then SNH wishes to provide advice on the conditions to mitigate impacts on natural heritage interests.

- 4.9.14 In its consultation response to the EIA Addendum Report, SNH maintained its objection. SNH based its objection on the information provided for ornithology impacts. Specifically, SNH stated that the amended proposal would continue to have an adverse effect on site integrity for kittiwake as a qualifying interest of the East and North Caithness Cliffs SPAs, incombination with the Moray Firth Developments. SNH also stated that there was still insufficient information to allow it to reach a conclusion for GBBG as a qualifying feature of the East Caithness SPA. SNH advised of no adverse effect on site integrity for common guillemot and razorbill for East Caithness Cliffs SPA.
- 4.9.15 In relation to the SLVIA, SNH welcomed the changes proposed to reduce the visual impacts, in particular the proposed reduction in turbine height and change in site boundary.
- 4.9.16 Concerning marine mammals, SNH was pleased to see that the noise modelling was run with a 1% conversion factor. SNH agreed with the conclusions of the EIA Addendum Report, that the magnitude of impact would be low or negligible. SNH reiterated that the Applicant would have to apply for a European Protected Species ("EPS") licence. Finally, considering that the Applicant predicted large effect zones on minke whale, SNH advised that an EPS licence for injury may be required, unless appropriate mitigation is included in the PS.
- 4.9.17 In response to the GBBG Report Consultation, SNH advised on 2 April 2019 that the Works, in-combination with the Moray Firth Developments, would have an adverse effect on the integrity of East Caithness Cliffs SPA with respect to GBBG. SNH advised that if s.36 consent and /or marine licences were to be granted, pre-construction monitoring should be undertaken to understand the movements of adult GBBG recorded in the Works site during the breeding season.
- 4.9.18 Conditions requiring the Applicant to prepare, consult on and adhere to a CoP, CMS and EMP have been attached to the s.36 consent and OWF marine licence to mitigate concerns raised by SNH.
- 4.10 The Highland Council
- 4.10.1 The Highland Council responded to the Original Consultation and to the EIA Addendum Consultation.
- 4.10.2 The Highland Council raised no objections to the Works. The Highland Council stated that although the Works would be likely to have visual impacts, it would also be likely to have positive effects on the local economy, in particular upon the number of jobs that are to come to the Highlands.
- 4.10.3 The Highland Council had no objections to the changes proposed in the EIA Addendum Report, subject to the addition of conditions that would address the following issues:

- Design, layout and lighting of the Works;
- Maximisation of the GVA in terms of employment and associated economic activities that comes to the Highlands, as a result of the construction phase of the project;
- Engagement with the Highlands renewable energy supply chain and its ports and harbours, including Nigg and Port of Cromarty as a potential operation and maintenance facility;
- Engagement with the relevant public and private sector bodies in the Highlands to ensure that the area achieves maximum socio-economic returns from the Works.
- 4.10.4 Officials considered the request from the Highland Council and concluded that the specific conditions could not be attached to the s.36 consent, if granted. Therefore, officials contacted the Highland Council to request further clarification on its position if conditions related to the socio-economic impacts of the Works were not attached to the s.36 consent, if granted. Officials also underlined that these aspects could be monitored via specific plans.
- 4.10.5 The Highland Council responded to the officials' correspondence stating that whilst understanding the reason why specific conditions cannot be attached, it is pleased that monitoring of the socio-economic impacts is possible. Although, the Highland Council welcomed the fact that the Applicant received a "supply chain certificate" from BEIS, it was not aware of any specific dialogue with the Applicant in respect of its request for the Highlands to benefit more widely from this Works. The Highland Council underlined that members of the committee were keen to ensure that Moray West would invest in the Highlands. The Highland Council concluded that the fact that the suggested conditions cannot be secured is not a reason to object to the Works. Therefore the Highland Council does not object to the Application.
- 4.10.6 Conditions requiring the Applicant to prepare, consult on and adhere to a DSLP, Design Statement ("DS"), PEMP and LMP have been attached to the s.36 consent.

### 5 Summary of non-statutory consultee responses

- 5.1 British Telecom ("BT")
- 5.1.1 BT did not object to the proposal and confirmed that the project should not cause interference to BT's current and planned radio networks.
- 5.1.2 BT did not object to the EIA Addendum Report.
- 5.2 <u>Cruising Association ("CA")</u>
- 5.2.1 CA had no comments on the Application.
- 5.3 Fordyce, Sanded and District Community Council ("FSDCC")
- 5.3.1 FSDCC responded to the Original Consultation and to the EIA Addendum Consultation.
- 5.3.2 FSDCC had no comments in respect of the Works and its electricity generation infrastructure.
- 5.3.3 FSDCC highlighted several deficiencies in the EIA Report with respect to the OfTI and associated cable landfall proposals. FSDCC concluded that the failure to include a landfall geology assessment to inform the HDD installation method demonstrated that this method is unproven. Until the HDD method is proven to be suitable, FSDCC is of the view that the landfall cable methodology proposed is flawed.
- 5.3.4 In addition, FSDCC felt that any change in the morphodynamics of the embayment below Mean High Water Springs ("MHWS") would potentially impact on the propagation of waves within the bay at Sandend. FSDCC also highlighted that the Applicant had not demonstrated any quantifiable analysis of the outcome of the sea bed installation works and ongoing cable burial over 50 years or on the morphodynamics which currently exist.
- 5.3.5 FSDCC had no comments in relation to the EIA Addendum Report. However, it reiterated that it retained its interest in matters regarding the OfTI.
- 5.3.6 To mitigate concerns raised in relation to the export cable, FSDCC will be consulted on post consent plans required as conditions of the marine licence for the OfTI, if granted. Such conditions will require the Applicant to prepare, consult on and adhere to a CoP, a CMS and an CaP.
- 5.4 <u>Highlands and Islands Enterprise ("HIE")</u>
- 5.4.1 HIE had no comments on the Application and did not respond to the EIA Addendum Consultation.

### 5.5 Ministry of Defence

- 5.5.1 MOD responded to the Original Consultation and to the EIA Addendum Consultation.
- 5.5.2 MOD objected to the Application stating that the Works' turbines would be detectable by and cause unacceptable interference to the Air Traffic Control ("ATC") radar used by RAF Lossiemouth. MOD confirmed that following an operational assessment of the proposal by an ATC subject matter expert, the proposed turbines would have a significant and detrimental effect on the provision of air traffic services at RAF Lossiemouth. MOD therefore objected on these grounds.
- 5.5.3 In addition, MOD objected to the Works for the following reasons:
  - a) Restrictions that the Works would impose upon departure routes including Standard Instrument Departures ("SIDS");
  - b) Restrictions that the Works would impose upon approach and arrival procedures;
  - c) Restrictions that the Works would impose upon traffic patterns, in particular the radar to visual profile;
  - d) Restrictions that the Works would impose upon lower airspace radar service and the Lossiemouth zone controller;
  - e) Restrictions that the Works would impose upon special tasks conducted by the ATC unit;
  - f) Restrictions that the Works would impose upon aircraft operating areas;
  - g) Restrictions that the Works would impose upon Tactical Aid to Navigation procedures;
  - h) Restrictions that the Works would impose upon final approach routes;
  - i) Restrictions that the Works would impose upon holding areas;
  - j) Restrictions that the Works would impose upon instrument flight paths;
  - k) The position of the Works in relation to controlled airspace;
  - I) The position of the Works in relation to restricted/danger areas;
  - m) MOD's future airspace and operational requirements;
  - n) The frequency of the provision of MOD traffic service and deconfliction service in the vicinity of the Works;
  - o) Air traffic density in the vicinity of the Works;
  - p) Existing clutter or wind farms in the vicinity of the Works;
  - q) The type and characteristics of aircraft routinely using the airspace in the vicinity of the Works:
  - r) The performance of the radar;

- s) The complexity of the ATC task.
- 5.5.4 MOD stated that, should the Applicant overcome these issues, the turbines in the Works would be required to be fitted with aviation lighting in accordance with Article 219 of the Air Navigation Order.
- 5.5.5 In response to the EIA Addendum Report, MOD maintained its objection and added that the proposed variation of the site boundary would cause unacceptable interference to the Precision Approach Radar ("PAR") located at RAF Lossiemouth. As a result of this objection, on the 25 February 2019, the Applicant submitted a letter to the Scottish Ministers withdrawing the request for a change of site boundary
- 5.5.6 On 10 April 2019, MOD sent an official letter to the Scottish Ministers to provide clarity on its position in relation to the Application. MOD informed the Scottish Ministers that it has been in discussions with the Applicant to reach agreement on measures to address the unacceptable impacts identified by MOD.
- 5.5.7 MOD added that the Applicant submitted a technical proposal to mitigate the impacts on the ATC radar at RAF Lossiemouth. MOD accepted the proposal. In its letter, MOD has proposed four draft conditions, previously agreed with the Applicant, to be attached to s.36 consent, if consent were to be granted.
- 5.5.8 Conditions have been attached to the s.36 consent and OWF marine licence requesting that the Applicant prepare, consult and submit for approval to the Scottish Ministers an ATC Radar Mitigation Scheme and a LMP. Conditions regarding MOD notification when works commence and in relation to charting requirements have also been attached to the s.36 consent.
- 5.6 National Air Traffic Services
- 5.6.1 NATS responded to the Original Consultation and to the EIA Addendum Consultation.
- NATS objected to the Application on the basis that the Works would have unacceptable impacts on NATS (En Route) Public Limited Applicant ("NERL") Allanshill Radar. The concerns of NATS related to the generation of false primary plots and a possible reduction in the probability of the radar's detection of real aircraft.
- 5.6.3 NATS maintained its objection to the Application in its response to the EIA Addendum Consultation. However, NATS notified the Scottish Ministers that it and the Applicant were actively working to agree on an option for mitigation.
- 5.6.4 NATS submitted a letter to inform the Scottish Ministers that the Applicant and NATS have entered an agreement on future mitigation implementation. Therefore, NATS would withdraw its objection, subject to the imposition of a proposed condition. The Applicant submitted a letter on 5 April 2019 notifying

- the Scottish Ministers that it accepts and recognises the need of the condition proposed by NATS.
- 5.6.5 A condition has been attached to the s.36 consent and OWF marine licence requiring the Applicant to prepare and submit an Primary Radar Mitigation Scheme ("PRMS") for approval by the Scottish Ministers. Such condition states also that no part of any WTG shall be erected above mean sea level until a PRMS has been submitted and approved by Scottish Ministers. No blades should be fitted until the mitigation measures are fully implemented in accordance with the PRMS. .
- 5.7 Royal Society for the Protection of Birds Scotland
- 5.7.1 RSPB Scotland responded to the Original Consultation, the EIA Addendum Consultation and the GBBG Report Consultation.
- 5.7.2 RSPB Scotland objected to the Application based on the in-combination impacts on seabird population from the Moray Firth Developments and other UK east coast projects.
- 5.7.3 RSPB Scotland noted that the Applicant had used more up-to-date assessment methods than had been deployed in relation to the Moray Firth Developments. However, RSPB Scotland considered that the EIA Report confirmed that the impacts of the already consented Moray Firth Developments would exceed the environmental capacity of regional seabird populations to cope with new threats.
- 5.7.4 RSPB Scotland advised that the Works in-combination with the Moray Firth Developments would lead to an adverse effect on the site integrity of East Caithness Cliffs and North Caithness Cliffs SPAs with respect to kittiwake. RSPB advised that the effects would likely lead to an adverse effect on the site integrity of Troup, Pennan and Lion's Heads SPA with respect to kittiwake. RSPB Scotland advised that in-combination impacts on kittiwake from UK wind farms is significant in EIA terms.
- 5.7.5 RSPB Scotland maintained its objection to the Application in its response to the EIA Addendum Consultation. RSPB Scotland stated that the concerns that it raised in its original response still stood and that the impacts of the Works alone and in-combination would be too significant. However, RSPB Scotland welcomed the change in duration of the Works from 50 to 25 years and the efforts made to change the Application to reduce the impacts of the Works.
- 5.7.6 In response to the GBBG Report Consultation, RSPB Scotland advised on 2 April 2019 that the Works in-combination with the Moray Firth Developments would have an adverse effect on the integrity of East Caithness Cliffs SPA with respect to GBBG. RSPB Scotland also raised queries on some technical aspects of the PVA modelling.

- 5.7.7 The Applicant responded to RSPB providing further clarity on points raised by RSPB. RSPB responded to the Applicant reiterating its position of maintaining its objection.
- 5.7.8 To mitigate concerns raised, a condition requiring the Applicant to prepare, consult on and adhere to a Project Environment Monitoring Programme ("PEMP") has been attached to the s.36 consent.
- 5.8 Royal Yachting Association Scotland ("RYA")
- 5.8.1 RYA responded to the Original Consultation and to the EIA Addendum Consultation.
- 5.8.2 RYA did not object to the Application. RYA noted that the layout is yet to be agreed and confirmed that it wished to be consulted on the post consent DSLP.
- 5.8.3 RYA submitted a response to the EIA Addendum Consultation, stating that the alternative layout would be preferable to the original one for recreational sailors.
- 5.9 <u>Scottish Fishermen's Federation ("SFF")</u>
- 5.10 SFF objected to the Application. SFF stated that it felt that the Works runs contrary to the following general planning polices within Scotland's National Marine Plan ("NMP"):
  - GEN 1 General planning principle;
  - GEN 2 Economic benefit;
  - GEN 3 Social benefit:
  - GEN 4 Co-existence:
  - GEN 17 Fairness.

SFF also stated that the Works runs contrary to the following within the fisheries policies of Scotland's NMP:

- Fisheries 1 which refers to safeguarding fishing opportunities wherever possible;
- Fisheries 2 which refers to the cultural and economic importance of fishing, potential impacts on sustainability of fish and shellfish, and impacts of displacement of fish stocks and the socio-economic costs to fishers:
- Fisheries 3 which states that where existing fishing opportunities or activity cannot be safeguarded, a Fisheries Management and Mitigation Strategy ("FMMS"), should be prepared.

- 5.10.1 Whilst SFF welcomed the Applicant's acknowledgment that the Works would have an effect on the fishing industry at the Works, SFF highlighted that the potential losses must be taken into account. In particular, SFF stated that the exclusion from fishing grounds could cause ten million pounds per annum. losses mostly in relation to scallop and nephrops, but also in respect of smaller fisheries in the area such as squid.
- 5.10.2 SFF underlined that in the worst case scenario the Works could exclude fishers from the area for the Works life-cycle of 50 years. SFF stated that this aspect would render it difficult for stakeholders to comment on some of the conclusions of the EIA Report. In particular, SFF advised that it would be difficult for stakeholders to consider the extent to which fishing would be feasible after construction, as it was impossible to define which areas of ground would be safe for use of mobile gear.
- 5.10.3 SFF consistently asked for the seabed to be restored post-decommissioning to ensure the safety of fishing activities, and stated that rig-to-reef options are not acceptable.
- 5.10.4 In response to the EIA Addendum Report, SFF maintained its objection to the Works. SFF stated that dropping the Model 4 of turbines had a negative impact on fisheries, as using Model 4 would have allowed the Applicant to install fewer turbines (62 as originally intended rather than 85).
- 5.10.5 Although SFF welcomed the change in the Works life from 50 years to 25 years, it was not satisfied that the worst case scenario for impacts on fisheries would be 36 months of displacement or loss of fishing grounds. SFF advised that the worst case scenario should be of 25 years of displacement or loss of fishing grounds. Therefore, monitoring of fishing activities post-construction should be in place and the FMMS should outline the manner in which the Applicant intended to compensate losses.
- 5.10.6 SFF also stated that, as there is insufficient evidence, further monitoring should be in place for increased sediment and deposition, noise and vibration and EMF.
- 5.10.7 SFF identified squid and scallop fisheries as the most affected by the variation due to the larger size of the Works. SFF also requested that any consent/licence would contain a condition to address potential issues that could arise during construction.
- 5.10.8 The Applicant has engaged with SFF and other stakeholders as depicted in the table below:

Date	Relevant document/ engagement type	Subject / Purpose	Main Outcome
May 2016	Moray West Offshore Wind Farm scoping report	Commencement of formal EIA scoping consultation period	<ul> <li>SFF responded to Marine Scotland's request for comments on the scoping report and its comments were addressed in the EIA Report.</li> <li>The following commercial fisheries organisations and other advisors were consulted on the scoping report but did not provide a response:</li> <li>Marine Scotland Compliance (Buckie, Fraserburgh, Scrabster and Ullapool offices);</li> <li>North &amp; East Coast Inshore Fisheries Groups;</li> <li>Scottish Fishermen's Organisation.</li> </ul>
May 2017	Moray West offshore transmission infrastructure scoping report	Additional formal EIA scoping consultation period	SFF responded to Marine Scotland's request for comments on the scoping report and its comments were addressed in the EIA Report.  The following commercial fisheries organisations and other advisors were consulted on the scoping report but did not provide a response:  Inshore fisheries (Scottish Government);  Marine Scotland Compliance (Buckie, Fraserburgh, Scrabster and Ullapool offices);  North & East Coast Inshore Fisheries Group;  Scottish Fishermen's Organisation.
14 May 2018	SFF and Scottish White Fish Producers Association Meeting (Aberdeen)	To discuss draft FMMS in advance of the Application	The meeting and discussion points were incorporated into an updated version of the draft FMMS that was subsequently shared with SFF on 22 May 2018 in advance of the Application.

31 May 2018	Wider commercial fisheries and offshore wind industry meeting (Dundee)	Bringing the offshore wind and fisheries sectors together	Moray West provided the attendees (including members of SFF) with a project update and participated in group discussions. As well as this Moray West had discussions on a one-to-one basis with SFF, other commercial fisheries representatives and individual fishermen at this event.
10 July 2018	EIA Report	Commencement of Original Consultation	SFF responded to Marine Scotland's request for comments on the Application on 26 August 2018  The following commercial fisheries organisations and other advisors were consulted on the EIA Report but did not provide a response:  • Marine Scotland Compliance (Buckie, Fraserburgh, Scrabster and Ullapool offices).  • North & East Coast Inshore Fisheries Groups.  • Scottish Fishermen's Organisation.
			representatives or individuals responded.
1 Oct 2018	Meeting (Edinburgh)	To discuss SFF's response to the Application	<ul> <li>Moray West committed to the following:</li> <li>Continued engagement with SFF throughout the process and during preconstruction, construction and operation;</li> <li>Issue of an indicative layout of the turbines and export cable in the future, post consent and post Contracts for Difference ("CfD") award.</li> </ul>
23 Nov 2018	EIA Addendum Report	Commencement of EIA Addendum Consultation.	SFF responded to Marine Scotland's request for comments on the EIA Addendum Report on 11 January 2019.  No other commercial fisheries representatives or individuals responded the public consultation.

6 Dec 2018	SFF and SWFPA Meeting (Edinburgh)	To present the EIA Addendum Report to SFF, allowing for an opportunity to comment and ask questions prior to receiving the formal SFF response	Moray West gave an overview of the Application and EIA Addendum.  SFF committed to providing its response to the addendum by mid-January 2019.
11 Jan 2019	Fishermen's Meeting (Helmsdale and Wick)	Moray West engagement meetings with fishing vessel owners of the Reliant CY799 and Southern Belle WK25	Moray West updated the fishermen with the latest project developments / timelines and committed to future engagement (e.g. through NtMs) throughout the project. SFF attended both meetings and contributed to discussions at both meetings.
15 Jan 2019	Wider commercial fisheries and offshore wind industry meeting (Dundee)	Bringing the offshore wind and fisheries sectors together	Moray West provided the attendees (including members of SFF) with a project update and participated in group discussions. As well as this Moray West had discussions on a one-to-one basis with SFF, other commercial fishermen representatives and individual fishermen at this event.

5.10.9 To mitigate concerns raised, SFF will be consulted on conditions requiring the Applicant to prepare, consult and adhere to a CoP, CMS, DSLP, VMP, NSP, CaP, PEMP and FMMS.

## 5.11 Sports Scotland

- 5.11.1 Sports Scotland noted that the area is used by a range of sports businesses and that the Applicant should engage with Mountaineering Scotland and other sports bodies in regards to the potential impacts at Redhythe Point.
- 5.12 The Joint Radio Company Limited ("JRC")
- 5.12.1 JRC did not foresee any potential problems arising from the Works, based on known interference scenarios. However, it stated that if any details change, particularly the disposition or scale of the WTGs, then it would be necessary for it to re-evaluate the proposal.

### 6 Representations from other organisations and members of the public

Three organisation representations and four public representations were received, five of these objected to the Works.

## 6.2 Wick Harbour

6.2.1 Wick Harbour submitted a representation in support of the Application due to the potential for job creation. Wick Harbour requested to become a consultee for future projects that are close to the port.

## 6.3 <u>Mountaineering Scotland</u>

- 6.3.1 Mountaineering Scotland stated that the EIA Report had omitted to assess the impacts on the landfall works on Redhythe Point and "the Widow" sites used by various outdoors centres.
- 6.3.2 Mountaineering Scotland welcomed the Applicant's decision to remove Sandend beach from the plans and acknowledged that views of the surfing community had been taken into account and accommodated.
- 6.3.3 The Applicant responded to Mountaineering Scotland stating that viable locations had been identified on the boundary between Redhaven and Skedam Cliff. Mountaineering Scotland raised concerns regarding the close proximity of the areas of "the Widow" of 500 metres and 700 metres respectively.
- 6.3.4 The Applicant confirmed that the area of concern is outside the marine licence area for the cable landfall and that there would therefore be no direct effects on the climbing area. The Applicant stated that the CaP will confirm the location of the landfall site and installation techniques. Approval of working methods will be sought from Aberdeenshire Council and SNH to avoid unacceptable impacts within the Cullen and Stakeness Coast SSSI where the climbing area is located.
- 6.3.5 Mountaineering Scotland requested to be consulted on plans that will be requested by the potential OfTI marine licence. Furthermore, Mountaineering Scotland requested that it be included in conversations on the choice of the landfall area and on potential impacts on the rock climbing community.

## 6.4 <u>Caithness Wind Farm World Council for Nature</u>

- 6.4.1 Caithness Wind Farm World Council for Nature responded to the Original Consultation with enquiries relating to information within the Application documentation and requirements for public notice. The enquiry was forwarded onto the Applicant and no formal objection was received.
- 6.5 Three public representations raised an objection related to the landfall area of the Works being Redhythe Point. The main concerns raised were with

- regards to the onshore impacts on the sea cliff as a result of construction work and how these could impact rock climbers.
- 6.6 A member of the public objected to the Works based on the impacts of the landfall works on Sandend beach. The individual also stated that the EIA Report did not include onshore impacts of landfall works on the bay area.

## 7 Advice from third parties

7.1 Marine Scotland-Licensing Operations Team ("MS-LOT") sought advice from the Marine Analytical Unit ("MAU") on the Application and from Marine Scotland Science ("MSS") on the Application, EIA Addendum Report, PVA Report, GBBG Report and consultation responses. MSS provided advice as follows and also provided expertise in completing the Appropriate Assessment ("AA").

### 7.2 Marine Mammals

- 7.2.1 Overall, MSS agreed with SNH comments on marine mammals. However, MSS advised that the Applicant would run the noise modelling with a 1% conversation factor to ensure a precautionary approach is followed. MSS advised that precaution was built in to other aspects of the model.
- 7.2.2 Regarding the EIA Addendum Report, MSS noted the inclusion of results of the noise modelling conducted with 1% conversion factor and agreed that the impacts on marine mammals due to noise are not significant in EIA terms. MSS noted that even though some scenarios for minke whales have a large effect zone, these are very unlikely scenarios and an EPS for injury would be a precautionary measure.

## 7.3 Ornithology

- 7.3.1 MSS noted that the technical appendix 10.1A 'Baseline Data Decision Support Flow Charts and use of a single year's baseline survey' was missing from the EIA Report. The absence of this appendix did not allow a full review of the process of the assessment on the EIA Report conclusions on the Works impacts on seabirds.
- 7.3.2 MSS agreed with SNH and RSPB comments on: collision risk modelling and the choice of avoidance rates; lack of clarity of the method used to calculate displacement effects; and on the PVA scenarios run.
- 7.3.3 In addition, MSS agreed with SNH's advice in relation to the lack of sufficient information on the manner in which the Works would affect the GBBG qualifying interest of the East Caithness Cliffs SPA.
- 7.3.4 As regards the EIA Addendum Report, MSS agreed with SNH's conclusions on the effects of the Works on kittiwake. MSS also stated that there was insufficient information on GBBG.

- 7.3.5 MSS provided comments on the GBBG Report. MSS accepted the refinements applied to the collision risk modelling for the in-combination impacts of the Works with the Moray Firth Developments. MSS stated that the Applicant followed the apportioning method advised by SNH for the breeding season. In relation to the non-breeding season apportioning, MSS discussed the two methods proposed by the Applicant and concluded that the first method is more biologically accurate.
- 7.3.6 MSS was content that the Applicant followed the approach to the PVA modelling, advised at the scoping stage, in the GBBG Report.
- 7.3.7 MSS stated that pre-construction studies on the presence of GBBG in the Works area could provide useful data. MSS underlined that it is not clear how practical such a study could be due to the current GPS tracking technology. However, MSS also added that the evolution of this technology could allow tracking of GBBG for longer time periods.
- 7.3.8 In consideration of RSPB Scotland's response to the GBBG Report, specifically on its criticism of the PVA modelling, MSS stated that, after reviewing the model, it was appropriate.

## 7.4 <u>Marine Fish Ecology</u>

- 7.4.1 Whilst MSS did not disagree with the conclusions of the EIA Report, it did advise that there was not enough information on the effects of offshore development on cod. Therefore, MSS suggested that post-construction surveys should be carried out to better understand the extent to which the Works would affect cod presence at the local level across the site.
- 7.4.2 In terms of impacts on sandeel, MSS advised that if gravity bases were to be used, then further considerations should be given to micro-siting to avoid areas of suitable habitat after site characterisation has taken place.
- 7.4.3 MSS welcomes the embedded mitigation and any involvement with the EMP, MPCP, Cable Burial Risk Assessment ("CBRA") and PS.
- 7.4.4 MSS advised that the EIA Addendum Report considered all the comments MSS submitted in regards to the Original Consultation.

#### 7.5 Diadromous Fish

- 7.5.1 Overall MSS agreed with the conclusion in the EIA Report in relation to diadromous fish. MSS emphasised the importance of the National Research and Monitoring Strategy for Diadromous Fish, considering that the Applicant did not commit to contribute to specific research.
- 7.5.2 In its advice on the EIA Addendum Report on diadromous fish, MSS stated that the information used lacked clarity in relation to salmon research and EMF impacts. MSS also questioned whether salmon fisheries representatives were consulted.

- 7.5.3 The Applicant responded to MSS, providing clarification on the points raised and officials clarified that Fisheries Management Scotland was consulted as representatives of salmon fisheries.
- 7.5.4 MSS did not raise any issues with the responses provided.

## 7.6 <u>Commercial Fisheries</u>

- 7.6.1 MSS welcomed a draft copy of the FMMS. MSS underlined that the Applicant failed to address the need for a resolution mechanism for when construction vessels cause damage to static gear.
- 7.6.2 MSS also noted the absence of any post-construction monitoring programmes to validate the assumption that fleets would regain access to the site after the end of construction.
- 7.6.3 Concerning potential cumulative impacts that could arise during construction, MSS suggested that, as the construction schedule is presented, there should be further discussion with the fishing industry to limit the impacts on the nomadic scallop fleet.
- 7.6.4 In the EIA Addendum Report, the Applicant responded to MSS concerns on post-construction monitoring, stating that Marine Scotland already possessed the tools to monitor fisheries operations post-construction. MSS stated that Marine Scotland conducting certain monitoring of fishing activities would not abrogate the Applicant of responsibility to validate the assumptions made in the EIA Report.

## 7.7 <u>Benthic Ecology</u>

- 7.7.1 With regard to the Works impacts on the benthic environment, MSS focused on the proposed worst case scenario of using of gravity bases and the proposal to use open cut-trenching for the export cable route.
- 7.7.2 MSS advised that there would be a need for further surveys and mitigation if gravity bases were to be used. MSS also stated that HDD would be the preferred method for export cable landfall installation.
- 7.7.3 Concerning the Applicant's proposal to leave the cables in situ after decommissioning, MSS advised that the Applicant would carry out periodic inspections to ensure that no cable parts had become exposed.
- 7.7.4 A telephone call was organised with the Applicant, MSS benthic advisor and MS-LOT, to discuss the comments on benthic ecology. During this telephone call, it was agreed that further surveys and mitigation should be in place in case gravity bases were to be chosen as foundation structures.
- 7.7.5 MSS was satisfied with the content of the EIA Addendum Report, and reiterated that even although certain comments were addressed during these telephone conversations, these comments remain relevant.

## 7.8 <u>Physical Processes</u>

7.8.1 MSS agreed with the model used during the assessment and the results of the EIA Report.

## 7.9 Socio-economics

- 7.9.1 MAU stated that the Applicant had provided a comprehensive socioeconomic baseline included in the EIA Report related to the socio-economic
  impact assessment of the Works. However, the assessment lacked evidence
  of how the main socio-economic indicators would change as a result of the
  Works. Moreover, MAU advised that the EIA Report failed to provide further
  evidence for the estimates of employment and GVA impacts presented.
  Therefore, MAU could not provide final advice due to the lack of evidence in
  the EIA Report.
- 7.9.2 MAU also stated that the assessment only focused on a minimal number of indicators, which did not give enough understanding of the social impacts of the Works.
- 7.9.3 The Applicant submitted an official response to MAU and provided commercially sensitive data to ensure that MAU could formulate final advice. The Applicant also stated that the number of indicators was limited to those aspects that were included in the scoping opinion as needing further assessment.
- 7.9.4 In response, MAU stated that, following review of the evidence provided, the Applicant's approach on the assessment of GVA and employment impacts provided greater clarity and confidence in the results within the EIA Report. In addition, MAU welcomed the Applicant's initiative to engage and develop a local supply chain for the Works, therefore increasing the potential to have higher GVA and employment.

## 7.10 Summary

7.10.1 Scottish Ministers have considered the advice provided in reaching their decision.

## 8 Public Local Inquiry("PLI")

8.1 Scottish Ministers did not require a PLI to be held.

#### 9 The Scottish Ministers Considerations

## 9.1 Environmental Matters

- 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 Works 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 Works 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, RIAA, PVA Report, EIA Addendum Report, GBBG Report and all relevant representations from consultees, MSS and third parties.

# 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 Works 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 Works 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 commercial fisheries;
    - Impacts on cultural heritage;
    - Impacts on seascape, landscape and visual amenity; and
    - Impacts on aviation.

## 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 Of particular relevance to this proposal are:
  - Chapter 4 policies 'GEN 1-21', which guide all Works proposals;
  - Chapter 6 Sea Fisheries, policies 'FISHERIES 1-3';
  - 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 Works 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 ("GHG") 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 Works 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 Works 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 SNH's view that the Works is likely to have a significant effect on the qualifying interests of the Moray Firth SAC, Dornoch Firth and Morrich More SAC, East and North Caithness Cliffs SPAs, Buchan Ness to Collieston Coast SPA, Troup, Pennan and Lion's Head SPA and Moray Firth 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 mammals species, the main impact of the Works would be underwater noise from piling, underwater noise from construction and decommissioning activities and collision with vessels during the construction phase and the operational and maintenance phase.
- 9.4.1.4 For the SAC qualifying interests, namely bottlenose dolphin 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 precaution in the assessment methods and the advice from SNH. Scottish Ministers concluded that the Works, subject to the application of conditions, would not adversely affect the site integrity of the Moray Firth SAC with respect to bottlenose dolphin and the Dornoch Firth

and Morrich More SACs, with respect to harbour seal, either alone or incombination with the Moray Firth Works. The AA provides detail on the noise propagation modelling and population modelling undertaken to inform the assessment.

- 9.4.1.5 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:
  - East Caithness Cliffs SPA kittiwake, GBBG, guillemot, razorbill, herring gull and fulmar;
  - North Caithness Cliffs SPA kittiwake, guillemot, razorbill, puffin and fulmar;
  - Buchan Ness to Collieston Coast SPA kittiwake, herring gull, guillemot and fulmar;
  - Troup, Pennan and Lion's Head SPA herring gull, kittiwake, guillemot, razorbill and fulmar;
  - Moray Firth pSPA all species.
- 9.4.1.6 After receiving information provided by the Applicant, SNH objected to the Works on 7 September 2018. SNH's objection was on the basis that the Works, in-combination with the Moray Firth Developments, would have an adverse effect on site integrity for kittiwake as a qualifying interest of the East and North Caithness Cliffs SPAs. Collision risk was identified as the key impact. SNH also advised that there was insufficient evidence to conclude no adverse effect on site integrity for GBBG, guillemot and razorbill as qualifying interests of the East Caithness Cliffs SPA.
- 9.4.1.7 As a result of the EIA Addendum Report, SNH advised that due to changes to the Works, including the reduction of the operational life from 50 to 25 years, it could conclude there would be no adverse effect on the site integrity of the East Caithness Cliffs SPA with respect to common guillemot and razorbill. On 2 April 2019, SNH advised that the Works, in- combination with the Moray Firth Developments, would have an adverse effect on the integrity of East Caithness Cliffs SPA with respect to GBBG and kittiwake. SNH advised that if s.36 consent and/or marine licences were granted then preconstruction monitoring should be undertaken to understand the movements of adult GBBG recorded in the Works site during the breeding season.
- 9.4.1.8 RSPB Scotland also objected to the Application due to in-combination effects with the Moray Firth Developments leading to an adverse effect on the site integrity of East Caithness Cliffs, North Caithness Cliffs, Troup, Pennan and Lion's Heads SPAs with respect to kittiwake. RSPB Scotland raised concerns regarding the assessment of impacts on GBBG, herring gull, guillemot, razorbill and puffin. RSPB Scotland advised that gannet should be included in the assessment. However, this was not advised by SNH through the scoping exercise or HRA screening exercise. On 11 January 2019, RSPB

Scotland, in response to the EIA Addendum Report, maintained its objection and highlighted its particular concern with regard to predicted impacts on kittiwake. On 2 April 2019, RSPB Scotland advised that the Works, incombination with Moray Firth Developments, would have an adverse effect on the integrity of East Caithness Cliffs SPA with respect to GBBG.

- 9.4.1.9 The AA considered the conservation objectives, the populations at the sites, the predicted levels of effect and population consequences, the precaution in the assessment methods and the advice from SNH. Scottish Ministers concluded that there will be no adverse effect on the site integrity of the Buchan Ness to Collieston Coast SPA, East Caithness Cliffs SPA, North Caithness Cliffs SPA, Troup, Pennan and Lion's Head SPA, Moray Firth pSPA, Moray Firth SAC or Dornoch Firth and Morrich More SAC (where each SAC, SPA or pSPA is taken as a whole) from the Works either in isolation or in-combination with other plans or projects.
- 9.4.1.10 In reaching their conclusion, Scottish Ministers have given considerable weight to SNH's advice. The methods advised by SNH through scoping, and additional information requested by SNH, have been fully incorporated into the AA. As such, divergence from SNH advice is limited to differing conclusions in relation to site integrity for kittiwake at East Caithness Cliffs SPA and North Caithness Cliffs SPA and GBBG at East Caithness Cliffs SPA. In reaching a different conclusion, Scottish Ministers consider that the level of impact being adverse to site integrity is a subjective opinion. In reaching their own conclusions, Scottish Ministers have taken account of the entire context of this assessment, in particular its precautionary assumptions, which make it unlikely the number of impacted individuals will be as large as the values presented in the assessment. For these reasons, Scottish Ministers consider the levels of assessed impact to be reasonable and are convinced that there will be no adverse impacts on site integrity of any of the SACs, SPAs or the pSPA considered in this AA.
- 9.4.1.11 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.
- 9.4.1.12 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 Works 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.

- 9.4.1.13 SNH advised that the Works in-combination with the Moray Firth Developments would not adversely affect the integrity of the North Caithness Cliffs SPA, Buchan Ness to Collieston Coast SPA, Troup, Pennan and Lion's Head SPA and Moray Firth pSPA. The competed AA came to the same conclusion.
- 9.4.1.14 Considering article 4(4) of the Birds Directive, Scottish Ministers concluded that the Works will not cause pollution or deterioration of habitats and any disturbance will be negligible.
- 9.4.1.15 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 Works 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 Works 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 Works have been fully considered in the current AA.
- 9.4.1.16 Conditions requiring the Applicant to prepare, consult on and adhere to a DP, CMS, EMP, PS, VMP, and CaP have been attached to the s.36 consent and OWF marine licence to mitigate these concerns.
- 9.4.1.17 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 Works on marine mammals, seabirds, European sites or European offshore marine sites which would require consent to be withheld.
- 9.5 Impacts on commercial fisheries
- 9.5.1 Minor and negligible significant effects were identified by the Applicant on several commercial fisheries throughout the lifespan of the Works.
- 9.5.2 SFF responded on behalf of its members, objecting to the Works. SFF objected to aspects of the assessment presented in the EIA Report, in relation to loss of access to fishing grounds during all phases of the works, the socio-economic assessment of impacts of potential losses to the fishing

industry, the absence of a cable plan, restoration of the seabed post Works, the impacts on squid and scallop fishing and spawning grounds for herring. In response to the EIA Addendum Report, SFF maintained its objection stating that the removal of the Model 4 WTG from the design had a negative effect as it allowed the Applicant to install 85 WTGs instead of 62 WTGs.

- 9.5.3 Conditions requiring the Applicant to prepare, consult and adhere to a FMMS and PEMP, which will include monitoring in relation to commercial fisheries, and to participate in the Moray Firth Commercial Fisheries Working Group ("MFCFWG"), as well as the requirement for a CBRA have been attached to the s.36 consent to mitigate these concerns.
- 9.5.4 Scottish Ministers have taken account of the terms of the NMP in relation to SFF's concerns. Conditions requiring the Applicant to prepare, consult on and adhere to a FMMS and PEMP (to include monitoring of commercial fisheries) and CaP will be attached to the s.36 consent and OWF marine licence and marine licences. A condition requiring a Fisheries Liaison Officer ("FLO") to establish and maintain effective communications between the Applicant, its contractors and sub-contractors, and fishermen and other users of the sea during the construction of the Works will be added to the s.36 consent. Conditions to require the Applicant to participate in the MFCFWG, and the ScotMER, will also be attached to the s.36 consent and OWF marine licence to mitigate concerns regarding commercial fisheries.
- 9.6 Impacts on seascape, landscape and visual amenity
- 9.6.1 SLVIA was undertaken for the Works and in-combination with the Moray Firth Developments. The Works, in isolation, identified low to moderate significant impacts on the coastal character of Caithness, north east Sutherland and the Highlands, spanning a section of coast roughly 60km in length. Low to medium significant impacts resulting from aviation and navigation lighting on visual amenity were assessed as concentrated on the coastal areas between Wick and Navidale, largely due to the relatively dark coastal landscape and sea skyline. Low to medium significant cumulative impacts were identified within the Highlands and in some instances the A9/A99, where, when visibility is very good or excellent, the Works can be seen in context of the Moray Firth Developments. Along the Moray Coast, low to medium significant impacts were identified where visibility is excellent.
- 9.6.2 SNH objected to the Works due to the cumulative impacts on sensitive landscape and in particular the distinctive landscape character of the East Sutherland coast, including both day time and night time impacts. SNH advised that the proposed reduction in turbine height (by the removal of the largest turbine design), creates some improvement with respect to cumulative visual effects. SNH also welcomed the proposed alteration to the site boundary within the EIA Addendum Report to reduce linear extent of the Works. However, the Applicant has since withdrawn this proposal.

- 9.6.3 The Highland Council stated that the Works is likely to have visual impacts but raised no objection due to the likely positive effects on the local economy and jobs.
- 9.6.4 FSDCC objected to the Works with regards to the landfall area for the export cable which was originally to be sited at the Sandend beach area. The Applicant has removed Sandend Beach and all potential landfall locations to the west towards Findlater Castle from the design. Investigations for the final location are ongoing.
- 9.6.5 There were four objections from public representatives. Primary concerns raised included the location of cable landfall areas and the impact on the integrity of the sea cliff and risks to climbers at Redhythe Point. The Applicant will continue to engage with Mountaineering Scotland and the climbing community about the location of landfall and arrangements for access.
- 9.6.6 The Applicant has removed the largest wind turbine design to mitigate impacts on seascape, landscape and visual amenity.
- 9.6.7 Conditions requiring the Applicant to prepare and consult on and adhere to a DSLP, LMP, DS, PEMP, CoP and CMS have been added to the s.36 consent and OWF marine licence to mitigate concerns regarding seascape, landscape and visual amenity.
- 9.6.8 Scottish Ministers consider that, having taken into account the information provided by the Applicant, the responses of the consultative bodies and the public representations, and having regard to the conditions attached, there are no outstanding concerns in relation to the impact of the Works on seascape, landscape and visual amenity which would require consent to be withheld.
- 9.7 Impacts on cultural heritage
- 9.7.1 Minor adverse effects on marine assets were identified as a result of the Works in isolation and were not considered significant in EIA terms.
- 9.7.2 Cumulative impacts on marine archaeology assets were considered incombination with the Beatrice Offshore Wind Farm export cable route and the Caithness Moray cable where there are spatial overlaps with the Works. Cumulative impacts were considered to be minor to negligible on marine archaeology assets.
- 9.7.3 The Highland Council did not raise any objection to the Works and no comment with regards to marine assets or cultural heritage was made.
- 9.7.4 HES did not raise an objection to the Works and was content that there are no assets within the Works Local Study Area that are subject to statutory protection. HES considered that, with the implementation of the embedded

- mitigation measures, there would not be any adverse effects that would raise issues of national interest.
- 9.7.5 Conditions requiring the Applicant to prepare, consult on and adhere to a PAD have been added to the s.36 consent.
- 9.7.6 Scottish Ministers consider that, having taken into account the information provided by the Applicant, the responses of the consultative bodies and the public representations, and having regard to the conditions attached, there are no outstanding concerns in relation to the impact of the Works on cultural heritage which would require consent to be withheld.
- 9.8 Impacts on aviation and defence
- 9.8.1 The EIA Report concluded that there would be significant adverse impacts on military and aviation receptors as a result of the Works, in isolation, which would have major significant effects on NATS (En Route) Public Limited Applicant ("NERL"), Allanshill PSR and RAF Lossiemouth PSR. Helicopter approach procedures to offshore installations, Wick Airport approach procedures and minimum safe altitude requirements were also assessed as significant. Mitigation in the EIA Report, to be agreed in discussion with stakeholders, could reduce the effects so as to render them not significant. No further assessment with respect to cumulative effects was required, due to the conclusion that the impact on any aviation receptor is a standalone effect.
- 9.8.2 MOD submitted an objection to the Works due to unacceptable interference with ATC Radar at RAF Lossiemouth. MOD requested that the turbines should be fitted with aviation lighting in accordance with Article 219 of the Air Navigation Order and that MOD safeguarding should be consulted and notified about the progress of planning applications and submissions to verify that there would be no adverse effects to its interests. MOD maintained its objection in response to the EIA Addendum Report adding that the proposed variation of the site boundary would cause unacceptable interference with to the PAR located at RAF Lossiemouth. The Applicant subsequently withdrew the proposed variation to the site boundary and four consent conditions were agreed which enabled MOD to lift its objection.
- 9.8.3 NATS submitted an objection to the Works due to unacceptable impacts on aviation radar.
- 9.8.4 The Applicant held discussions with NATS and subsequently entered into an agreement regarding consent conditions which enabled NATS to withdraw its objection.
- 9.8.5 Conditions requiring the Applicant to prepare, consult on and adhere to the ATC Radar Mitigation Scheme, LMP, DSLP and MOD notification prior to commencement of works have been attached to the s.36 consent.

- 9.8.6 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, there are no outstanding concerns in relation to the impact of the Works on aviation and defence which would require consent to be withheld.
- 9.9 Renewable energy generation and associated policy benefits
- 9.9.1 The key environmental benefit of the Works is to offset GHG emissions that might otherwise be produced by other means of electricity generation. Over the lifetime of the Works, carbon emissions from fabrication, construction, operation and decommissioning will be offset by the net reduction in emissions through low carbon wind energy technology.
- 9.9.2 There are multiple benefits associated with the Works, including:
  - a) 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;
  - b) Improvements to the security of the UK's domestic energy supply through increased energy generation;
  - c) Reduction in the reliance on fossil fuels; and
  - d) Providing a contribution towards the ambitious Scottish, UK and European Union renewable energy targets.
- 9.9.3 The proposed installed capacity of the Works will be around 850MW 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,<sup>1</sup> it is estimated that, depending on the fuel type displaced, up to 520,476 tonnes of carbon dioxide will be saved each year. It is estimated that the Works will generate enough electricity each year to meet the needs of the equivalent of 569,130 Scottish households per year.
- 9.10 Economic benefits
- 9.10.1 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

<sup>&</sup>lt;sup>1</sup> https://www.gov.scot/Topics/Statistics/Browse/Business/Energy/onlinetools/ElecCalc (Last accessed: 9 May 2019).

achieving socio-economics benefits and supporting the growth of the low carbon economy. The EIA Report reported that the Works would support the development of the domestic renewable energy industry and offset GHG emissions.

- 9.10.2 Whilst impacts on tourism were scoped out of the EIA Report, the Applicant assessed socio-economic impacts related to the offshore elements of the Works Local Study Area and across Scotland.
- 9.10.3 The Applicant has estimated that net additional employment from the Works is estimated to be between 220 FTE ("Full Time Equivalent") and 840 FTE direct and indirect and induced construction jobs at a Local Study Area level, dependant on the impact scenario considered. For the rest of Scotland, net additional employment from the Works was estimated to be between 1080 FTE and 3080 FTE direct, indirect and induced construction jobs. The Applicant estimates levels of between ten million pounds and £50 million direct and indirect GVA per annum at a Local Study Area level, and between £50 million and £180 million for Scotland.
- 9.10.4 During the operation and maintenance phase, the Applicant estimates that the net additional employment from the Works would represent a new GVA at a Local Study Area of ten million pounds per annum under both low and high scenarios, and between £50 million and £180 million per annum for Scotland as a whole. The Applicant estimates that between 30 and 60 FTE jobs would be supported in total within the Local Study Area and between 100 and 160 FTE jobs for Scotland.
- 9.10.5 The Applicant estimates that during the decommissioning phase the number of jobs will be equal to or less than those estimated for the construction phase.
- 9.10.6 The Highland Council stated that despite detrimental impact on the open and panoramic sea views recognised in the assessment of Highlands SLAs the economic benefits offered, namely the positive effects on the local economy and the amount of jobs to be created by the Works, outweighed any adverse impacts.
- 9.10.7 In its consultation response, SFF stated that the EIA Report did not fully consider the potential negative socio-economic impacts on commercial fisheries and disagreed this would have only minor impacts and contended this given the potential length of disturbance to and displacement of fishing grounds.
- 9.10.8 MAU advised that the socio-economic assessment provided a comprehensive baseline. However, the assessment lacked evidence of the effects of the Works and failed to provide evidence for estimates for employment and GVA presented. The Applicant responded to MAU and provided commercially sensitive data which enabled MAU to have more confidence in agreeing with the results provided in the EIA Report.

9.10.9 The Scottish Ministers consider that there is sufficient information regarding the socio-economic impacts of the Works 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.
- When formulating proposals for the construction of the proposed generating station, the Applicant must comply with paragraph 3 of Schedule 9 to the Electricity Act 1989. Paragraph 3(1)(a) of Schedule 9 requires the Applicant in formulating such proposals to have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest. Paragraph 3(1)(b) requires the Applicant to do what it reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects. Under paragraph 3(3) of that Schedule, the Applicant must also avoid, so far as possible, causing injury to fisheries or to the stock of fish in any waters.
- 10.3 Under paragraph 3(2) of Schedule 9, the Scottish Ministers must have regard to the desirability of the matters mentioned in paragraph 3(1)(a) of that Schedule and the extent to which the Applicant has complied with its duty under paragraph 3(1)(b). Under paragraph 3(3) the Scottish Ministers must avoid, so far as possible, causing injury to fisheries or to the stock of fish in any waters.
- In considering the Application, the Scottish Ministers have had regard to the desirability of the matters mentioned in paragraph 3(1)(a) of Schedule 9 and the extent to which the Applicant has complied with its duty under paragraph 3(1)(b). Ministers consider that the Applicant has done what it reasonably can to mitigate the effect of the proposed Works on the matters mentioned in paragraph 3(1)(a). The Scottish Ministers are content that the requirements of paragraph 3 of Schedule 9 are satisfied.
- 10.5 Scottish Ministers have weighed the impacts of the proposed Works, 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.
- 10.6 Scottish Ministers have considered the extent to which the Works 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 Works, in particular: impacts on seabirds and marine mammals (including impacts on European sites and European offshore marine sites), impacts on benthic communities, 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 Works to reducing carbon dioxide emissions and the socio-economic and the renewable energy benefits of the Works.

- 10.7 Scottish Ministers are satisfied that the environmental issues have been appropriately addressed by way of the design of the Works and through mitigation measures, and that the issues which remain are, on balance, outweighed by the benefits of the Works. In particular, Scottish Ministers are satisfied that the proposal will not adversely affect the integrity of the Moray Firth, Dornoch Firth and Morrich More SACs, East Caithness Cliffs and North Caithness Cliffs SPAs, the Buchan Ness to Collieston Coast SPA, the Troup, Pennan and Lion's Head SPA and the Moray Firth pSPA.
- 10.8 Scottish Ministers have had regard to the requirements of Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds, and Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora.
- In their consideration of the environmental impacts of the Works, Scottish Ministers have identified conditions to be attached to the s.36 consent and OWF marine licence to reduce and monitor environmental impacts. These include requirements for pre-construction, construction and operational monitoring of birds, marine mammals and benthic communities, CMS, an EMP, Operation and Maintenance Programme ("OMP") and a VMP.
- 10.10 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. The ECoW will be required to monitor and report on compliance with all consent conditions, monitor that the Works is being constructed in accordance with plans and the terms of the Application, the s.36 consent, 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.
- 10.11 Scottish Ministers are satisfied, having regard to current knowledge and methods of assessment, that this reasoned conclusion, as required under the 2007 MW Regulations, is valid.
- 10.12 Scottish Ministers **grant a marine licence** under Part 4 of the Marine and Coastal Access Act 2009, to construct, alter or improve the offshore transmission infrastructure associate with the Moray West Offshore Wind Farm. The draft of the licence is available in Annex 1.
- 10.13 The embedded mitigation and any additional mitigation identified in the EIA Report has been incorporated into the conditions of this s.36 consent and/or

- any marine licence(s) granted. The conditions also capture monitoring measures required under regulation 22 of the 2007 MW Regulations.
- 10.14 In accordance with the 2007 MW Regulations, the Applicant must publicise notice of this determination in the newspapers or other publications where the Application was publicised and provide that a copy of this decision letter may be inspected on the Application website. The Applicant must provide copies of the public notices to the Scottish Ministers.
- 10.15 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 Marine Scotland Information website.
- 10.16 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 <a href="mailto:the Scottish Courts and Tribunals">the Scottish Courts and Tribunals</a> website.
- 10.17 Your local Citizens' Advice Bureau or your solicitor will be able to advise you about the applicable procedures.

Yours sincerely,

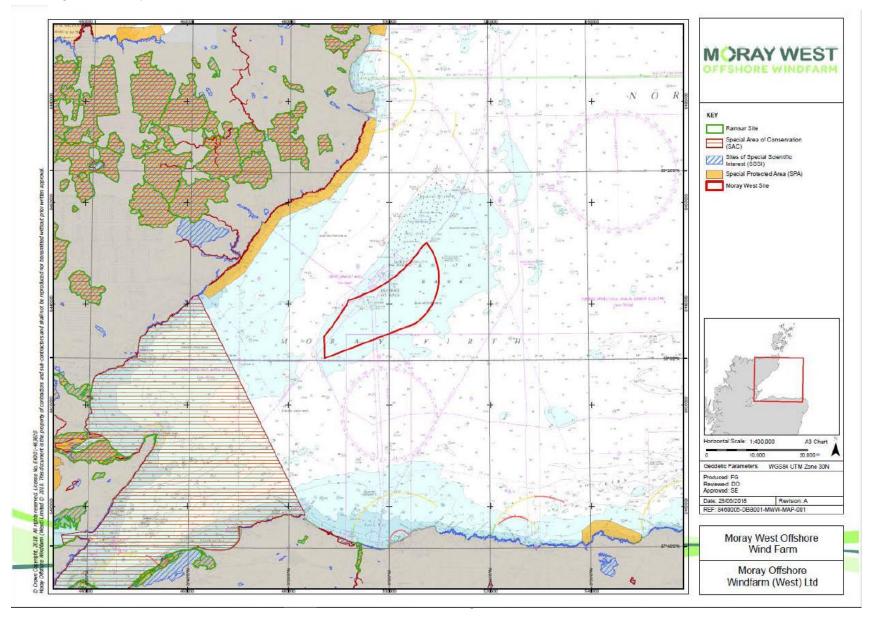
#### **Zoe Crutchfield**

Leader, Marine Scotland Licensing Operations Team

A member of the staff of the Scottish Ministers

14 June 2019

Figure 1 Moray West Offshore Windfarm Site Location



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

- "AA" means the Appropriate Assessment;
- "ADD" means Acoustic Deterrent Devices;
- "Application" means the EIA Report, RIAA and supporting documents submitted by the Applicant on 5 July 2018 to construct and operate an offshore generating station and transmission works, it also includes the PVA Report submitted on 31 August 2018, the EIA Addendum Report submitted on 23 November 2018 and the GBBG Report submitted on 18 March 2019;
- "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 Applicant on 5 July 2018;
- "the Applicant" means Moray Offshore Windfarm (West) Limited (Company Number 10515140) registered at Condor House, 10 St. Paul's Churchyard, London EC4M 8AL:
- "CRM" means collision risk modelling;
- "dSPA" means draft Special Protection Area;
- "Works" means the Moray West Offshore Wind Farm, approximately 22.5km southeast off the Caithness coastline;
- "ECoW" means Environmental Clerk of Works;
- "EIA" means Environmental Impact Assessment,
- "EIA Addendum Report" means the Environmental Impact Assessment Addendum Report submitted by the Applicant on 23 November 2018;
- "the EIA Addendum Consultation" mean the consultation on the EIA Addendum Report:
- "EIA Report" means Environmental Impact Assessment Report;
- "EPS" means European Protected Species;
- "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 deem the Works to be complete;
- "First Commissioning of the Works" means the date on which the first wind turbine generator constructed forming the Works has supplied electricity on a commercial basis to the National Grid;
- "FLO" means Fisheries Liaison Officer;
- "Moray Firth Works" means combinations of existing consents for the Moray East Offshore Wind Farm (granted in March 2014 and varied in March 2018) and the Beatrice Offshore Wind Farm (granted in March 2014);
- "FTE" means full-time equivalent:
- "GBBG" means great black-backed gulls;
- "GBBG Report" means the Information to Inform HRA Great Black-backed Gull Report submitted on 18 March 2019;
- "the GBBG Report Consultation" means consultation on the GBBG Report;
- "GHG" means greenhouse gas;
- "GVA" means Gross Value Added;

- "HAT" means Highest Astronomical Tide;
- "HDD" means Horizontal Directional Drilling;
- "HRA" means Habitats Regulations Appraisal;
- "IALA" means International Association of Marine Aids to Navigation and Lighthouse Authorities;
- "Local Study Area" means the combined local authorities of Highlands, Moray, Aberdeenshire & Aberdeen City;
- "LSE" means Likely Significant Effect;
- "MMO" means Marine Mammal Observer;
- "MW" means megawatt;
- "OEC" means Offshore Export Cable;
- "OfTI" means Offshore Transmission Infrastructure;
- "the Original Consultation" means consultation on the Application for s.36 consent, E and RIAA;
- "OWF" means Offshore Wind Farm;
- "PAM" means passive acoustic monitoring;
- "pMPA" means Proposed Marine Protected Area;
- "pSPA" means Proposed Special Protection Areas;
- "PLI" means Public Local Inquiry;
- "PSR" means Primary Surveillance Radar;
- "PVA" means Population Viability Analysis;
- "PVA Report" means the Population Viability Analysis Report submitted on 31 August 2018;
- "the Radar" means the Primary Surveillance Radar at Leuchars Airfield;
- "RIAA" means Report to Inform the Appropriate Assessment;
- "SAC" means Special Area of Conservation;
- "SAR" means Search and Rescue;
- "ScotMER" means Scottish Marine Energy Research Programme;
- "SIDS" means Standard Instrument Departures;
- "SLVIA" means Seascape, Landscape and Visual Impact Assessment;
- "SLA" means Special Landscape Area;
- "SNCBs" means the Statutory Nature Conservation Bodies;
- "SPA" means Special Protection Area;
- "s.36" means section 36 of the Electricity Act 1989 (as amended);
- "SSC" means Suspended Sediment Concentration:
- "SSSI" means Site of Special Scientific Interest; and
- "WTG" means wind turbine generators.

## Organisations and Companies

- "BT" means BT Radio Network Protection;
- "CAA" means the Civil Aviation Authority;
- "CFWG" means Commercial Fisheries Working Group;
- "FMS" means Fisheries Management Scotland;
- "FSDCC" means Fordyce, Sandend and District Community Council;

- "MFCFWG" means the Moray Firth Commercial Fisheries Working Group;
- "MFRAG" means Moray Firth Regional Advisory Group;
- "HES" means Historic Environment Scotland;
- "HIE" means Highlands and Islands Enterprise;
- "IHO" means International Hydrographic Office;
- "JNCC" means Joint Nature Conservation Committee;
- "JRC" means Joint Radio Company 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;
- "Moray East" means Moray Offshore Windfarm (East) Limited;
- "Moray West" means Moray Offshore Windfarm (West) Limited;
- "NATS" means National Air Traffic Service Safeguarding;
- "NERL" means NATS (En Route) Public Limited Applicant;
- "NLB" means the Northern Lighthouse Board;
- "RAF" means the Royal Air Force;
- "RYA" means the Royal Yachting Association Scotland;
- "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;
- "SFF" means the Scottish Fishermen's Federation;
- "SNH" means Scottish Natural Heritage; and
- "UKHO" means United Kingdom Hydrographic Office.

## Plans and Programmes

- "ATC Scheme" means Air Traffic Control Radar Mitigation Scheme;
- "CaP" means Inter Array Cable Plan;
- "CBRA" means Cable Burial Risk Assessment:
- "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;
- "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;
- "MPCP" means Marine Pollution Contingency Plan;
- "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;
- "PRMS" means Primary Radar Mitigation Scheme;
- "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 Works 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 Offshore Marine 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 2007 MW Regulations" means the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended);
- "the 2010 Act" means the Marine (Scotland) Act 2010; and
- "the 2009 Act" means the Marine and Coastal Access Act 2009.

#### ANNEX 1 - OFFSHORE GENERATING STATION MARINE LICENCE

## MARINE AND COASTAL ACCESS ACT (2009), PART 4 MARINE LICENSING

LICENCE TO CONSTRUCT, ALTER OR IMPROVE ANY WORKS AND DEPOSIT ANY SUBSTANCE OR OBJECT WITHIN THE UK MARINE LICENSING AREA

Licence Number: 06763/19/0

Date of issue: 14 June 2019

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

Moray Offshore Windfarm (West) Limited C/O Shepherd And Wedderburn Llp Condor House 10 St. Paul's Churchyard London EC4M 8AL

### Under the Marine and Coastal Access Act 2009,

- To construct, alter or improve any Works within the UK marine licensing area in or over the sea, or on or under the seabed,
   7.
- 2) To deposit any substance or object (except for dredge spoil) within the UK marine licensing area, either in the sea or on or under the seabed; and

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

This licence remains in force from **14 June 2019** to **13 June 2044** 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:	
Michael Bland	
For and on behalf of the Licensing Authority	

#### 1. PART 1 – GENERAL

## 1.1 Interpretation

In this licence, unless otherwise stated, terms are as defined in sections 1, and 115 of the 2009 Act, and,

- 1) "the 2009 Act" means the Marine Coastal Access Act 2009;
- 2) "the Application" means the EIA Report, RIAA and supporting documents submitted by the Applicant on 5 July 2018 to construct and operate an offshore generating station and transmission works, it also includes the PVA Report submitted on 31 August 2018, the EIA Addendum Report submitted on 23 November 2018 and the GBBG Report submitted on 18 March 2019; "CAA" means Civil Aviation Authority:
- 3) "CaP" means Cable Plan;
- 4) "CoP" means Construction Programme;
- 5) "CMS" means Construction Method Statement;
- 6) "CTMP" means Construction Traffic Management Plan;
- 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) "Decommissioning of the Works" means removal of the Works from the seabed, demolishing or dismantling the Works;
- 11) "**DP**" means Decommissioning Programme:
- 12) "DS" means Design Statement;
- 13) "DSLP" means Development Specification and Layout Plan;
- 14) "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);
- 15) "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 Site and transiting to the site from relevant ports:
- 16) "EMP" means Environmental Management Plan;
- 17) "ERCoP" means Emergency Response Co-operation Plan;
- 18) "F-Gas Regulation" means Regulation No 517/2014 of the European Parliament and of the Council of 16 April 2014 on Fluorinated Greenhouse Gases;
- 19) "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;
- 20) "FMMS" means Fisheries Management Co-operation Plan;
- 21) "HAT" means Highest Astronomical Tide;
- 22) "HRA" means Habitats Regulations Appraisal;

- 23) "IALA" means International Association of Marine Aids to Navigation and Lighthouse Authorities:
- 24) "IHO Order" means International Hydrographic Organization Order;
- 25) "Licensed Activities" means any activity or activities listed in section 66 of the 2009 which is, or are authorised under this licence;
- 26) "the Licensee" means Moray West having its registered office Conder House 5-10 St Paul's Churchyard, London, EC4M 8AL at and registered in England having its registered company number as 11413110;
- 27) "LMP" means Lighting and Marking Plan;
- 28) "MCA" means Maritime and Coastguard Agency;
- 29) "MEDIN" means Marine Environmental Data and Information Network;
- 30) "MGN" means Marine Guidance Note;
- 31) "MHWS" means mean high water springs;
- 32) "MMO" means Marine Mammal Observer;
- 33) "MOD" means Ministry of Defence;
- 34) "NLB" means Northern Lighthouse Board;
- 35) "NMP" means the National Marine Plan;
- 36) "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;
- 37) "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);
- 38) "OMP" means Operation and Maintenance Programme;
- 39) "OSPAR" means the Convention for the Protection of the Marine Environment of the North-East Atlantic;
- 40) "PEMP" means Project Environmental Monitoring Programme
- 41) "PS" means Piling Strategy;
- 42) "RSPB Scotland" means Royal Society for the Protection of Birds Scotland;
- 43) "ScotMER" means the Scottish Marine Energy Research Programme;
- 44) "SEPA" means the Scottish Environment Protection Agency;
- 45) "SFF" means Scottish Fishermen's Federation;
- 46) "SMWWC" means the Scottish Marine Wildlife Watching Code;
- 47) "SNH" means Scottish Natural Heritage;
- 48) "the Site" means the total area extending to approximately 225km² as shown delineated in Figure 1 in Appendix 1 of this licence;
- 49) "the Works" means the as described in Part 2 of this licence or any part thereof;
- 50) "TAR" means Transportation Audit Report;
- 51) "TPC" or "TPV" means Third Party Certification or Verification;
- 52) "UKHO" means United Kingdom Hydrographic Office;
- 53) "Vessel Reports" means reports detailing the operators, vessels and vehicles engaging in the Licensed Activities;
- 54) "VMP" means the Vessel Management Plan;
- 55) "WTG" means Wind Turbine Generators.
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All geographical co-ordinates contained within this licence are in latitude and longitude format World Geodetic, System 84.

#### **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: MS.MarineRenewables@gov.scot

#### 1.2 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 on 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.

## 1.3 Variation, suspension, revocation and transfer

Under section 72(1) of the 2009 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 71(2) or (3) of the 2009 Act.

Under section 71(7) of the 2009 Act, on an application made by the Licensee, the Licensing Authority may transfer this licence from the Licensee to another person.

Under the 2009 Act variations, suspensions, revocations and transfers of licences are subject to the procedures set out in section 30 of the 2009 Act.

# 1.4 Breach of requirement for, or conditions of, licence

Under section 85 of the 2009 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.

## 1.5 Defences: actions taken in an emergency

Under section 86 of the 2009 Act, it is a defence for a person charged with an offence under section 85(1) of the 2009 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 inform the Licensing Authority of the matters set out in section 86(2) of the 2009 Act.

## 1.6 Offences relating to information

Under section 85 of the 2009 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 2009 Act or the provisions of this licence.

# 1.7 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 against a decision taken by the Licensing Authority under section 71(1)(b) or (c) or (5) of the Act.

#### 2. PART 2 - PARTICULARS

# 2.1 Description of the Works

An offshore energy generating station at the Site, located in the Moray Firth, approximately 22.5km from Caithness Coastline as shown in Figure 1, comprised of either

All as described in the Application.

- 10. No more than 85 three-bladed horizontal axis Wind Turbine Generators ("WTG") each with:
  - g. a maximum rotor tip height of 230 metres (measured from Highest Astronomical Tide ("HAT");
  - h. a maximum rotor diameter of 195 metres;
  - i. a maximum hub height of 132.5 metres (measured from HAT);
  - j. a minimum blade tip clearance of 35 metres (measured from HAT);
  - k. blade width of up to 6 metres; and
  - I. a minimum spacing of 1,050 metres crosswind and 1,200 metres downwind.

or

If the rotor tip height of the WTGs exceeds 230 metres (measured from HAT), no more than 72 WTGs each with:

- g. a maximum rotor tip height of 265 metres (measured from HAT);
- h. a maximum rotor diameter of 230 metres;
- i. a maximum hub height of 150 metres (measured from HAT);
- j. a minimum blade tip clearance of 35 metres (measured from HAT);
- k. blade width of up to 6 metres; and
- a minimum spacing of 1,050 metres crosswind and 1,200 metres downwind;
- 11. No more than 275km of inter-array cable;
- 12. Monitoring equipment, such as metocean buoys;
- 13. Up to 85 foundations and substructures and associated fixtures, fittings and protections:
- 14. Scour and inter-array cable protection;

The design of the WTG substructure will be chosen from the following options:

- i. Gravity base;
- ii. Monopile:
- iii. Jacket Foundation;
- iv. Suction Caisson.

## 2.2 Location of the Works

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

58° 03.946' N	02° 54.796' W	58° 10.501' N	02° 55.757' W
58° 05.383' N	02° 52.068' W	58° 08.844' N	02° 59.165′ W
58° 07.095' N	02° 50.479' W	58° 07.399' N	03° 03.675' W
58° 08.945' N	02° 49.990' W	58° 06.432' N	03° 08.146' W
58° 10.514' N	02° 50.442' W	58° 04.515' N	03° 10.381' W
58° 11.510' N	02° 51.175′ W	58° 02.616' N	03° 13.067' W
58° 12.571' N	02° 52.451' W	58° 00.237' N	03° 12.986′ W
58° 12.242' N	02° 53.185′ W		

# 2.3 Descriptions 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	400,000 tonnes
Plastics/Synthetic	5,000 tonnes
Sand	5,000,000 tonnes
Stone/Rock/Gravel/Concrete(quantity includes	5,950,000 m <sup>3</sup>
the total scour protection for the array cables and	
jacket legs, made up of stone or rock or concrete)	
Cable, inter-array	319,000 m
Concrete bags/mattresses	112,000 m3

## **Deposits**

Moorings to support construction 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 items 1 and 7 in section 66(1) of the 2009 Act whether or not this licence has been transferred to that person.

Reason: To safeguard the obligations of the licence, in accordance with s.71(5) of the 2009 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, agent, contractor or subcontractor 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 Moray Offshore Windfarm (West) Limited webpage: <a href="http://www.morayoffshore.com/moray-west/">http://www.morayoffshore.com/moray-west/</a>

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, agent, contractor or sub-contractor which has not yet been notified to the Licensing Authority engaging in the Licensed Activities.

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

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 this 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 72 of the 2009 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.85(1)(b) of the 2009 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, 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.86 of the 2009 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.72 (3) of the 2009 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 implementation 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.71(3)(c) of the 2009 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 the PEMP.

Reason: To ensure that all reports and notifications are submitted within a reasonable timescale after the licence is granted, in accordance with s.71(3)(c) of the 2009 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.71(2)(b) of the 2009 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 CO<sub>2</sub> 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.71(2)(b) of the 2009 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 any 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 and all construction materials used 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.71(2)(b) of the 2009 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 vessels permitted to engage in the Works.

Reason: To ensure the licence is available for the purpose of inspection, in accordance with s.71(2)(b) of the 2009 Act.

#### 3.1.12 Inspection of the Works

Any persons authorised by the Licensing Authority must be permitted to inspect the Works. The Licensee must, as far as reasonably practicable, 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 71(2)(b) of the 2009 Act.

#### 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.71(2)(b) of the 2009 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.71(3)(c) of the 2009 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 71(2)(b)of the 2009 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. Such approval may only be granted following consultation by the Licensing Authority with Scottish Environmental Protection Agency ("SEPA") and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.

The DP must outline measures for the decommissioning of the Works, 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.71(3)(d) of the 2009 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.71(3)(c) of the 2009 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.71(2)(b) of the 2009 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.71(2)(b) of the 2009 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 <u>s.71(3)(c)</u> of the 2009 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. Commencement of the Works cannot take place until such approval is granted.

**Reason:** To provide independent certification or verification of the technology, materials or equipment, in accordance with s.71(2)(b) of the 2009 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. Such approval may only be granted following consultation by the Licensing Authority with SNH, Aberdeenshire Council, SFF and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. Commencement of the Works cannot take place until such approval is granted.

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;
- d) Contingency planning for poor weather or other unforeseen delays; and
- e) The scheduled date for Final Commissioning of the Works.

The final CoP must be sent to Aberdeenshire Council, MCA, NLB, Moray Council and the Highland Council for information only.

Reason: To confirm the timing and programming of construction in accordance with s.71(3)(c) of the 2009 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. Such approval may only be granted following consultation by the Licensing Authority with SNH, SEPA, MCA, NLB, RSPB Scotland, SFF, Aberdeenshire Council and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. Commencement of the Works cannot take place until such approval is granted.

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.
- 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 Moray Council and the Highland Council and NLB 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.71(3)(c) of the 2009 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. Such approval may only be granted following consultation by the Licensing Authority with SNH and any such other advisors as may be required at the discretion of the Licensing Authority. Commencement of the Works cannot take place until such approval is granted.

The PS must include, but not be limited to:

- Details of expected noise levels from pile-drilling/driving in order to inform point d below:
- b. Full details of the proposed method and anticipated duration of piling to be carried out at all locations:
- c. Details of soft-start piling procedures and anticipated maximum piling energy required at each pile location; and
- d. Details of any mitigation such as Passive Acoustic Monitoring, MMO, use of Acoustic Deterrent Devices 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, Atlantic salmon and sea trout.

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

Reason: To mitigate the underwater noise impacts arising from piling activity in accordance s.71(3)(c) of the 2009 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. Such approval may only be granted following consultation by the Licensing Authority with SNH, RYA, MCA, NLB, MOD, CAA, SFF, Aberdeenshire Council, Moray Council, the Highland Council, JRC and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. Commencement of the Works cannot take place until such approval is granted.

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

- a) A plan showing the location of each individual WTG (subject to any required micro-siting), including information on WTG spacing, WTG identification/numbering, seabed conditions, bathymetry, confirmed foundation type for each WTG and any key constraints recorded on the site;
- A list of latitude and longitude co-ordinates accurate to three decimal places of minutes of arc for each WTG. This should also be provided as a GIS shape file using WGS84 format;
- c) A table or diagram of each WTG dimensions including height to blade tip LAT to the highest point;
- d) The finishes for each WTG; and
- e) The length and proposed arrangements on the seabed of all inter-connector and export cables.

Reason: To confirm the final Works specification and layout in accordance with s.71(3)(a) of the 2009 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 Applicant 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, Moray Council, the Highland Council, SNH, MCA and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. Commencement of the Works cannot take place until such approval is granted

Reason: To ensure that the Works is 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.71(3)(c) of the 2009 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. Such approval may only be granted following consultation by the Licensing Authority with SNH, and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. Commencement of the Works cannot take place until such approval is granted.

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

- All construction as required to be undertaken before the Completion of the Works;
   and
- b. The operational lifespan of the Works from the Completion of the Works until the cessation of electricity generation.

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 3.2.2.8);
- b. Marine Pollution Contingency Plan;
- 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 MFRAG, 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 the 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.71(3)(a) and (c) of the 2009 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. Such approval may only be granted following consultation by the Licensing Authority with SNH, MCA, RYA, SFF and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. Commencement of the Works cannot take place until such approval is granted.

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

- a. The number, types and specification of vessels required;
- b. The manner in which vessel management will be coordinated, particularly during construction but also during operation;

- c. Location of working port(s), the routes of passage, the frequency with which 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; and
- d. A fishing gear Transit Notice. The Transit Notice must lay out guidelines for vessels operating in and around the Site and transiting into the Site from relevant ports.

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, the PEMP, the NSP, and an LMP.

The final VMP must be sent to NLB for information only.

Reason: To mitigate the navigational risk to other legitimate users of the sea in accordance with s.71(3) (a) and (c) of the 2009 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 Operation and Maintenance Programme ("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, Aberdeenshire 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 WTG substructures, and inter-array cable network. 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 MCA and the Highland Council for information only.

**Reason**: To safeguard environmental interests during operation and maintenance of the offshore generating station in accordance with s.71(2)(b) of the 2009 Act.

# 3.2.2.14 Navigational Safety Plan

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

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.71(3)(a) and (c)of the 2009 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.

Such approval may only be granted following consultation by the Licensing Authority with the MCA and any other navigational advisors or organisations as may be required at the discretion of the Licensing Authority. Commencement of the Works cannot take place until such approval is granted.

The ERCoP should follow the template and guidance as found on the MCA website. The ERCoP must be developed in discussion with the MCA.

The final ERCoP must be sent to NLB for information only.

Reason: For emergency response planning for the Works and requirements for search and rescue helicopter operations in and around the Works in accordance with s.71(3)(a) of the 2009 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. Such approval may only be granted following consultation by the Licensing Authority with SNH, MCA, SFF and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. Commencement of the Works cannot take place until such approval is granted.

The CaP must be in accordance with the Application.

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

- a. The vessel types, location, duration and cable laying techniques for the inter array cables;
- b. The results of monitoring or data collection work (including geophysical, geotechnical and benthic surveys) which will help inform cable routing;
- c. Technical specification of inter array cables, including a desk based assessment of attenuation of electro-magnetic field strengths and shielding;

- d. A burial risk assessment to ascertain burial depths and where necessary alternative protection measures;
- e. Methodologies for surveys (e.g. over trawl) of the inter array cables through the operational life of the wind farm where mechanical protection of cables laid on the sea bed is deployed; and
- f. Methodologies for inter array cable inspection with measures to address and report to the Licensing Authority any exposure of inter array cables.

Any licensed cable protection 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.71(3)9a) and (c) of the 2009 Act.

#### 3.2.2.17 Lighting and Marking Plan

The Licensee must, no later than six months prior to the Commencement of the Works, submit a Lighting and Marking Plan ("LMP"), 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, CAA, MOD, RYA, Aberdeenshire Council, the Highland Council, Moray Council and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. Commencement of the Works cannot take place until such approval is granted.

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 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 International Association of Marine Aids to Navigation and Lighthouse Authorities ("IALA") Recommendation O-139 or any other documents that may supersede this guidance prior to approval of the LMP.

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.71(3)(a) of the 2009 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 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 s.71(2)(b) of the 2009 Act.

### 3.2.2.19 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. Such approval may only be granted following consultation by the Licensing Authority with SNH, SFF, the Highland Council and any other environmental advisors or organisations as required at the discretion of the Licensing Authority. Commencement of the Works cannot take place until such approval is granted. 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 the Highland Council for the socioeconomic receptor and MFRAG.

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 and post-construction (if considered appropriate by the Licensing Authority) monitoring or data collection as relevant in terms of the Application, and any subsequent monitoring or data collection for impacts on the following receptors:
  - 1. Birds, including the pre-construction monitoring of the great black-backed gull of the East Caithness SPA;
  - 2. Marine Mammals:
  - 3. Commercial Fisheries;
  - 4. Socio-economic; and
  - 5. Benthic communities.
- 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 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 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 them to identify the appropriateness of on-going monitoring. Following such reviews, the Licensing Authority may, in consultation with the MFRAG 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 MFRAG 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 them. Consideration should be given to data storage, analysis and reporting and be to MEDIN standards.

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.71(3)(a) and (c) of the 2009 Act.

#### 3.2.2.20 Regional Advisory Group

The Licensee must participate in the Moray Firth Regional Advisory Group ("MFRAG") 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, 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 of the impacts of the Works is undertaken, in accordance with s71(3)(c) of the 2009 Act.

#### 3.2.2.21 Fisheries Management and Mitigation Strategy

The Licensee must no later than six months prior to the Commencement of the Works, submit a FMMS, in writing, to the Licensing Authority for its written approval, in consultation with SFF and other fisheries representatives. Commencement of the Works cannot take place until such approval is granted. The FMMS must be defined and finalised in consultation with the MFCFWG.

In order to inform the production of the FMMS, the Licensee must monitor or collect data as relevant and agreed with 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 Works and transiting to the Works.

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 any contractors, or sub-contractors working for the Licensee must implement the mitigation measures committed to be carried out by the Licensee within the FMMS. The Licensee must participate in and remain a member of the MFCFWG or any successor group formed to facilitate commercial fisheries dialogue.

**Reason**: To mitigate the impact on commercial fishermen in accordance with s.71(3)(c) of the 2009 Act.

#### 3.2.2.22 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. Commencement of the Works cannot take place until such approval is granted. The ECoW must be appointed in time to review and approve the draft version of the first plan or programme submitted under this consent to Licensing Authority, in sufficient time for any preconstruction 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 consent;
- b) Responsible for the monitoring and reporting of compliance with the consent conditions and the environmental mitigation measures for all wind farm infrastructure;
- c) Provision of on-going advice and guidance to the Licensee in relation to achieving compliance with consent conditions, including but not limited to the conditions relating to and the implementation of the CMS, the EMP, the PEMP, the PS, the CaP and the VMP;
- d) Provision of reports on point b & c above to the 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;
- Monitoring that the Works are being constructed in accordance with the plans and this consent, the Application and in compliance with all relevant regulations and legislation;
- g) Reviewing and reporting incidents/near misses and reporting any changes in procedures as a result 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.71(2)(b)and (c) of the 2009 Act.

#### 3.2.2.23 Fisheries Liaison Officer

Prior to the Commencement of the Works, a FLO, must be appointed by the Licensee and approved, in writing, by the Licensing Authority (following consultation with SFF and the MFCFWG). Commencement of the Works cannot take place until such approval is granted. 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. 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.71 (3)(a) and (c) of the 2009 Act.

### 3.2.2.24 Protocol for Archaeological Discoveries

The Licensee must, no later than six months prior to the Commencement of the Works, submit a PAD and a WSI 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.

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. Commencement of the Works cannot take place until such approval is granted. The Reporting Protocol must be implemented in full, at all times, by the Licensee.

The final PAD and WSI must be sent to Aberdeenshire Council for information only.

Reason: To ensure any discovery of archaeological interest is properly and correctly reported in accordance with s. 71(3)(a) of the 2009 Act.

# 3.2.2.25 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. Such approval may only be granted following consultation by the Licensing Authority with TS and any such other

advisors as may be required at the discretion of the Licensing Authority. Commencement of the Works cannot take place until such approval is granted.

The CTMP must include:

- 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 s.71(3)(a) of the 2009 Act.

# 3.2.2.26 Aviation Radar

The Licensee must, prior to the Commencement of the Works, submit an Air Traffic Control Radar Mitigation Scheme ("ATC Scheme"), in writing, to the Licensing Authority for its written approval. Such approval may only be granted following consultation on the ATC Scheme with the Ministry of Defence ("MOD"). Commencement of the Works cannot take place until such approval is granted.

The ATC Scheme is a scheme designed to mitigate the impact of the Works upon the operation of the Primary Surveillance Radar at RAF Lossiemouth ("the Radar") and the air traffic control operations of the MOD, which is reliant upon the Radar. The approved ATC Scheme 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

### 3.2.2.27 MOD Notification

The Licensee must notify MOD, at least 14 days prior to the Commencement of the Works, in writing of the following information:

- a) the earliest date of the Commencement of the Works;
- b) the earliest date any WTGs are brought into use;
- c) the maximum height of any construction equipment 50 metres or greater in height above mean sea level, to be used; and
- d) the maximum heights of any WTG, offshore platforms or other, temporary or permanent, offshore structures 50 metres or greater in height, above mean sea level, to be deployed or constructed.

Reason: To mitigate the aviation risks in accordance with s.71(2)(b) of the 2009 Act.

Annex 1 – Offshore Generating Station Marine Licence

# 3.2.3 During the 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.71(3)(c) of the 2009 Act and that any accidental deposits are recovered or charted appropriately in accordance with s.71(3)(c) of the 2009 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.71(2)(b) of the 2009 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 SNH, MCA, NLB, CAA, MOD, RYA, Aberdeenshire Council, The Highland Council, Moray Council 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;
- 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.71(2)(b) of the 2009 Act.

# 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 s.71(3)(c) of the 2009 Act.

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 materials used were in accordance with the Application and in accordance with s.71(3)(d) of the 2009 Act.

# **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.71(3)(c) of the 2009 Act.

#### 3.2.4.2 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.71(2)(b) of the 2009 Act.

# 3.2.4.3 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 NLB, MCA, CAA 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:

- 1. the lighting requirements of the MCA, NLB, CAA and MOD;
- 2. 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:
- 3. that all other WTG must be fitted with a fixed single red 200 candela aviation light for SAR purposes; and
- 4. that all WTG aviation lights should be compatible with night vision imaging systems.

Reason: To ensure safe appropriate marking and lighting of the offshore Works, in accordance with s.71(2)(b) of the 2009 Act.

# 3.2.4.4 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.71(3)(b) of the 2009 Act.

### 3.2.4.5 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 the 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.71(3)(e) of the 2009 Act.

## 3.2.4.6 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.71(2)(b) of the 2009 Act.

### 3.2.4.7 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.71 (3)(c) of the 2009 Act.