

The logo for Moray East Offshore Windfarm. It features the word "MORAY EAST" in a bold, dark blue, sans-serif font. Below it, the words "OFFSHORE WINDFARM" are written in a lighter blue, sans-serif font. The letter "O" in "MORAY" is stylized as a circle with a blue segment. In the background, there is a large, light blue circular graphic composed of several segments, resembling a stylized sun or a wind turbine hub.

# **MORAY EAST**

## **OFFSHORE WINDFARM**

## **OFFSHORE CONSENTS VARIATION APPLICATION REPORT**

**Telford, Stevenson and MacColl Offshore Wind Farms**

**December 2017**

Telford Offshore Windfarm Limited, Stevenson Offshore Windfarm Limited and  
MacColl Offshore Windfarm Limited



<b>Produced by</b>	Catarina Rei
<b>Reviewed by</b>	Sarah Pirie
<b>Document Status</b>	FINAL
<b>File Name</b>	8460001-PCA0011-MWE-REP-001
<b>Date</b>	18/12/2017

**Review / Approval**

<b>Moray East Ecological Clerk of Works</b>	<b>Legal Review</b>
Benjamin King [Royal Haskoning DHV]	Colin Innes [Shepherd and Wedderburn]

<b>Moray Offshore Windfarm (East) Limited</b>		
Catarina Rei Offshore Consents Manager	Sarah Pirie Head of Development	Oscar Diaz Project Director

## Table of Contents

List of Abbreviations.....	3
1 Introduction.....	4
1.1 Project Background .....	4
1.2 Proposed development .....	4
2 Need for Variation to existing Section 36 Consents.....	8
2.1 Overview.....	8
2.2 Implications for the Section 36 Consents.....	9
2.2.1 Annex 1: Description of the Development .....	9
2.2.2 Annex 2: Conditions of the Section 36 Consent .....	9
2.3 Potential Implications for the Marine Licences.....	9
3 Environmental Impact Assessment and Appropriate Assessment Implications .....	11
4 Conclusions.....	12
5 References .....	13
APPENDIX 1 – Development Areas .....	15
APPENDIX 2 – Section 36 Consents Proposed Variations.....	17
APPENDIX 3 – Potential Implications for the Marine Licences.....	19
APPENDIX 4 – Technical Note by Royal HaskoningDHV .....	21

## List of Figures

Figure 1-1: Location of (1) the three consented wind farms (Telford, Stevenson and MacColl) where the Moray East Offshore Wind Farm will be located, and (2) the Offshore Transmission Infrastructure (OfTI). .....	4
--	---

## List of Tables

Table 1-1: Overview of proposed Development .....	5
Table 2-1: Overview of consented parameters and proposed variation .....	8

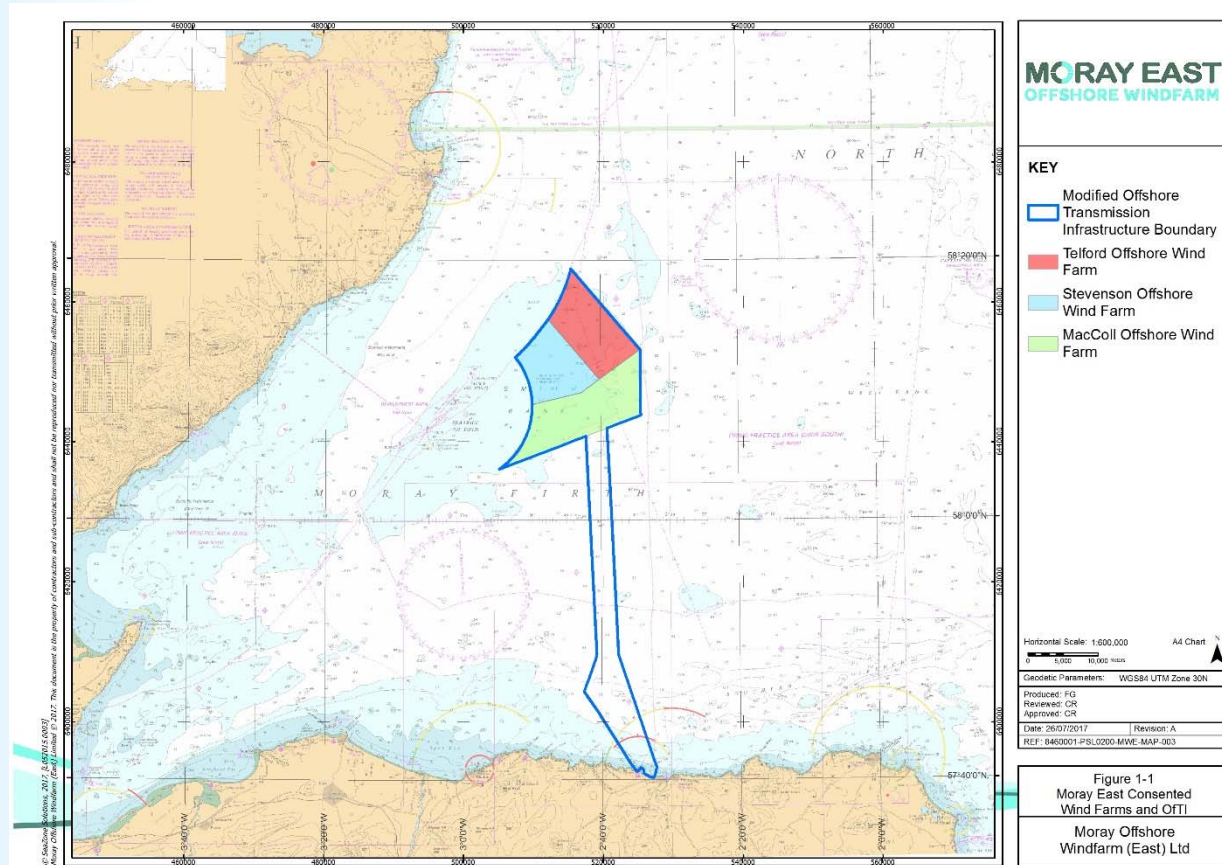
## List of Abbreviations

<b>AA</b>	Appropriate Assessment
<b>EIA</b>	Environmental Impact Assessment
<b>HRA</b>	Habitats Regulations Appraisal
<b>MS-LOT</b>	Marine Scotland Licensing Operations Team
<b>OftI</b>	Offshore Transmission Infrastructure
<b>OFTO</b>	Offshore Transmission Operator
<b>OSP</b>	Offshore Substation Platform
<b>SPA</b>	Special Protection Area
<b>WTG</b>	Wind Turbine Generator

## 1 Introduction

### 1.1 Project Background

In March 2014 Section 36 consents (Marine Scotland, 2014 a-c) were granted for the Telford, Stevenson and MacColl offshore wind farms (see Figure 1-1 below). The three wind farm sites together comprise the Moray East Site. Marine Licences for the three wind farms and the modified Offshore Transmission Infrastructure (OfTI) were granted in September 2014 (Marine Scotland, 2014 d-g). A further Marine Licence was granted for two additional Offshore Substation Platforms (OSPs) in September 2017 (Marine Scotland, 2017).



**Figure 1-1: Location of (1) the three consented wind farms (Telford, Stevenson and MacColl) where the Moray East Offshore Wind Farm will be located, and (2) the Offshore Transmission Infrastructure (OfTI).**

Telford Offshore Windfarm Limited is the holder of the Section 36 consent relating to the Telford Wind Farm, Stevenson Offshore Windfarm Limited is the holder of the Section 36 consent relating to the Stevenson Offshore Wind Farm and MacColl Offshore Windfarm Limited is the holder of the Section 36 consent relating to the MacColl Offshore Wind Farm (collectively known as the wind farm companies). Moray Offshore Windfarm (East) Limited (known as Moray East) owns 100% of the Telford, Stevenson and MacColl companies and intends to develop the three sites within the Moray East site as a single wind farm.

### 1.2 Proposed development

The wind farm companies have applied under Section 36(3) of the Electricity Act 1989 to vary the respective Section 36 consents for the Telford, Stevenson and MacColl Offshore Wind Farms in light of technological advances in wind turbine design and efficiency. No changes are proposed to the assessed physical parameters of the wind farms. It is proposed only to increase the maximum turbine nominal rated capacity from 8 MW to 10 MW and increase the maximum capacity to be installed within the

MacColl Wind Farm from 372 MW to 500 MW (solely as a result of this increase in the nominal turbine capacity i.e. a multiplier effect rather than an increase in the number of turbines). Nevertheless a summary of the proposed design envelope for each wind farm (should the variations be awarded) is provided below.

The proposed development encompasses three offshore wind farms (Telford, Stevenson and MacColl) located in the Smith Bank in the Outer Moray Firth, approximately 22 km from the Caithness coastline. The combined gross electrical output capacity for the three wind farms as consented is 1,116 MW. In terms of the application for variation the electrical output for the Telford and Stevenson Offshore Wind Farms remains capped at 372 MW and it is proposed that the cap for the MacColl Offshore Wind Farm is increased to 500 MW. However, it is noted that no change is proposed to the maximum number of turbines that could be installed in the MacColl site. The increase in the maximum installed capacity to 500 MW in the MacColl site is subject to the proviso that that the installed capacity in MacColl can only exceed 372 MW where the overall maximum total installed capacity of the Telford, Stevenson and MacColl will not exceed 1,116 MW as originally consented. The responsibility for ensuring compliance with the overall cap rests with the holder of the Section 36 consent for the MacColl Offshore Wind Farm. This report will be expressly referenced in the change to condition 7 and the requirement in relation to capacities identified above would therefore become a binding requirement.

Table 1-1 below provides a summary of the design envelope for each of the wind farms.

**Table 1-1: Overview of proposed Development**

Infrastructure Type	Parameter	Parameter Range
Offshore Wind Farm	Maximum capacity	372 MW for the Telford and Stevenson Offshore Wind Farms; 500 MW for the MacColl Offshore Wind Farm; (1,116 MW maximum for Telford, Stevenson and MacColl combined)
Wind Turbine Generators (WTGs)	Turbine rating	Between 6 MW and 10 MW
	Number of turbines in each of the three wind farms	Up to 62 turbines [62 x 6 MW turbines or 53 x 7-10 MW turbines]
	Hub height	97-118 m
	Rotor Diameter	150–172 m
	Blade Width Range	5 –5.8 m
	Max Tip Height (LAT)	186-204 m
	Minimum air draft i.e. minimum clearance between blade tip and sea level at HAT	22 m
	Rotational speed range	4 – 12.8 rpm
	Spacing Downwind Crosswind	 1,200–1,720 m 1,050–1,376 m
Substructure & foundation for WTG's:	Work platform size (at base on turbine)	45 x 45 m
	Base Width	65 m

Infrastructure Type	Parameter	Parameter Range
Concrete Gravity Base Foundations with Ballast and a gravel / grout bed	Gravel / grout bed diameter	75 m
	Excavated bed + scour protection diameter	95 m
	Max dredger affected diameter	125 m
	Max bed excavation depth	5 m
	Max gravel bed depth	2.5 m
Substructure & foundation for WTG's: Steel Lattice Jackets with Pin Piles	Jacket base width	60 m
	Number of legs / piles	3–4
	Max Diameter of piles	2.5 m
	Max Length of piles	60 m
	Max number of simultaneous piling events	6 (2 simultaneous piling events per wind farm)
	Max scour protection around each leg plus pile diameter	16 m
Inter-array cabling	Indicative number of strings per wind farm	7–12
	Capacity of each string	Up to 80 MW
	Configuration of strings	Branched or looped
	Voltage of cabling	33 or 66 kV
	Entry / exit method to WTGs and OSPs	J-tube
	Target burial depth in seabed	1 m
	Protection where burial not achieved	Rock placement, concrete mattresses / concrete tunnels / grout bags, Proprietary steel / plastic ducting / protecting sleeves.
Meteorological Mast	Number to installed as part of the proposed project (i.e. one met mast in the EDA in addition to the one to be installed in 2014)	1
Met-mast style and substructure & foundation: Option 1 – Steel lattice met mast on a monopile	Indicative diameter of monopile	4.5 m
	Mast tip height at LAT	Up to 110 m
Met-mast style and substructure & foundation: Option 2 – Steel lattice met mast on a ballasted concrete gravity base with gravel / grout bed	Dimensions are expected to be no greater than those of the gravity base for a WTG	
	Mast tip height at LAT	Up to 110 m



Infrastructure Type	Parameter	Parameter Range
Met–mast style and substructure & foundation: Option 3 – Steel lattice met mast on a steel lattice jacket with pin piles	Dimensions are expected to be no greater than those of the jacket substructure for a WTG	
	Mast tip height at LAT	Up to 110 m
Met–mast style and substructure & foundation: Option 4 – LIDAR on a floating spar with moorings which are weighted or anchored to the seabed	Indicative spar diameter	1–2 m
	Indicative spar height from top to bottom	c. 35 m
	Indicative work platform diameter	3 m
	Indicative height above sea level	10 m

A plan showing of each of the development areas is contained in Appendix 1.

## 2 Need for Variation to existing Section 36 Consents

### 2.1 Overview

Wind turbine technology has progressed rapidly since 2012 when Moray Offshore Renewables Limited (renamed 'Moray East' in 2016) applied for consent to develop offshore wind generation on the site. The most significant development has been in efficiency of wind turbine generators increasing the energy they can capture from the wind and therefore the power they can deliver. At the time of assessment in 2012 Moray East considered a range of turbines for the Moray East site (between 3.6 MW and 7/8 MW). Following detailed assessment of ornithological impacts during the determination period Moray East removed the lower rated turbines and reduced the number of turbines.

As a result of this technology development Moray East requires to amend the consented wind turbine nominal rated capacity. In addition, and as a result of this change an amendment will also be required to the maximum consented capacity for the MacColl Wind Farm as discussed at section 1.2 above. No changes in the physical parameters for the three wind farms are required as highlighted in Table 2-1 below.

**Table 2-1: Overview of consented parameters and proposed variation**

Parameter	Telford, Stevenson and MacColl Section 36 Consents	Telford, Stevenson and MacColl Section 36 consents variation
Maximum installed capacity	372 MW per wind farm. (1,116 MW maximum for Telford, Stevenson and MacColl combined)	372 MW maximum installed capacity for Telford and Stevenson – <b>as consented</b> <b>Change:</b> 500 MW maximum installed capacity for MacColl Offshore Wind Farm subject to the proviso that that the maximum megawatts installed in MacColl can only exceed 372 MW where the overall maximum total installed capacity of the Telford, Stevenson and MacColl will not exceed 1,116 MW.
Wind turbine nominal rated capacity	6 to 8 MW	<b>Change:</b> Up to 10 MW: impact on condition 7 for each consent.
Maximum number of turbines	6 MW turbines – 186 (62 per wind farm) 7 & 8 MW turbines – 159 (53 per wind farm)	159 (53 per wind farm) – <b>as consented</b> (as per 7/8 MW turbine parameters).
Maximum turbine tip height	204 m	204 m – <b>as consented</b> (as per 7/8 MW turbine parameters).
Maximum rotor diameter	172 m (7/8 MW turbines)	172 m – <b>as consented</b> (as per 7/8 MW turbine parameters).
Maximum blade width	5.8 m	5.8 m – <b>as consented</b> (as per 7/8 MW turbine parameters).
Rotor speed	4.25 to 12.8 rpm	4.25 to 12.8 rpm – <b>as consented</b> (as per 7/8 W turbine parameters).
Minimum air draft (HAT)	22 m	22 m – <b>as consented</b> .

## 2.2 Implications for the Section 36 Consents

The process to vary Section 36 consents is contained in the Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013 as amended by the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017.

The proposed variations to each of the Section 36 consents are set out in Appendix 2.

The following sections of the consents are of relevance to the proposed amendments referred in Table 2-1 above.

### 2.2.1 Annex 1: Description of the Development

Annex 1 of each of the Section 36 consents states that the development (i.e. wind farm) *“shall have a permitted generating capacity not exceeding 372 MW”*.

The nominal wind turbine capacity is not stated. No amendments are therefore required to this annex for the Telford and Stevenson Offshore Wind Farms however, and as mentioned in section 2.1 above, a variation has been sought to increase the MacColl capacity cap to 500 MW. No increase in the number of WTGs permitted in Annex 1 is sought.

### 2.2.2 Annex 2: Conditions of the Section 36 Consent

Condition 7 of each of the Section 36 consents states the following:

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

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

The Moray East Environmental Statement (Moray East ES, 2012) set out the design envelope parameters which included WTGs between 3.6 MW and 7/8 MW and provided an assessment of the environmental impacts of the proposed wind farms for those WTGs. Applications were made for up to 336 turbines (over the three wind farms) and for a maximum capacity of 1,500 MW.

During the determination period Additional Information in relation to ornithology assessments was submitted in 2015. As a result of potential significant cumulative impacts on ornithology (namely great black-backed gull) Moray East reduced the number of WTGs and restricted the turbine type for the wind farms (3.6 MW and 5 MW turbines were removed from the design envelope by limiting the specified rotor diameter in Annex 1 of the consents).

Due to the proposed variation of WTG rated capacity Condition 7 in each of the Section 36 consents would need to be varied to include reference to the variation application documents to ensure that Moray East can comply with the Section 36 consents if it uses WTGs with a rated capacity higher than 8 MW.

## 2.3 Potential Implications for the Marine Licences

It is noted that if consent is granted for the application to vary the Section 36 consent then the Scottish Ministers may consider exercising their discretion to vary the Marine Licences granted in respect of the wind farms under of section 72(3)(d) of the Marine and Coastal Access Act 2009 and section 30(3)(d) of the Marine (Scotland) Act 2010 to ensure that the marine licence and consent granted under Section 36 of the Electricity Act 1989 (as amended) are consistent.

The potential implications of the Section 36 consent variations to each of the Marine Licences are set out in Appendix 3.

### 3 Environmental Impact Assessment and Appropriate Assessment Implications

The Moray East ES (2012) provided detailed assessment of the predicted environmental impacts of the proposed wind farms. As mentioned above applications were made for up to 1,500 MW and up to 336 WTGs. The range of WTGs considered was between 3.6 MW and 7/8 MW. Following detailed discussions during the determination period on potential significant cumulative impacts on great black-backed gull at East Caithness Cliffs Special Protection Area (SPA) Moray East revised the wind farm design by reducing the number of turbines and removing the lower rated turbines from the envelope. The consented envelope was therefore up to 186 x 6 MW turbines or 159 x 7/8 MW turbines across the three wind farms.

Collision risk was deemed to be the key risk for great back-backed gull. Detailed calculations demonstrated that the worst case scenario parameter for this species was the 7/8 MW WTG model with 7 MW the worst due to number of turbines.

As highlighted in Table 2-1 above the physical parameters of the larger turbine (10 MW) are the same as the consented 7/8 MW turbine. No change is proposed to the maximum number of turbines (i.e. in the case of the 8MW WTG up to 53 in each of the wind farms is permitted). In addition, the variation seeks to increase the maximum capacity per string from 36 MW to 80 MW due to the multiplier effect of using higher rated WTGs. This parameter is not used in any of the assessments presented within the 2012 ES) and therefore a change in this parameter does not affect the Environmental Impact Assessments (EIA) or Appropriate Assessment (AA) results.

Therefore it can be concluded that the results of the EIA and AA remain valid (as per consent decision documents for each of the three wind farms). This conclusion has been validated by the Moray East Ecological Clerk of Works, Royal HaskoningDHV, who have reviewed the variation documents. Their conclusions are set out in Appendix 4.

## 4 Conclusions

Wind turbine technology has developed significantly since the consent applications for the Telford, Stevenson and MacColl Offshore Wind Farms were submitted in 2012. The main change has been in the rated capacity output per turbine due to developments in the efficiency of WTGs capturing energy from the wind. In order for Moray East to take advantage of these recent technological efficiencies it has applied for the Section 36 consents for the Telford, Stevenson and MacColl Offshore Wind Farms to be varied.

Therefore, the wind farm companies request confirmation from Marine Scotland Licencing and Operations Team on behalf of the Scottish Ministers that in terms of Schedule 2 of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 no significant adverse effects on the environment arise from the changes proposed and accordingly there is no requirement for a new EIA to be undertaken and that the Section 36 consents can be varied accordingly (as per section 2.2 above) with no further assessment required.

## 5 References

Marine Scotland (2014 a) MacColl Offshore Wind Farm Section 36 Consent – accessed via <http://www.gov.scot/Resource/0044/00446497.pdf>.

Marine Scotland (2014 b) Telford Offshore Wind Farm Section 36 Consent – accessed via <http://www.gov.scot/Resource/0044/00446485.pdf>.

Marine Scotland (2014 c) Stevenson Offshore Wind Farm Section 36 Consent – accessed via <http://www.gov.scot/Resource/0044/00446493.pdf>.

Marine Scotland (2014d) MacColl Offshore Wind Farm Marine Licence – accessed via <http://www.gov.scot/Resource/0045/00458797.pdf>.

Marine Scotland (2014 e) Telford Offshore Wind Farm Marine Licence – accessed via <http://www.gov.scot/Resource/0045/00458795.pdf>.

Marine Scotland (2014 f) Stevenson Offshore Wind Farm Marine Licence – accessed via <http://www.gov.scot/Resource/0045/00458796.pdf>.

Marine Scotland (2017) Moray Offshore Windfarm (East) Limited Offshore Substation Platforms (“OSPs” Marine Licence - <http://www.gov.scot/Resource/0052/00524980.pdf>).

Moray East (2012) Telford, Stevenson, MacColl Wind Farms and Associated Transmission Infrastructure Environmental Statement

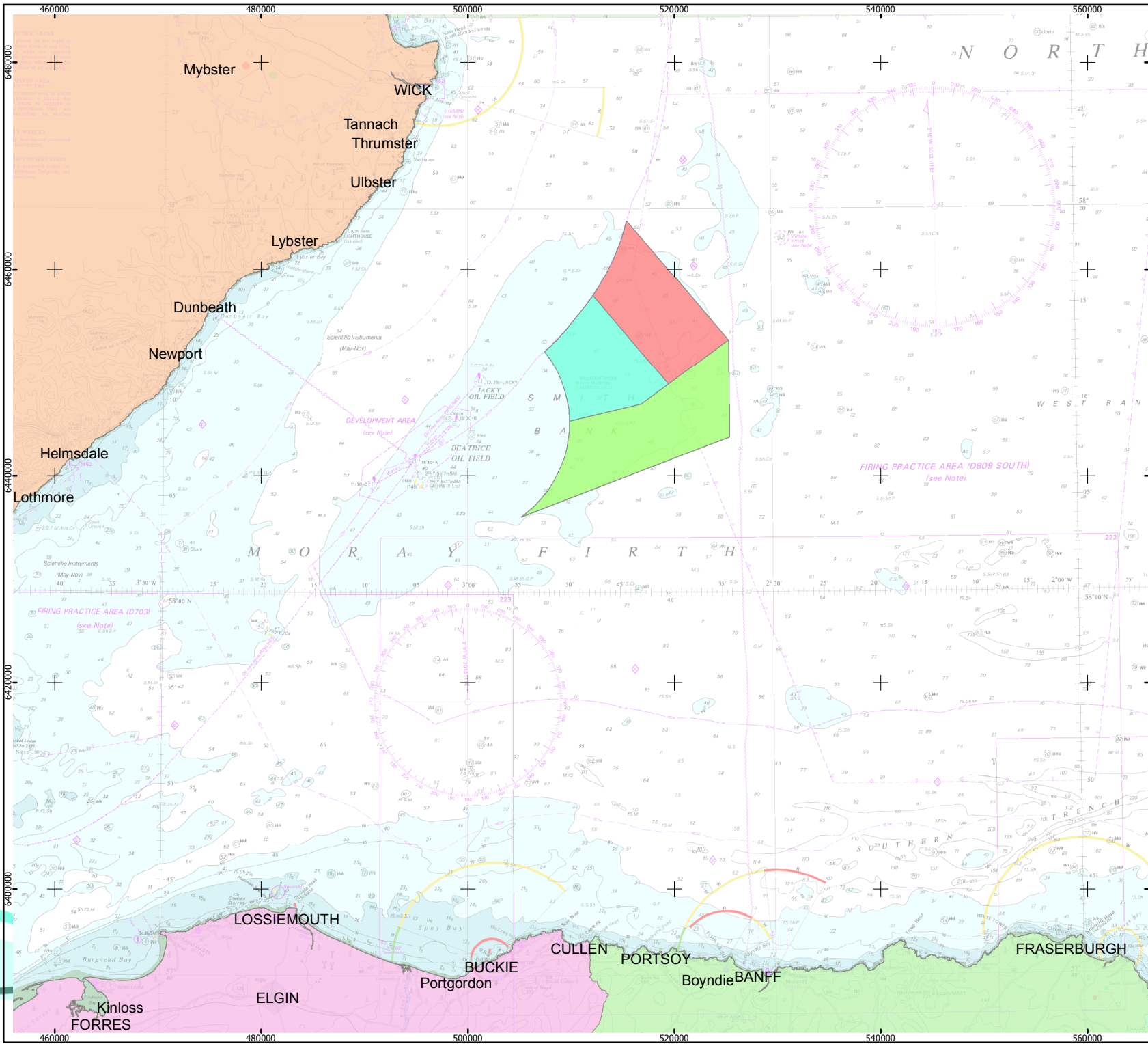
.





## **APPENDIX 1 – Development Areas**

Contains Ordnance Survey data © Crown Copyright and database right [2017].  
© Seazone Solutions Limited, 2017. [05/2015/0003]. This product includes mapping data licensed from Ordnance Survey (Great Britain) with the permission of HMSO. © Crown Copyright, 2017. All rights reserved.  
Moray Offshore Windfarm (East) Limited © 2017. This document is the property of contractors and sub-contractors and shall not be reproduced nor transmitted without prior written approval.



# MORAY EAST OFFSHORE WINDFARM

## KEY

- MacColl Offshore Windfarm
- Stevenson Offshore Windfarm
- Telford Offshore Windfarm

Horizontal Scale: 1:500,000

0 5,000 10,000 Meters

A4 Chart



Geodetic Parameters: WGS84 UTM Zone 30N

Produced: FG  
Reviewed: CG  
Approved: CG

Date: 06/10/2017 Revision: A  
REF: 8460001-PCA0011-MWE-MAP-001

Figure A 1  
Consented Windfarm Sites

Moray Offshore  
Windfarm (East) Ltd

## **APPENDIX 2 – Section 36 Consents Proposed Variations**

**APPLICATION FOR VARIATION OF SECTION 36 CONSENT**  
**TELFORD OFFSHORE WIND FARM**  
**DRAFT PROPOSED ALTERATIONS TO SECTION 36 CONSENT**

**Alteration and/or Addition**

**In Annex 2 – Conditions of the Section 36 Consent**

1. In condition 7, after “the Additional Ornithological Information” insert “, the Section 36 Consents Variation Application Report for Telford, Stevenson and MacColl Offshore Wind Farms dated December 2017”.

## **Annex 1**

### **DESCRIPTION OF THE DEVELOPMENT**

The Development, located as shown on Figure 1 below, shall have a permitted generating capacity not exceeding 372 MW and shall comprise a wind-powered electricity generating station in the Outer Moray Firth, including:

1. not more than 62 three-bladed horizontal axis wind turbine generators each with:
  - a. a maximum blade tip height of 204 metres;
  - b. a rotor diameter of between 150 and 172 metres;
  - c. a minimum crosswind spacing of 1,050 metres; and
  - d. a minimum downwind spacing of 1,200 metres;
2. all foundations, substructures, fixtures, fittings, fixings, and protections;
3. inter array cabling and cables up to and onto the offshore substation platforms; and
4. transition pieces including access ladders / fences and landing platforms,

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

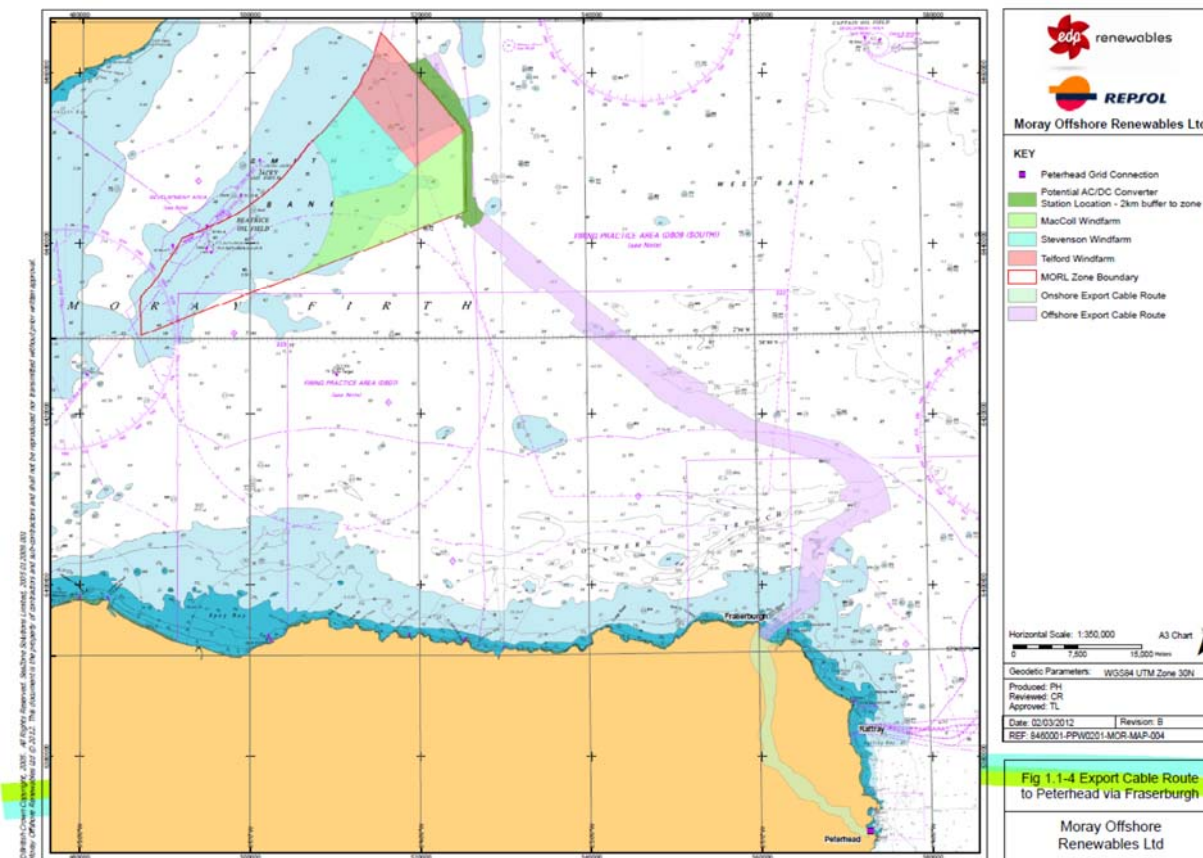


Figure 1. Development Location – see KEY

## Annex 2

### **CONDITIONS OF THE SECTION 36 CONSENT**

The consent granted in accordance with section 36 of the Electricity Act 1989 is subject to the following conditions:

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

**Reason:** *To define the duration of the consent.*

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

**Reason:** *To ensure the Commencement of the Development is undertaken within a reasonable timescale after consent is granted.*

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

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

4. The Company is not permitted to assign this consent without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may grant (with or without conditions) or refuse such authorisation as they, at their own discretion, see fit. The consent is not capable of being assigned, alienated or transferred otherwise than in accordance with the foregoing procedure.

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

5. In the event that for a continuous period of 12 months or more any WTG installed and commissioned and forming part of the Development fails to produce electricity on a commercial basis to the National Grid then, unless otherwise agreed in writing by the Scottish Ministers and after consultation with any advisors as required at the discretion of the Scottish Ministers, any such WTG and all associated foundations and ancillary equipment may be deemed by the Scottish Ministers to cease to be required. If so deemed, the WTG and all its associated foundations and ancillary equipment must be dismantled and removed from the Site by the Company, following the procedures laid out within the Company's Decommissioning Programme, within the period of 24 months from the date of the deeming decision by the Scottish Ministers and the Site must be fully reinstated by the Company to the specification and satisfaction of the Scottish Ministers after consultation with any such advisors on decommissioning as may be required at the discretion of the Scottish Ministers.

**Reason:** *To ensure that any redundant WTGs and associated ancillary equipment is removed from the Site in the interests of safety, amenity and environmental protection.*

6. If any serious health and safety incident occurs on the Site requiring the Company to report it to the Health and Safety Executive, then the Company must also notify the Scottish Ministers of the incident within 24 hours of the incident occurring.

**Reason:** *To inform the Scottish Ministers of any serious health and safety incident occurring on the Site.*

7. The Development must be constructed and operated in accordance with the terms of the Application and related documents, including the accompanying ES, the Additional Ornithological Information, [the Section 36 Consents Variation Application Report for Telford, Stevenson and MacColl Offshore Wind Farms dated December 2017](#) and Annex 1 of this letter, except in so far as amended by the terms of this section 36 consent.

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

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

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



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

The CoP must set out:

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

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

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

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

**Reason:** *To ensure the appropriate construction management of the Development, taking into account mitigation measures to protect the environment and other users of the marine area.*

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

The PS must include:

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

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

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

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

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

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

- a. A plan showing the proposed location of each individual WTG (subject to any required micro-siting), including information on WTG spacing, WTG identification / numbering, location of the substation platforms,

- seabed conditions, bathymetry, confirmed foundation type for each WTG and any key constraints recorded on the Site;
- b. A list of latitude and longitude co-ordinates accurate to three decimal places of minutes 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 (measured above HAT), height to hub (measured above HAT to the centreline of the generator shaft), rotor diameter and rotation speed;
- d. The generating capacity of each WTG used on the Site and a confirmed generating capacity for the Site overall;
- e. The finishes for each WTG (see condition 19 on WTG lighting and marking); and
- f. The length and proposed arrangements on the seabed of all inter-array cables.

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

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

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

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

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

- a. all construction as required to be undertaken before the Final Commissioning of the Development; and

- b. the operational lifespan of the Development from the Final Commissioning of the Development until the cessation of electricity generation. (Environmental management during decommissioning is addressed by condition 3).

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

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

The Company must, no later than 3 months prior to the Final Commissioning of the Development, submit an updated EMP, in writing, to cover the operation and maintenance activities for the Development to the Scottish Ministers for their written approval. Such approval may be given only following consultation with the JNCC, SNH, SEPA, RSPB Scotland and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The EMP must be regularly reviewed by the Company and the MFRAG (referred to in condition 27) over the lifespan of the Development, and be kept up to date (in relation to the likes of construction methods and operations of the Development in terms of up to date working practices) by the Company in consultation with the MFRAG.

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

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

- 15. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Vessel Management Plan ("VMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be

granted following consultation by the Scottish Ministers with the JNCC, SNH, and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved VMP (as updated and amended from time to time by the Company). Any updates or amendments made to the VMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

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

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

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

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

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

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

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

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

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

17. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Navigational Safety Plan ("NSP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB and any other navigational advisors or organisations as may be required at the discretion of the Scottish Ministers. The NSP must include, but not be limited to, the following issues:
- a. Navigational safety measures;
  - b. Construction exclusion zones;
  - c. Notice(s) to Mariners and Radio Navigation Warnings;
  - d. Anchoring areas;
  - e. Temporary construction lighting and marking;
  - f. Emergency response and co-ordination arrangements for the construction, operation and decommissioning phases of the Development; and
  - g. Buoyage.

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

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

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

The CaP must include the following:

- a. Details of the location and cable laying techniques for the inter array cables;
- b. The results of survey work (including geophysical, geotechnical and benthic surveys) which will help inform cable routing;
- c. Technical specification of inter array cables, including a desk based assessment of attenuation of electro-magnetic field strengths and shielding;
- d. A burial risk assessment to ascertain if burial depths can be achieved. In locations where this is not possible then suitable protection measures must be provided;
- e. Methodologies for over trawl surveys of the inter array cables through the operational life of the wind farm where mechanical protection of cables laid on the sea bed is deployed; and
- f. Measures to address exposure of inter array cables.

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

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

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

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

20. The Company must, prior to the erection of any WTGs on the Site, submit an Air Traffic Control Radar Mitigation Scheme ("ATC Scheme"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the DIO.

No WTGs shall become operational until:

- a. the mitigation measures that are required under the approved ATC Scheme have been implemented;
- b. any performance criteria, all as specified in the approved ATC Scheme as requiring to be satisfied, have been so satisfied; and
- c. the implementation and satisfaction of the performance criteria have been approved by the Scottish Ministers in consultation with the DIO.

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

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

21. No part of any turbine shall be erected above sea level until a Primary Radar Mitigation Scheme agreed with the Operator has been submitted to and approved in writing by the Scottish Ministers in order to avoid the impact of the Development on the Primary Radar of the Operator located at Allanshill and associated air traffic management operations.

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

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

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

23. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Television and Radio Reception Mitigation Plan ("TRRMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the Highland Council. The TRRMP must provide for a baseline television reception survey to be carried out at a location(s) to be agreed by the Scottish Ministers in consultation with the Highland Council, paid for by the Company, prior to the commencement of any WTG installation. The results of which must be submitted by the Company, in writing, to the Highland Council within the time limit set in the TRRMP.

From Commencement of the Development until the date occurring 12 months after the Final Commissioning of the Development, any reasonable claim by any individual person regarding television picture loss or interference at their house, business premises or other building, which they claim is attributable to the Development, and which is notified to the Company, must be investigated by a qualified engineer approved by the Scottish Ministers in consultation with the Highland Council. The Company is liable for any costs incurred by any



such investigation. The results of any investigation must be submitted by the Company to the Scottish Ministers and the Highland Council within 2 months of completion of the investigation. Any impairment to the television signal shall be remedied by the Company, at its own expense, as soon as practicable to provide that the standard of reception at any affected property is equivalent to the baseline television and radio reception as existing at that property before the operation of the Development.

**Reason: For the protection of the local amenity.**

24. The Company must, prior to the Commencement of the Development, and following confirmation of the approved DSLP by the Scottish Ministers (refer to condition 12), provide the positions and maximum heights of the WTGs and construction equipment to the UKHO for aviation and nautical charting purposes. The Company must, within 1 month of the Final Commissioning of the Development, provide the “as-built” positions and maximum heights of the WTGs to the UKHO for aviation and nautical charting purposes.

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

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

**Reason: To minimise the impact on public roads.**

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

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

Monitoring should be done in such a way as to ensure that the data which is collected allows useful and valid comparisons as between different phases of the Development. Monitoring may also serve the purpose of verifying key predictions in the ES. Additional monitoring may be required in the event that further potential adverse environmental effects are identified for which no predictions were made in the ES.

The Scottish Ministers may agree that monitoring may cease before the end of the lifespan of the Development.

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

- a. Pre-construction, construction (if considered appropriate by the Scottish Ministers) and post-construction monitoring surveys as relevant in terms of the ES and any subsequent surveys for:
  1. Birds;
  2. Cod;
  3. Herring;
  4. Sandeels;
  5. Diadromous fish;
  6. Benthic communities; and
  7. Seabed scour and local sediment deposition.
- b. The participation by the Company in surveys to be carried out in relation to marine mammals as set out in the MMMP; and
- c. The participation by the Company in surveys to be carried out in relation to regional and strategic bird monitoring;

All the initial methodologies for the above monitoring must be approved, in writing, by the Scottish Ministers and, where appropriate, in consultation with the MFRAG referred to in condition 27 of this consent. Any pre-consent surveys carried out by MORL to address any of the above species may be used in part to discharge this condition.

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

The Company must submit written reports of such monitoring surveys to the Scottish Ministers at timescales to be determined by the Scottish Ministers in consultation with the MFRAG. Subject to any legal restrictions regarding the

treatment of the information, the results are to be made publicly available by the Scottish Ministers, or by such other party appointed at their discretion.

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

27. The Company must participate in any Moray Firth Regional Advisory Group (“MFRAG”) established by the Scottish Ministers for the purpose of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish. Should a SSMEG be established (refer to condition 28), the responsibilities and obligations being delivered by the MFRAG will be subsumed by the SSMEG at a timescale to be determined by the Scottish Ministers.

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

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

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

29. Prior to the Commencement of the Development, the Company must at its own expense, and with the approval of the Scottish Ministers in consultation with the JNCC and SNH, appoint an Ecological Clerk of Works (“ECoW”). The term of appointment for the ECoW shall be from no later than 9 months post consent until the Final Commissioning of the Development.

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

- a. Quality assurance of final draft version of all plans and programmes required under this consent;
- b. Provide advice to the Company on compliance with consent conditions, including the conditions relating to the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
- c. Monitor compliance with the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
- d. Provide reports on point c) above to the Scottish Ministers at timescales to be determined by the Scottish Ministers; and
- e. Inducting site personnel on site / works environmental policy and procedures.

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

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

**Reason:** *To ensure effective monitoring of the effects on migratory fish at a local level (the Moray Firth).*

31. The Company must continue its membership in the Moray Firth Offshore Wind Developers Group - Commercial Fisheries Working Group ("MFOWDG-CFWG"), or any successor group formed to facilitate commercial fisheries dialogue to define and finalise the draft Commercial Fisheries Mitigation Strategy (dated 1<sup>st</sup> July 2013 (Revision C)). As part of the finalised Commercial Fisheries Mitigation Strategy ("CFMS"), the Company must produce and implement a mitigation strategy for each commercial fishery that can prove to the Scottish Ministers that they will be adversely affected by the Development. Should it be deemed necessary by the MFOWDG-CFWG, investigations into alternative gear for the scallop fishing industry in the Moray Firth must form part of the CFMS. The CFMS to be implemented must be approved in writing by the Scottish Ministers. The Company must implement all mitigation measures committed to be carried out by the Company within the CFMS, so far as is applicable to the Development. Any contractors, or sub-contractors working for the Company, must co-operate with the fishing industry to ensure the effective implementation of said CFMS.

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

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

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

- a. Establishing and maintaining effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea concerning the overall project and any amendments to

- the CMS and site environmental procedures;
- b. Provision of information relating to the safe operation of fishing activity on the site of the Development; and
- c. Ensuring that information is made available and circulated in a timely manner to minimise interference with fishing operations and other users of the sea.

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

- 33.** In the event that pile foundations are to be used, the Company must undertake herring surveys every year during the months of August and September commencing the first August and September following the date of this consent, up until, and including, the last August and September prior to Commencement of the Development, unless otherwise agreed in writing by the Scottish Ministers. The methodology of the herring surveys must be agreed, in writing, by the Scottish Ministers, following consultation with Marine Scotland Science, prior to the surveys commencing. The results of the herring surveys will be used to better inform the knowledge of spawning behaviour / characteristics of the Orkney / Shetland herring stock, thus allowing the Company to devise mitigation options to minimise noise impacts from piling activity on all life stages of herring and to inform the Company's PS (if a PS is required).

Following the results of the herring surveys undertaken in the last August and September prior to the Commencement of the Development, the Company must submit, in writing, its mitigation strategy to minimise the noise impacts on herring from piling activity, to the Scottish Ministers for their written approval. Once the Scottish Ministers have provided their written approval, the mitigation must be deployed during the annual herring spawning period (August and September) in any year of construction involving piling. Failing any agreement on mitigation, a piling restriction not exceeding sixteen (16) days within the months of August and September will take place in the area marked 'mitigation zone', as shown on the Telford Wind Farm Fish Mitigation and Monitoring Plan in Figure 2, in any year of construction involving piling. The sixteen (16) days are not necessarily to be consecutive. The relevant sixteen (16) days of piling restrictions will be notified to the Company by the Scottish Ministers, in writing, at least 90 days prior to the first day of piling restriction.

**Reason: To mitigate the risk to herring numbers in the Orkney/Shetland stock.**

- 34.** The cod surveys undertaken on 17-26<sup>th</sup> February 2013 and 10-19<sup>th</sup> March 2013 in the Moray Firth by MORL will remain valid as a pre-construction baseline survey provided the Commencement of the Development occurs no later than 1<sup>st</sup> April 2018. If Commencement of the Development is later than 1<sup>st</sup> April 2018, the Company must undertake a further baseline cod survey during the months of February and March immediately prior to the Commencement of the Development in the area marked 'Cod Survey Area'

shown on the Telford Wind Farm Fish Mitigation and Monitoring Plan in Figure 2, unless prior written approval is sought and obtained from the Scottish Ministers. A full survey report and data set must be submitted, in writing, to the Scottish Ministers within 6 months following completion of any further baseline cod survey for approval, in writing, by the Scottish Ministers.

The Company must undertake a post-construction cod survey in the first February and March, occurring no earlier than 12 months, following the Final Commissioning of the Development. This cod survey must be undertaken in the area marked 'Cod Survey Area' shown on Telford Wind Farm Fish Mitigation and Monitoring Plan in Figure 2, unless prior written approval is sought and obtained from the Scottish Ministers. A full survey report and data set must be submitted, in writing, to the Scottish Ministers within 6 months following completion of any post-construction cod survey for approval, in writing, by the Scottish Ministers.

**Reason:** *To validate conclusions of impact assessments made in the ES on cod populations in the Moray Firth.*

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

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

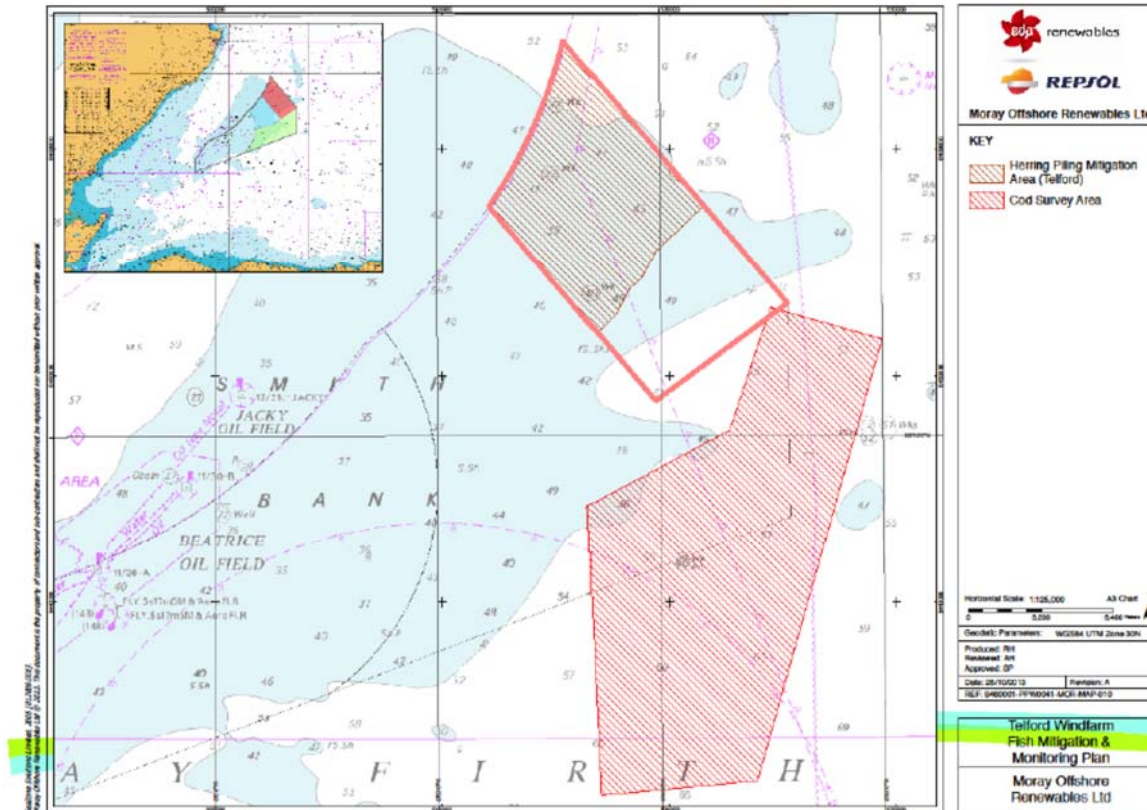


Figure 2. Telford Herring Piling Mitigation Area and Post Construction Cod Survey Area

## **Annex 3**

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

In this decision letter and in Annex 1 and 2:

“AA” means Appropriate Assessment.

“ABC” means the Acceptable Biological Change tool.

“Additional Ornithology Information” means the covering letter and report, submitted to the Scottish Ministers by Moray Offshore Renewables Limited on the 17<sup>th</sup> June 2013, concerning the reworking of bird data provided in the original Environmental Statement.

“the Application” means the Application letter and Environmental Statement submitted to the Scottish Ministers by Moray Offshore Renewables Limited, on behalf of Telford Offshore Windfarm Limited, on 2<sup>nd</sup> August 2012, and the Additional Ornithology Information submitted to the Scottish Ministers by Moray Offshore Renewables Limited on the 17<sup>th</sup> June 2013.

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

“CFMS” means Commercial Fisheries Mitigation Strategy - the final document produced from consultation between Moray Offshore Renewables Limited and the Moray Firth Offshore Wind Developers Group - Commercial Fisheries Working Group (“MFOWDG-CFWG”), based on the draft Commercial Fisheries Mitigation Strategy (dated 1st July 2013 (Revision C) produced by Moray Offshore Renewables Limited).

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

“Commissioning of the First WTG” means the date on which the first wind turbine generator forming the Development has supplied electricity on a commercial basis to the National Grid.

“the Company” means Telford Offshore Wind farm Limited, 1st floor, 14/18 City Road, Cardiff, CF24 3DL. Registration Number: 07386810.

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

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



“the Development” means the Telford Offshore Wind Farm in the Outer Moray Firth.

“ECC” means East Caithness Cliffs Special Protection Area.

“ECoW” means Ecological Clerk of Works.

“EDA” means the Eastern Development Area of Zone 1 of Round 3 leasing agreements in the UK Renewable Energy Zone.

“EIA” means Environmental Impact Assessment.

“EMF” means electromagnetic fields.

“EPS” means European Protected Species.

“ES” means the Environmental Statement submitted to the Scottish Ministers by the Moray Offshore Renewables Limited on 2<sup>nd</sup> August 2012 as part of the Application as defined above.

“EU” means European Union.

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

“FLO” means a Fisheries Liaison Officer.

“GIS” means Geographic Information System.

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

“GW” means gigawatt.

“HAT” means Highest Astronomical Tide - the highest level of water which can be predicted to occur under any combination of astronomical conditions.

“HRA” means Habitats Regulations Appraisal.

“IALA Recommendation O-139” means the International Association of Marine Aids to Navigation and Lighthouse Authorities Recommendation O-139 On The Marking of Man Made Offshore Structures.

“Marine Guidance Note 371” means the Maritime and Coastguard Agency Marine Guidance Note 371 Offshore Renewable Energy installations (OREI’s) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues.

“MFOWDG-CFW” means Moray Firth Offshore Wind Developers Group - Commercial Fisheries Working Group. A group formed, and set up, to develop the

Commercial Fisheries Mitigation Strategy, and as forum to facilitate on-going dialogue with the commercial fishing industry.

“MFRAG” means Moray Firth Regional Advisory Group. A group yet to be formed, responsible for overseeing monitoring and mitigation on a regional scale, set up by the Scottish Ministers

“MW” means megawatt.

“NCC” means North Caithness Cliffs Special Protection Area.

“nm” means nautical miles.

“NRA” means Navigational Risk Assessment.

“OfTI” means the Offshore Transmission Infrastructure.

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

“OPEX” means Operational Expenditure.

“PBR” means Potential Biological Removal.

“the Planning Authorities” means Aberdeenshire Council, the Highland Council and Moray Council.

“the Planning Authority” means Aberdeenshire Council.

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

“the Proposal” means the proposed MORL development, consisting of all three wind farms; Telford Offshore Wind Farm, Stevenson Offshore Wind Farm and MacColl Offshore Wind Farm.

“PVA” means Population Viability Analysis

“SAC” means Special Area of Conservation.

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

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

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

“SEA” means Strategic Environmental Assessment.

“the Site” means the area shaded in red in Figure 1, attached to this consent at Annex 1.

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

“SPA” means Special Protection Area.

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

“SSSI” means Site of Special Scientific Interest.

“the Study Area” means Moray, Highland, Aberdeen City and Aberdeenshire.

“WDA” means the Western Development Area of Zone 1 of Round 3 leasing agreements in the UK Renewable Energy Zone.

“WGS84” means the World Geodetic System 1984.

“WTG” means wind turbine generator.

### Organisations

“ASFB” means The Association of Salmon Fishery Boards.

“BOWL” means Beatrice Offshore Windfarm Limited (Company Number SC350248) and having its registered office at Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ.

“CAA” means The Civil Aviation Authority.

“CoS” means The Chamber of Shipping.

“DECC” means Department of Energy and Climate Change.

“DIO” means The Defence Infrastructure Organisation (Ministry of Defence).

“IALA” means International Association of Marine Aids to Navigation and Lighthouse Authorities.

“JNCC” means The Joint Nature Conservation Committee.

“MCA” means The Maritime and Coastguard Agency.

“MFSTP” means Moray Firth Sea Trout Project.

“MMO” means Marine Management Organisation.

“MORL” means Moray Offshore Renewables Limited, and having its registered office at 1st floor, 14/18 City Road, Cardiff, CF24 3DL. Registration Number: 7101438.

“MPFSPG” Moray and Pentland Firth Salmon Protection Group.

“MS-LOT” means Marine Scotland Licensing Operations Team.

“MSS” means Marine Scotland Science.

“NATS” means National Air Traffic Service.

“NLB” means The Northern Lighthouse Board.

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

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

“RYA Scotland” means Royal Yachting Association Scotland.

“SAS” means Surfers Against Sewage.

“SCA” means – Scottish Canoe Association

“SEPA” means The Scottish Environment Protection Agency.

“SFF” means The Scottish Fisherman’s Federation.

“SMRU” means Sea Mammal Research Unit.

“SNH” means Scottish Natural Heritage.

“UNECE” means United Nations Economic Commission for Europe.

“UKHO” means United Kingdom Hydrographic Office.

“WDC” means Whale and Dolphin Conservation.

#### Plans, Programmes and Statements

“ACSSDP” means Aberdeen City and Shire Strategic Development Plan, proposed February 2013.

“ALDP” means The Aberdeenshire Local Development Plan, June 2012.

“CaP” means Cable Plan.

“CFMS” means Commercial Fisheries Mitigation Strategy.

“CMS” means Construction Method Statement.

“CoP” means Construction Programme.

“DIO Scheme” means Air Traffic Control Radar Mitigation Scheme.

“DS” means Design Statement.

“DSL P” means Development Specification and Layout Plan.

“EMP” means Environmental Management Plan.

“HRESPG” means Highland Renewable Energy Strategy and Planning Guidelines, May 2006.

“HwLDP” means The Highland – wide Local Development Plan, April 2012.

“LMP” means Lighting and Marking Plan.

“MES” means Moray Economic Strategy, October 2012.

“MLP” means The Moray Local Plan, November 2008.

“MMMP” means Marine Mammal Monitoring Programme.

“MSP 2007” means The Moray Structure Plan, April 2007.

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

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

“NSP” means Navigational Safety Plan.

“OMP” means Operation and Maintenance Programme.

“PEMP” means Project Environmental Monitoring Programme.

“PS” means Piling Strategy.

“SEIS” means Supplementary Environmental Information Statement.

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

“the Structure Plan” means Aberdeen City and Shire Structure Plan, August 2009.

“TRRMP” means Television and Radio Reception Mitigation Plan.

“TTP” means Traffic and Transportation Plan

“VMP” means Vessel Management Plan.

### Legislation

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

“the Electricity Act” means the Electricity Act 1989 (as amended).

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

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

“the 1990 Regulations” means the Electricity (Applications for Consent) Regulations 1990 (as amended).

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

“the 2000 Regulations” means the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended).

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

“the 2009 Act” means Marine and Coastal Access Act 2009 (as amended).

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

**APPLICATION FOR VARIATION OF SECTION 36 CONSENT**

**STEVENSON OFFSHORE WINDFARM**

**DRAFT PROPOSED ALTERATIONS TO SECTION 36 CONSENT**

**Alteration and/or Addition**

**In Annex 2 – Conditions of the Section 36 Consent**

1. In condition 7, after “the Additional Ornithological Information” insert “, the Section 36 Consents Variation Application Report for Telford, Stevenson and MacColl Offshore Wind Farms dated December 2017”.

## **Annex 1**

### **DESCRIPTION OF THE DEVELOPMENT**

The Development, located as shown on Figure 1 below, shall have a permitted generating capacity not exceeding 372 MW and shall comprise a wind-powered electricity generating station in the Outer Moray Firth, including:

1. not more than 62 three-bladed horizontal axis wind turbine generators each with:
  - a. a maximum blade tip height of 204 metres;
  - b. a rotor diameter of between 150 and 172 metres;
  - c. a minimum crosswind spacing of 1,050 metres; and
  - d. a minimum downwind spacing of 1,200 metres;
2. all foundations, substructures, fixtures, fittings, fixings, and protections;
3. inter array cabling and cables up to and onto the offshore substation platforms; and
4. transition pieces including access ladders / fences and landing platforms,

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



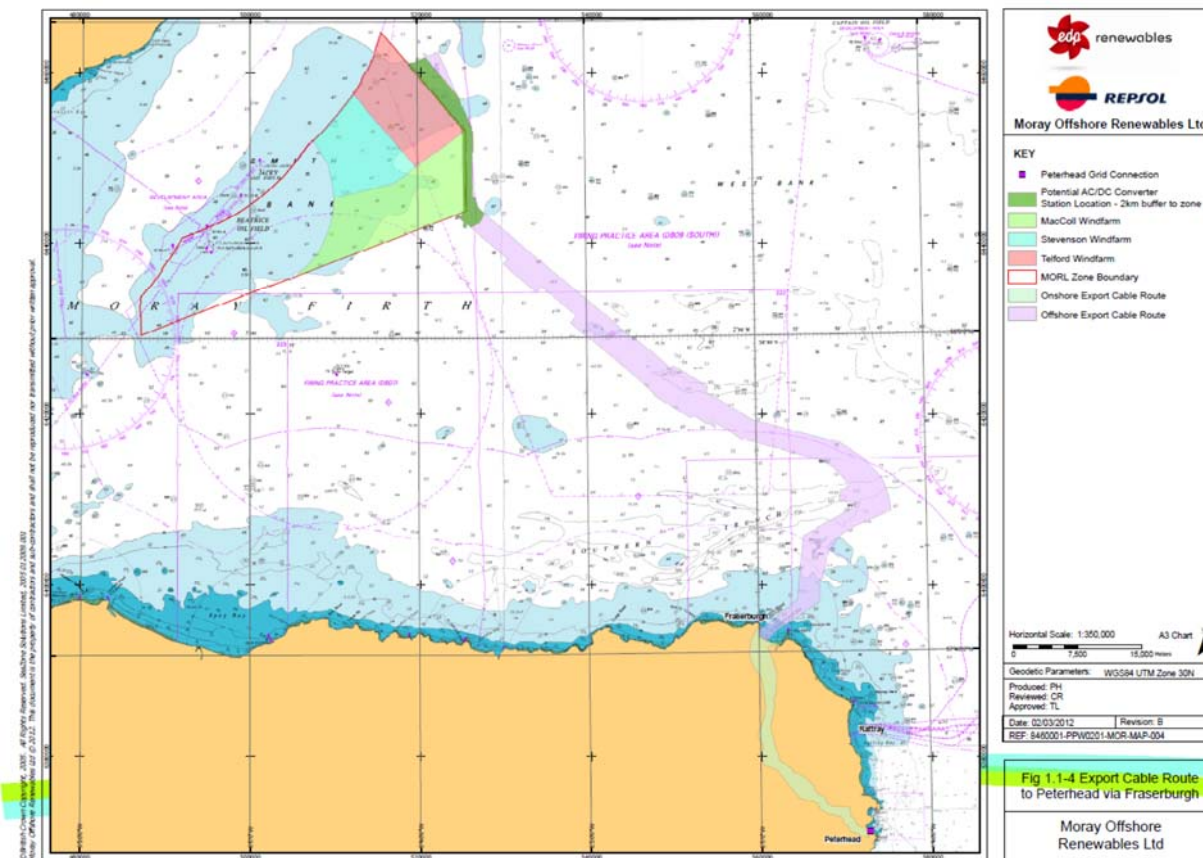


Figure 1. Development Location – see KEY

## Annex 2

### **CONDITIONS OF THE SECTION 36 CONSENT**

The consent granted in accordance with section 36 of the Electricity Act 1989 is subject to the following conditions:

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

**Reason:** *To define the duration of the consent.*

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

**Reason:** *To ensure the Commencement of the Development is undertaken within a reasonable timescale after consent is granted.*

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

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

4. The Company is not permitted to assign this consent without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may grant (with or without conditions) or refuse such authorisation as they, at their own discretion, see fit. The consent is not capable of being assigned, alienated or transferred otherwise than in accordance with the foregoing procedure.

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

5. In the event that for a continuous period of 12 months or more any WTG installed and commissioned and forming part of the Development fails to produce electricity on a commercial basis to the National Grid then, unless otherwise agreed in writing by the Scottish Ministers and after consultation with any advisors as required at the discretion of the Scottish Ministers, any such WTG and all associated foundations and ancillary equipment may be deemed by the Scottish Ministers to cease to be required. If so deemed, the WTG and all its associated foundations and ancillary equipment must be dismantled and removed from the Site by the Company, following the procedures laid out within the Company's Decommissioning Programme, within the period of 24 months from the date of the deeming decision by the Scottish Ministers and the Site must be fully reinstated by the Company to the specification and satisfaction of the Scottish Ministers after consultation with any such advisors on decommissioning as may be required at the discretion of the Scottish Ministers.

**Reason: To ensure that any redundant WTGs and associated ancillary equipment is removed from the Site in the interests of safety, amenity and environmental protection.**

6. If any serious health and safety incident occurs on the Site requiring the Company to report it to the Health and Safety Executive, then the Company must also notify the Scottish Ministers of the incident within 24 hours of the incident occurring.

**Reason: To inform the Scottish Ministers of any serious health and safety incident occurring on the Site.**

7. The Development must be constructed and operated in accordance with the terms of the Application and related documents, including the accompanying ES, the Additional Ornithological Information, [the Section 36 Consents Variation Application Report for Telford, Stevenson and MacColl Offshore Wind Farms dated December 2017](#) and Annex 1 of this letter, except in so far as amended by the terms of this section 36 consent.

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

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

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

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

The CoP must set out:

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

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

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

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

**Reason:** *To ensure the appropriate construction management of the Development, taking into account mitigation measures to protect the environment and other users of the marine area.*

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

The PS must include:

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

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

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

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

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

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

- a. A plan showing the proposed location of each individual WTG (subject to any required micro-siting), including information on WTG spacing, WTG identification / numbering, location of the substation platforms,

- seabed conditions, bathymetry, confirmed foundation type for each WTG and any key constraints recorded on the Site;
- b. A list of latitude and longitude co-ordinates accurate to three decimal places of minutes 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 (measured above HAT), height to hub (measured above HAT to the centreline of the generator shaft), rotor diameter and rotation speed;
- d. The generating capacity of each WTG used on the Site and a confirmed generating capacity for the Site overall;
- e. The finishes for each WTG (see condition 19 on WTG lighting and marking); and
- f. The length and proposed arrangements on the seabed of all inter-array cables.

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

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

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

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

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

- a. all construction as required to be undertaken before the Final Commissioning of the Development; and

- b. the operational lifespan of the Development from the Final Commissioning of the Development until the cessation of electricity generation. (Environmental management during decommissioning is addressed by condition 3).

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

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

The Company must, no later than 3 months prior to the Final Commissioning of the Development, submit an updated EMP, in writing, to cover the operation and maintenance activities for the Development to the Scottish Ministers for their written approval. Such approval may be given only following consultation with the JNCC, SNH, SEPA, RSPB Scotland and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The EMP must be regularly reviewed by the Company and the MFRAG (referred to in condition 27) over the lifespan of the Development, and be kept up to date (in relation to the likes of construction methods and operations of the Development in terms of up to date working practices) by the Company in consultation with the MFRAG.

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

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

- 15. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Vessel Management Plan ("VMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be

granted following consultation by the Scottish Ministers with the JNCC, SNH, and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved VMP (as updated and amended from time to time by the Company). Any updates or amendments made to the VMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

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

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

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

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

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

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

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



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

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

17. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Navigational Safety Plan ("NSP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB and any other navigational advisors or organisations as may be required at the discretion of the Scottish Ministers. The NSP must include, but not be limited to, the following issues:
- a. Navigational safety measures;
  - b. Construction exclusion zones;
  - c. Notice(s) to Mariners and Radio Navigation Warnings;
  - d. Anchoring areas;
  - e. Temporary construction lighting and marking;
  - f. Emergency response and co-ordination arrangements for the construction, operation and decommissioning phases of the Development; and
  - g. Buoyage.

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

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

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

The CaP must include the following:

- a. Details of the location and cable laying techniques for the inter array cables;
- b. The results of survey work (including geophysical, geotechnical and benthic surveys) which will help inform cable routing;
- c. Technical specification of inter array cables, including a desk based assessment of attenuation of electro-magnetic field strengths and shielding;
- d. A burial risk assessment to ascertain if burial depths can be achieved. In locations where this is not possible then suitable protection measures must be provided;
- e. Methodologies for over trawl surveys of the inter array cables through the operational life of the wind farm where mechanical protection of cables laid on the sea bed is deployed; and
- f. Measures to address exposure of inter array cables.

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

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

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

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

20. The Company must, prior to the erection of any WTGs on the Site, submit an Air Traffic Control Radar Mitigation Scheme ("ATC Scheme"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the DIO.

No WTGs shall become operational until:

- a. the mitigation measures that are required under the approved ATC Scheme have been implemented;
- b. any performance criteria, all as specified in the approved ATC Scheme as requiring to be satisfied, have been so satisfied; and
- c. the implementation and satisfaction of the performance criteria have been approved by the Scottish Ministers in consultation with the DIO.

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

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

21. No part of any turbine shall be erected above sea level until a Primary Radar Mitigation Scheme agreed with the Operator has been submitted to and approved in writing by the Scottish Ministers in order to avoid the impact of the Development on the Primary Radar of the Operator located at Allanshill and associated air traffic management operations.

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

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

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

23. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Television and Radio Reception Mitigation Plan ("TRRMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the Highland Council. The TRRMP must provide for a baseline television reception survey to be carried out at a location(s) to be agreed by the Scottish Ministers in consultation with the Highland Council, paid for by the Company, prior to the commencement of any WTG installation. The results of which must be submitted by the Company, in writing, to the Highland Council within the time limit set in the TRRMP.

From Commencement of the Development until the date occurring 12 months after the Final Commissioning of the Development, any reasonable claim by any individual person regarding television picture loss or interference at their house, business premises or other building, which they claim is attributable to the Development, and which is notified to the Company, must be investigated by a qualified engineer approved by the Scottish Ministers in consultation with the Highland Council. The Company is liable for any costs incurred by any

such investigation. The results of any investigation must be submitted by the Company to the Scottish Ministers and the Highland Council within 2 months of completion of the investigation. Any impairment to the television signal shall be remedied by the Company, at its own expense, as soon as practicable to provide that the standard of reception at any affected property is equivalent to the baseline television and radio reception as existing at that property before the operation of the Development.

**Reason: For the protection of the local amenity.**

24. The Company must, prior to the Commencement of the Development, and following confirmation of the approved DSLP by the Scottish Ministers (refer to condition 12), provide the positions and maximum heights of the WTGs and construction equipment to the UKHO for aviation and nautical charting purposes. The Company must, within 1 month of the Final Commissioning of the Development, provide the “as-built” positions and maximum heights of the WTGs to the UKHO for aviation and nautical charting purposes.

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

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

**Reason: To minimise the impact on public roads.**

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

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

Monitoring should be done in such a way as to ensure that the data which is collected allows useful and valid comparisons as between different phases of the Development. Monitoring may also serve the purpose of verifying key predictions in the ES. Additional monitoring may be required in the event that further potential adverse environmental effects are identified for which no predictions were made in the ES.

The Scottish Ministers may agree that monitoring may cease before the end of the lifespan of the Development.

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

- a. Pre-construction, construction (if considered appropriate by the Scottish Ministers) and post-construction monitoring surveys as relevant in terms of the ES and any subsequent surveys for:
  1. Birds;
  2. Cod;
  3. Herring;
  4. Sandeels;
  5. Diadromous fish;
  6. Benthic communities; and
  7. Seabed scour and local sediment deposition.
- b. The participation by the Company in surveys to be carried out in relation to marine mammals as set out in the MMMP; and
- c. The participation by the Company in surveys to be carried out in relation to regional and strategic bird monitoring;

All the initial methodologies for the above monitoring must be approved, in writing, by the Scottish Ministers and, where appropriate, in consultation with the MFRAG referred to in condition 27 of this consent. Any pre-consent surveys carried out by MORL to address any of the above species may be used in part to discharge this condition.

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

The Company must submit written reports of such monitoring surveys to the Scottish Ministers at timescales to be determined by the Scottish Ministers in consultation with the MFRAG. Subject to any legal restrictions regarding the

treatment of the information, the results are to be made publicly available by the Scottish Ministers, or by such other party appointed at their discretion.

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

27. The Company must participate in any Moray Firth Regional Advisory Group ("MFRAG") established by the Scottish Ministers for the purpose of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish. Should a SSMEG be established (refer to condition 28), the responsibilities and obligations being delivered by the MFRAG will be subsumed by the SSMEG at a timescale to be determined by the Scottish Ministers.

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

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

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

29. Prior to the Commencement of the Development, the Company must at its own expense, and with the approval of the Scottish Ministers in consultation with the JNCC and SNH, appoint an Ecological Clerk of Works ("ECoW"). The term of appointment for the ECoW shall be from no later than 9 months post consent until the Final Commissioning of the Development.

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

- a. Quality assurance of final draft version of all plans and programmes required under this consent;
- b. Provide advice to the Company on compliance with consent conditions, including the conditions relating to the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
- c. Monitor compliance with the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
- d. Provide reports on point c) above to the Scottish Ministers at timescales to be determined by the Scottish Ministers; and
- e. Inducting site personnel on site / works environmental policy and procedures.

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

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

**Reason:** *To ensure effective monitoring of the effects on migratory fish at a local level (the Moray Firth).*

31. The Company must continue its membership in the Moray Firth Offshore Wind Developers Group - Commercial Fisheries Working Group ("MFOWDG-CFWG"), or any successor group formed to facilitate commercial fisheries dialogue to define and finalise the draft Commercial Fisheries Mitigation Strategy (dated 1<sup>st</sup> July 2013 (Revision C)). As part of the finalised Commercial Fisheries Mitigation Strategy ("CFMS"), the Company must produce and implement a mitigation strategy for each commercial fishery that can prove to the Scottish Ministers that they will be adversely affected by the Development. Should it be deemed necessary by the MFOWDG-CFWG, investigations into alternative gear for the scallop fishing industry in the Moray Firth must form part of the CFMS. The CFMS to be implemented must be approved in writing by the Scottish Ministers. The Company must implement all mitigation measures committed to be carried out by the Company within the CFMS, so far as is applicable to the Development. Any contractors, or sub-contractors working for the Company, must co-operate with the fishing industry to ensure the effective implementation of said CFMS.

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

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

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

- a. Establishing and maintaining effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea concerning the overall project and any amendments to

- the CMS and site environmental procedures;
- b. Provision of information relating to the safe operation of fishing activity on the site of the Development; and
- c. Ensuring that information is made available and circulated in a timely manner to minimise interference with fishing operations and other users of the sea.

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

- 33.** In the event that pile foundations are to be used, the Company must undertake herring surveys every year during the months of August and September commencing the first August and September following the date of this consent, up until, and including, the last August and September prior to Commencement of the Development, unless otherwise agreed in writing by the Scottish Ministers. The methodology of the herring surveys must be agreed, in writing, by the Scottish Ministers, following consultation with Marine Scotland Science, prior to the surveys commencing. The results of the herring surveys will be used to better inform the knowledge of spawning behaviour / characteristics of the Orkney / Shetland herring stock, thus allowing the Company to devise mitigation options to minimise noise impacts from piling activity on all life stages of herring and to inform the Company's PS (if a PS is required).

Following the results of the herring surveys undertaken in the last August and September prior to the Commencement of the Development, the Company must submit, in writing, its mitigation strategy to minimise the noise impacts on herring from piling activity, to the Scottish Ministers for their written approval. Once the Scottish Ministers have provided their written approval, the mitigation must be deployed during the annual herring spawning period (August and September) in any year of construction involving piling. Failing any agreement on mitigation, a piling restriction not exceeding sixteen (16) days within the months of August and September will take place in the area marked 'mitigation zone', as shown on the Stevenson Wind Farm Fish Mitigation and Monitoring Plan in Figure 2, in any year of construction involving piling. The sixteen (16) days are not necessarily to be consecutive. The relevant sixteen (16) days of piling restrictions will be notified to the Company by the Scottish Ministers, in writing, at least 90 days prior to the first day of piling restriction.

**Reason: To mitigate the risk to herring numbers in the Orkney/Shetland stock.**

- 34.** The cod surveys undertaken on 17-26<sup>th</sup> February 2013 and 10-19<sup>th</sup> March 2013 in the Moray Firth by MORL will remain valid as a pre-construction baseline survey provided the Commencement of the Development occurs no later than 1<sup>st</sup> April 2018. If Commencement of the Development is later than 1<sup>st</sup> April 2018, the Company must undertake a further baseline cod survey during the months of February and March immediately prior to the Commencement of the Development in the area marked 'Cod Survey Area'



shown on the Stevenson Wind Farm Fish Mitigation and Monitoring Plan in Figure 2, unless prior written approval is sought and obtained from the Scottish Ministers. A full survey report and data set must be submitted, in writing, to the Scottish Ministers within 6 months following completion of any further baseline cod survey for approval, in writing, by the Scottish Ministers.

The Company must undertake a post-construction cod survey in the first February and March, occurring no earlier than 12 months, following the Final Commissioning of the Development. This cod survey must be undertaken in the area marked 'Cod Survey Area' shown on the Stevenson Wind Farm Fish Mitigation and Monitoring Plan in Figure 2, unless prior written approval is sought and obtained from the Scottish Ministers. A full survey report and data set must be submitted, in writing, to the Scottish Ministers within 6 months following completion of any post-construction cod survey for approval, in writing, by the Scottish Ministers.

**Reason: To validate conclusions of impact assessments made in the ES on cod populations in the Moray Firth.**

35. The sandeel survey undertaken between 30<sup>th</sup> January and 2<sup>nd</sup> March 2012 in the Moray Firth by MORL will remain valid as a pre-construction baseline survey provided that the Commencement of the Development occurs no later than 1st April 2017. If Commencement of the Development occurs later than 1st April 2017, the Company must undertake a further baseline sandeel survey prior to the Commencement of the Development of the area marked 'Sandeel Survey Area' shown on the Stevenson Wind Farm Fish Mitigation and Monitoring Plan in Figure 2, unless prior written approval is sought and obtained from the Scottish Ministers. A full survey report and data set must be submitted by the Company, in writing, to the Scottish Ministers within 6 months following completion of any further baseline sandeel survey for approval, in writing, by the Scottish Ministers.

No earlier than 12 months following Final Commissioning of the Development, the Company must undertake a post-construction sandeel survey using a methodology agreed, in writing, with the Scottish Ministers. The post-construction sandeel survey will cover the area marked 'Sandeel Survey Area' shown on the Stevenson Wind Farm Fish Mitigation and Monitoring Plan in Figure 2, unless prior written approval is sought and obtained from the Scottish Ministers. A full survey report and data set must be submitted, in writing, to the Scottish Ministers within 6 months following completion of any post-construction sandeel survey for approval, in writing, by the Scottish Ministers.

**Reason: To validate conclusions of impact assessments made in the ES on sandeel populations in the Moray Firth.**

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

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

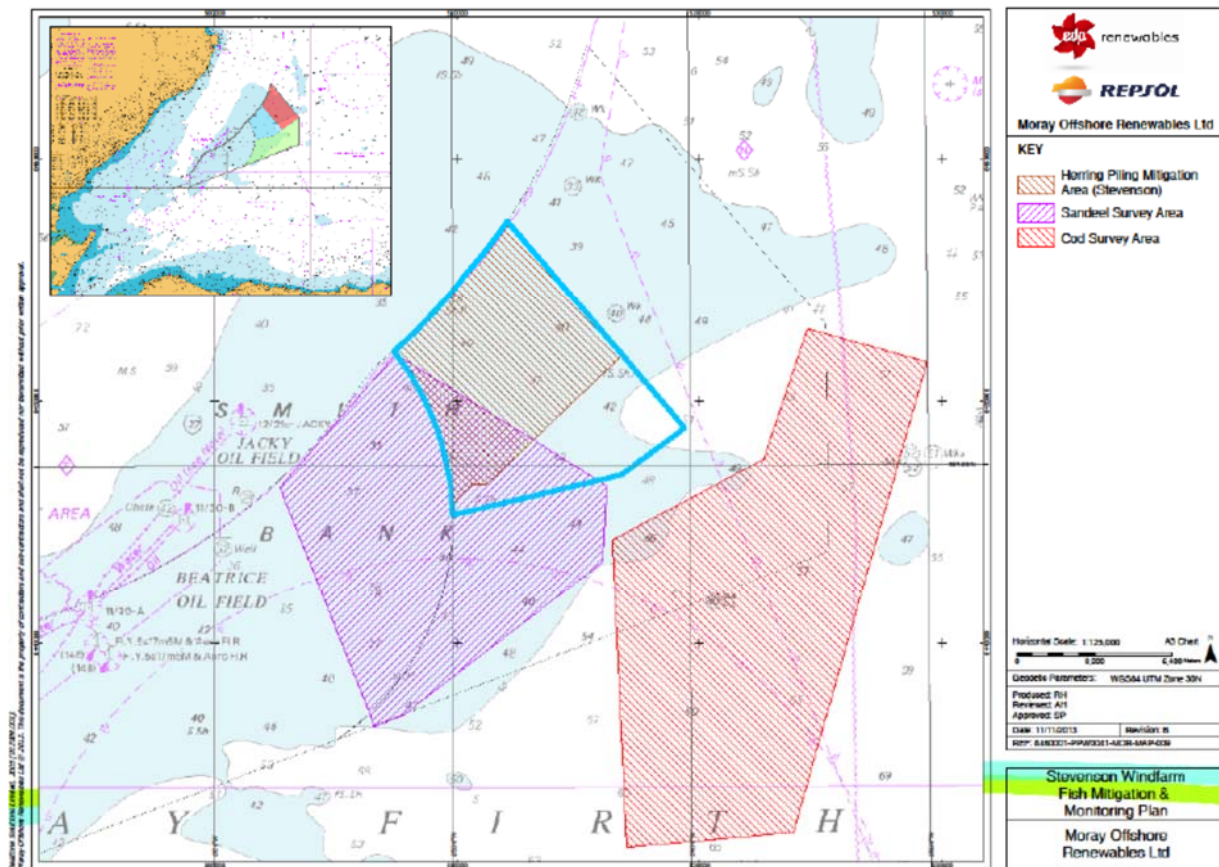


Figure 2. Stevenson Herring Piling Mitigation Area and Post Construction Cod and Sandeel Survey Areas

## **Annex 3**

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

In this decision letter and in Annex 1 and 2:

“AA” means Appropriate Assessment.

“ABC” means the Acceptable Biological Change tool.

“Additional Ornithology Information” means the covering letter and report, submitted to the Scottish Ministers by Moray Offshore Renewables Limited on the 17<sup>th</sup> June 2013, concerning the reworking of bird data provided in the original Environmental Statement.

“the Application” means the Application letter and Environmental Statement submitted to the Scottish Ministers by Moray Offshore Renewables Limited, on behalf of Stevenson Offshore Windfarm Limited, on 2<sup>nd</sup> August 2012, and the Additional Ornithology Information submitted to the Scottish Ministers by Moray Offshore Renewables Limited on the 17<sup>th</sup> June 2013.

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

“CFMS” means Commercial Fisheries Mitigation Strategy - the final document produced from consultation between Moray Offshore Renewables Limited and the Moray Firth Offshore Wind Developers Group - Commercial Fisheries Working Group (“MFOWDG-CFWG”), based on the draft Commercial Fisheries Mitigation Strategy (dated 1st July 2013 (Revision C) produced by Moray Offshore Renewables Limited).

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

“Commissioning of the First WTG” means the date on which the first wind turbine generator forming the Development has supplied electricity on a commercial basis to the National Grid.

“the Company” means Stevenson Offshore Wind farm Limited, 1st floor, 14/18 City Road, Cardiff, CF24 3DL. Registration Number: 07386838.

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

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

“the Development” means the Stevenson Offshore Wind Farm in the Outer Moray Firth.

“ECC” means East Caithness Cliffs Special Protection Area.

“ECOW” means Ecological Clerk of Works.

“EDA” means the Eastern Development Area of Zone 1 of Round 3 leasing agreements in the UK Renewable Energy Zone.

“EIA” means Environmental Impact Assessment.

“EMF” means electromagnetic fields.

“EPS” means European Protected Species.

“ES” means the Environmental Statement submitted to the Scottish Ministers by the Moray Offshore Renewables Limited on 2<sup>nd</sup> August 2012 as part of the Application as defined above.

“EU” means European Union.

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

“FLO” means a Fisheries Liaison Officer.

“GIS” means Geographic Information System.

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

“GW” means gigawatt.

“HAT” means Highest Astronomical Tide - the highest level of water which can be predicted to occur under any combination of astronomical conditions.

“HRA” means Habitats Regulations Appraisal.

“IALA Recommendation O-139” means the International Association of Marine Aids to Navigation and Lighthouse Authorities Recommendation O-139 On The Marking of Man Made Offshore Structures.

“Marine Guidance Note 371” means the Maritime and Coastguard Agency Marine Guidance Note 371 Offshore Renewable Energy installations (OREI’s) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues.

“MFOWDG-CFW” means Moray Firth Offshore Wind Developers Group - Commercial Fisheries Working Group. A group formed, and set up, to develop the Commercial Fisheries Mitigation Strategy, and as forum to facilitate on-going dialogue with the commercial fishing industry.

“MFRAG” means Moray Firth Regional Advisory Group. A group yet to be formed, responsible for overseeing monitoring and mitigation on a regional scale, set up by the Scottish Ministers

“MW” means megawatt.

“NCC” means North Caithness Cliffs Special Protection Area.

“nm” means nautical miles.

“NRA” means Navigational Risk Assessment.

“OfTI” means the Offshore Transmission Infrastructure.

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

“OPEX” means Operational Expenditure.

“PBR” means Potential Biological Removal.

“the Planning Authorities” means Aberdeenshire Council, the Highland Council and Moray Council.

“the Planning Authority” means Aberdeenshire Council.

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

“the Proposal” means the proposed MORL development, consisting of all three wind farms; Telford Offshore Wind Farm, Stevenson Offshore Wind Farm and MacColl Offshore Wind Farm.

“PVA” means Population Viability Analysis

“SAC” means Special Area of Conservation.

“Scottish Atlantic Salmon, Sea Trout and European Eel Monitoring Strategy” means a strategy that will be formulated from the Marine Scotland Science Report 05/13 – “The Scope of Research Requirements for Atlantic Salmon, Sea Trout and European

Eel in the Context of Offshore Renewables” to monitor migratory fish at a strategic level.

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

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

“SEA” means Strategic Environmental Assessment.

“the Site” means the area shaded in blue in Figure 1, attached to this consent at Annex 1.

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

“SPA” means Special Protection Area.

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

“SSSI” means Site of Special Scientific Interest.

“the Study Area” means Moray, Highland, Aberdeen City and Aberdeenshire.

“WDA” means the Western Development Area of Zone 1 of Round 3 leasing agreements in the UK Renewable Energy Zone.

“WGS84” means the World Geodetic System 1984.

“WTG” means wind turbine generator.

### Organisations

“ASFB” means The Association of Salmon Fishery Boards.

“BOWL” means Beatrice Offshore Windfarm Limited (Company Number SC350248) and having its registered office at Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ.

“CAA” means The Civil Aviation Authority.

“CoS” means The Chamber of Shipping.

“DECC” means Department of Energy and Climate Change.

“DIO” means The Defence Infrastructure Organisation (Ministry of Defence).

“IALA” means International Association of Marine Aids to Navigation and Lighthouse Authorities.

“JNCC” means The Joint Nature Conservation Committee.

“MCA” means The Maritime and Coastguard Agency.

“MFSTP” means Moray Firth Sea Trout Project.

“MMO” means Marine Management Organisation.

“MORL” means Moray Offshore Renewables Limited, and having its registered office at 1st floor, 14/18 City Road, Cardiff, CF24 3DL. Registration Number: 7101438.

“MPFSPG” Moray and Pentland Firth Salmon Protection Group.

“MS-LOT” means Marine Scotland Licensing Operations Team.

“MSS” means Marine Scotland Science.

“NATS” means National Air Traffic Service.

“NLB” means The Northern Lighthouse Board.

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

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

“RYA Scotland” means Royal Yachting Association Scotland.

“SAS” means Surfers Against Sewage.

“SCA” means – Scottish Canoe Association

“SEPA” means The Scottish Environment Protection Agency.

“SFF” means The Scottish Fisherman’s Federation.

“SMRU” means Sea Mammal Research Unit.

“SNH” means Scottish Natural Heritage.

“UNECE” means United Nations Economic Commission for Europe.

“UKHO” means United Kingdom Hydrographic Office.

“WDC” means Whale and Dolphin Conservation.



## Plans, Programmes and Statements

“ACSSDP” means Aberdeen City and Shire Strategic Development Plan, proposed February 2013.

“ALDP” means The Aberdeenshire Local Development Plan, June 2012.

“CaP” means Cable Plan.

“CFMS” means Commercial Fisheries Mitigation Strategy.

“CMS” means Construction Method Statement.

“CoP” means Construction Programme.

“DIO Scheme” means Air Traffic Control Radar Mitigation Scheme.

“DS” means Design Statement.

“DSLDP” means Development Specification and Layout Plan.

“EMP” means Environmental Management Plan.

“HRESPG” means Highland Renewable Energy Strategy and Planning Guidelines, May 2006.

“HwLDP” means The Highland – wide Local Development Plan, April 2012.

“LMP” means Lighting and Marking Plan.

“MES” means Moray Economic Strategy, October 2012.

“MLP” means The Moray Local Plan, November 2008.

“MMMP” means Marine Mammal Monitoring Programme.

“MSP 2007” means The Moray Structure Plan, April 2007.

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

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

“NSP” means Navigational Safety Plan.

“OMP” means Operation and Maintenance Programme.

“PEMP” means Project Environmental Monitoring Programme.

“PS” means Piling Strategy.

“SEIS” means Supplementary Environmental Information Statement.

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

“the Structure Plan” means Aberdeen City and Shire Structure Plan, August 2009.

“TRRMP” means Television and Radio Reception Mitigation Plan.

“TTP” means Traffic and Transportation Plan

“VMP” means Vessel Management Plan.

### Legislation

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

“the Electricity Act” means the Electricity Act 1989 (as amended).

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

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

“the 1990 Regulations” means the Electricity (Applications for Consent) Regulations 1990 (as amended).

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

“the 2000 Regulations” means the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended).

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

“the 2009 Act” means Marine and Coastal Access Act 2009 (as amended).

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

**APPLICATION FOR VARIATION OF SECTION 36 CONSENT**

**MACCOLL OFFSHORE WIND FARM**

**DRAFT PROPOSED ALTERATIONS TO SECTION 36 CONSENT**

**Alteration and/or Addition**

**In Annex 1**

1. After “permitted generating capacity not exceeding”, for “372 MW” substitute “500 MW”.

**In Annex 2**

2. In condition 7, after “the Additional Ornithological Information” insert “, the Section 36 Consents Variation Application Report for Telford, Stevenson and MacColl Offshore Wind Farms dated December 2017”.

## **Annex 1**

### **DESCRIPTION OF THE DEVELOPMENT**

The Development, located as shown on Figure 1 below, shall have a permitted generating capacity not exceeding ~~372 MW~~500 MW and shall comprise a wind-powered electricity generating station in the Outer Moray Firth, including:

1. not more than 62 three-bladed horizontal axis wind turbine generators each with:
  - a. a maximum blade tip height of 204 metres;
  - b. a rotor diameter of between 150 and 172 metres;
  - c. a minimum crosswind spacing of 1,050 metres; and
  - d. a minimum downwind spacing of 1,200 metres;
2. all foundations, substructures, fixtures, fittings, fixings, and protections;
3. inter array cabling and cables up to and onto the offshore substation platforms; and
4. transition pieces including access ladders / fences and landing platforms,

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

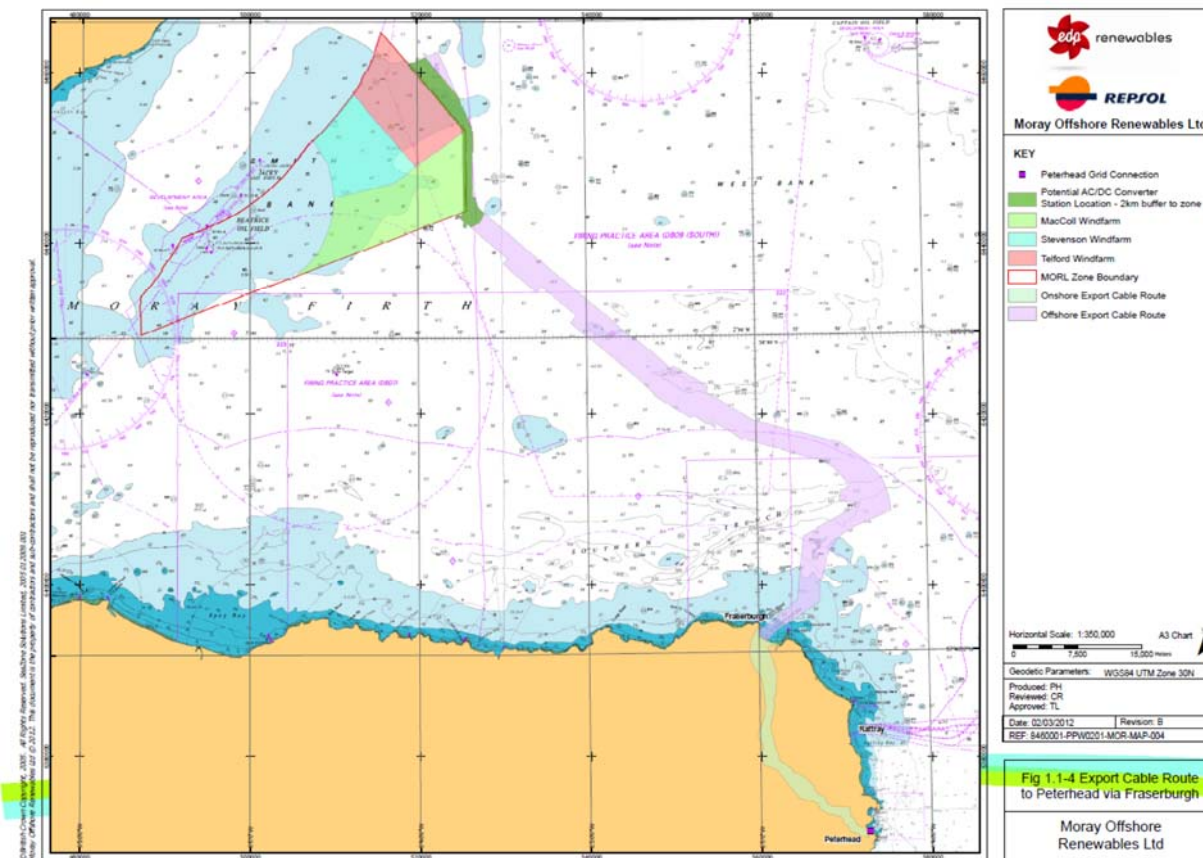


Figure 1. Development Location – see KEY

## Annex 2

### **CONDITIONS OF THE SECTION 36 CONSENT**

The consent granted in accordance with section 36 of the Electricity Act 1989 is subject to the following conditions:

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

**Reason:** *To define the duration of the consent.*

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

**Reason:** *To ensure the Commencement of the Development is undertaken within a reasonable timescale after consent is granted.*

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

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

4. The Company is not permitted to assign this consent without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may grant (with or without conditions) or refuse such authorisation as they, at their own discretion, see fit. The consent is not capable of being assigned, alienated or transferred otherwise than in accordance with the foregoing procedure.

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

5. In the event that for a continuous period of 12 months or more any WTG installed and commissioned and forming part of the Development fails to produce electricity on a commercial basis to the National Grid then, unless otherwise agreed in writing by the Scottish Ministers and after consultation with any advisors as required at the discretion of the Scottish Ministers, any such WTG and all associated foundations and ancillary equipment may be deemed by the Scottish Ministers to cease to be required. If so deemed, the WTG and all its associated foundations and ancillary equipment must be dismantled and removed from the Site by the Company, following the procedures laid out within the Company's Decommissioning Programme, within the period of 24 months from the date of the deeming decision by the Scottish Ministers and the Site must be fully reinstated by the Company to the specification and satisfaction of the Scottish Ministers after consultation with any such advisors on decommissioning as may be required at the discretion of the Scottish Ministers.

**Reason:** *To ensure that any redundant WTGs and associated ancillary equipment is removed from the Site in the interests of safety, amenity and environmental protection.*

6. If any serious health and safety incident occurs on the Site requiring the Company to report it to the Health and Safety Executive, then the Company must also notify the Scottish Ministers of the incident within 24 hours of the incident occurring.

**Reason:** *To inform the Scottish Ministers of any serious health and safety incident occurring on the Site.*

7. The Development must be constructed and operated in accordance with the terms of the Application and related documents, including the accompanying ES, the Additional Ornithological Information, [the Section 36 Consents Variation Application Report for Telford, Stevenson and MacColl Offshore Wind Farms dated December 2017](#) and Annex 1 of this letter, except in so far as amended by the terms of this section 36 consent.

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

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

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

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

The CoP must set out:

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

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

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

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

**Reason:** *To ensure the appropriate construction management of the Development, taking into account mitigation measures to protect the environment and other users of the marine area.*



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

The PS must include:

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

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

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

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

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

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

- a. A plan showing the proposed location of each individual WTG (subject to any required micro-siting), including information on WTG spacing, WTG identification / numbering, location of the substation platforms,

- seabed conditions, bathymetry, confirmed foundation type for each WTG and any key constraints recorded on the Site;
- b. A list of latitude and longitude co-ordinates accurate to three decimal places of minutes 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 (measured above HAT), height to hub (measured above HAT to the centreline of the generator shaft), rotor diameter and rotation speed;
- d. The generating capacity of each WTG used on the Site and a confirmed generating capacity for the Site overall;
- e. The finishes for each WTG (see condition 19 on WTG lighting and marking); and
- f. The length and proposed arrangements on the seabed of all inter-array cables.

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

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

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

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

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

- a. all construction as required to be undertaken before the Final Commissioning of the Development; and

- b. the operational lifespan of the Development from the Final Commissioning of the Development until the cessation of electricity generation. (Environmental management during decommissioning is addressed by condition 3).

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

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

The Company must, no later than 3 months prior to the Final Commissioning of the Development, submit an updated EMP, in writing, to cover the operation and maintenance activities for the Development to the Scottish Ministers for their written approval. Such approval may be given only following consultation with the JNCC, SNH, SEPA, RSPB Scotland and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The EMP must be regularly reviewed by the Company and the MFRAG (referred to in condition 27) over the lifespan of the Development, and be kept up to date (in relation to the likes of construction methods and operations of the Development in terms of up to date working practices) by the Company in consultation with the MFRAG.

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

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

- 15. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Vessel Management Plan ("VMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be

granted following consultation by the Scottish Ministers with the JNCC, SNH, and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved VMP (as updated and amended from time to time by the Company). Any updates or amendments made to the VMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

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

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

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

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

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

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

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

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

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

17. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Navigational Safety Plan ("NSP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB and any other navigational advisors or organisations as may be required at the discretion of the Scottish Ministers. The NSP must include, but not be limited to, the following issues:
- a. Navigational safety measures;
  - b. Construction exclusion zones;
  - c. Notice(s) to Mariners and Radio Navigation Warnings;
  - d. Anchoring areas;
  - e. Temporary construction lighting and marking;
  - f. Emergency response and co-ordination arrangements for the construction, operation and decommissioning phases of the Development; and
  - g. Buoyage.

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

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

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

The CaP must include the following:

- a. Details of the location and cable laying techniques for the inter array cables;
- b. The results of survey work (including geophysical, geotechnical and benthic surveys) which will help inform cable routing;
- c. Technical specification of inter array cables, including a desk based assessment of attenuation of electro-magnetic field strengths and shielding;
- d. A burial risk assessment to ascertain if burial depths can be achieved. In locations where this is not possible then suitable protection measures must be provided;
- e. Methodologies for over trawl surveys of the inter array cables through the operational life of the wind farm where mechanical protection of cables laid on the sea bed is deployed; and
- f. Measures to address exposure of inter array cables.

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

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

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

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

20. The Company must, prior to the erection of any WTGs on the Site, submit an Air Traffic Control Radar Mitigation Scheme ("ATC Scheme"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the DIO.

No WTGs shall become operational until:

- a. the mitigation measures that are required under the approved ATC Scheme have been implemented;
- b. any performance criteria, all as specified in the approved ATC Scheme as requiring to be satisfied, have been so satisfied; and
- c. the implementation and satisfaction of the performance criteria have been approved by the Scottish Ministers in consultation with the DIO.

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

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

21. No part of any turbine shall be erected above sea level until a Primary Radar Mitigation Scheme agreed with the Operator has been submitted to and approved in writing by the Scottish Ministers in order to avoid the impact of the Development on the Primary Radar of the Operator located at Allanshill and associated air traffic management operations.

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

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

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

23. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Television and Radio Reception Mitigation Plan ("TRRMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the Highland Council. The TRRMP must provide for a baseline television reception survey to be carried out at a location(s) to be agreed by the Scottish Ministers in consultation with the Highland Council, paid for by the Company, prior to the commencement of any WTG installation. The results of which must be submitted by the Company, in writing, to the Highland Council within the time limit set in the TRRMP.

From Commencement of the Development until the date occurring 12 months after the Final Commissioning of the Development, any reasonable claim by any individual person regarding television picture loss or interference at their house, business premises or other building, which they claim is attributable to the Development, and which is notified to the Company, must be investigated by a qualified engineer approved by the Scottish Ministers in consultation with the Highland Council. The Company is liable for any costs incurred by any

such investigation. The results of any investigation must be submitted by the Company to the Scottish Ministers and the Highland Council within 2 months of completion of the investigation. Any impairment to the television signal shall be remedied by the Company, at its own expense, as soon as practicable to provide that the standard of reception at any affected property is equivalent to the baseline television and radio reception as existing at that property before the operation of the Development.

**Reason: For the protection of the local amenity.**

24. The Company must, prior to the Commencement of the Development, and following confirmation of the approved DSLP by the Scottish Ministers (refer to condition 12), provide the positions and maximum heights of the WTGs and construction equipment to the UKHO for aviation and nautical charting purposes. The Company must, within 1 month of the Final Commissioning of the Development, provide the “as-built” positions and maximum heights of the WTGs to the UKHO for aviation and nautical charting purposes.

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

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

**Reason: To minimise the impact on public roads.**

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

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



Monitoring should be done in such a way as to ensure that the data which is collected allows useful and valid comparisons as between different phases of the Development. Monitoring may also serve the purpose of verifying key predictions in the ES. Additional monitoring may be required in the event that further potential adverse environmental effects are identified for which no predictions were made in the ES.

The Scottish Ministers may agree that monitoring may cease before the end of the lifespan of the Development.

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

- a. Pre-construction, construction (if considered appropriate by the Scottish Ministers) and post-construction monitoring surveys as relevant in terms of the ES and any subsequent surveys for:
  1. Birds;
  2. Cod;
  3. Herring;
  4. Sandeels;
  5. Diadromous fish;
  6. Benthic communities; and
  7. Seabed scour and local sediment deposition.
- b. The participation by the Company in surveys to be carried out in relation to marine mammals as set out in the MMMP; and
- c. The participation by the Company in surveys to be carried out in relation to regional and strategic bird monitoring;

All the initial methodologies for the above monitoring must be approved, in writing, by the Scottish Ministers and, where appropriate, in consultation with the MFRAG referred to in condition 27 of this consent. Any pre-consent surveys carried out by MORL to address any of the above species may be used in part to discharge this condition.

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

The Company must submit written reports of such monitoring surveys to the Scottish Ministers at timescales to be determined by the Scottish Ministers in consultation with the MFRAG. Subject to any legal restrictions regarding the

treatment of the information, the results are to be made publicly available by the Scottish Ministers, or by such other party appointed at their discretion.

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

27. The Company must participate in any Moray Firth Regional Advisory Group (“MFRAG”) established by the Scottish Ministers for the purpose of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish. Should a SSMEG be established (refer to condition 28), the responsibilities and obligations being delivered by the MFRAG will be subsumed by the SSMEG at a timescale to be determined by the Scottish Ministers.

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

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

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

29. Prior to the Commencement of the Development, the Company must at its own expense, and with the approval of the Scottish Ministers in consultation with the JNCC and SNH, appoint an Ecological Clerk of Works (“ECoW”). The term of appointment for the ECoW shall be from no later than 9 months post consent until the Final Commissioning of the Development.

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

- a. Quality assurance of final draft version of all plans and programmes required under this consent;
- b. Provide advice to the Company on compliance with consent conditions, including the conditions relating to the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
- c. Monitor compliance with the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
- d. Provide reports on point c) above to the Scottish Ministers at timescales to be determined by the Scottish Ministers; and
- e. Inducting site personnel on site / works environmental policy and procedures.

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

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

**Reason:** *To ensure effective monitoring of the effects on migratory fish at a local level (the Moray Firth).*

31. The Company must continue its membership in the Moray Firth Offshore Wind Developers Group - Commercial Fisheries Working Group ("MFOWDG-CFWG"), or any successor group formed to facilitate commercial fisheries dialogue to define and finalise the draft Commercial Fisheries Mitigation Strategy (dated 1<sup>st</sup> July 2013 (Revision C)). As part of the finalised Commercial Fisheries Mitigation Strategy ("CFMS"), the Company must produce and implement a mitigation strategy for each commercial fishery that can prove to the Scottish Ministers that they will be adversely affected by the Development. Should it be deemed necessary by the MFOWDG-CFWG, investigations into alternative gear for the scallop fishing industry in the Moray Firth must form part of the CFMS. The CFMS to be implemented must be approved in writing by the Scottish Ministers. The Company must implement all mitigation measures committed to be carried out by the Company within the CFMS, so far as is applicable to the Development. Any contractors, or sub-contractors working for the Company, must co-operate with the fishing industry to ensure the effective implementation of said CFMS.

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

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

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

- a. Establishing and maintaining effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea concerning the overall project and any amendments to

- the CMS and site environmental procedures;
- b. Provision of information relating to the safe operation of fishing activity on the site of the Development; and
- c. Ensuring that information is made available and circulated in a timely manner to minimise interference with fishing operations and other users of the sea.

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

- 33.** The cod surveys undertaken on 17-26<sup>th</sup> February 2013 and 10-19<sup>th</sup> March 2013 in the Moray Firth by MORL will remain valid as a pre-construction baseline survey provided the Commencement of the Development occurs no later than 1<sup>st</sup> April 2018. If Commencement of the Development is later than 1<sup>st</sup> April 2018, the Company must undertake a further baseline cod survey during the months of February and March immediately prior to the Commencement of the Development in the area marked 'Cod Survey Area' shown on the MacColl Wind Farm Fish Monitoring Plan in Figure 2, unless prior written approval is sought and obtained from the Scottish Ministers. A full survey report and data set must be submitted, in writing, to the Scottish Ministers within 6 months following completion of any further baseline cod survey for approval, in writing, by the Scottish Ministers.

The Company must undertake a post-construction cod survey in the first February and March, occurring no earlier than 12 months, following the Final Commissioning of the Development. This cod survey must be undertaken in the area marked 'Cod Survey Area' shown on the MacColl Wind Farm Fish Monitoring Plan in Figure 2, unless prior written approval is sought and obtained from the Scottish Ministers. A full survey report and data set must be submitted, in writing, to the Scottish Ministers within 6 months following completion of any post-construction cod survey for approval, in writing, by the Scottish Ministers.

**Reason: To validate conclusions of impact assessments made in the ES on cod populations in the Moray Firth.**

- 34.** The sandeel survey undertaken between 30<sup>th</sup> January and 2<sup>nd</sup> March 2012 in the Moray Firth by MORL will remain valid as a pre-construction baseline survey provided that the Commencement of the Development occurs no later than 1st April 2017. If Commencement of the Development occurs later than 1st April 2017, the Company must undertake a further baseline sandeel survey prior to the Commencement of the Development of the area marked 'Sandeel Survey Area' shown on the MacColl Wind Farm Fish Monitoring Plan in Figure 2, unless prior written approval is sought and obtained from the Scottish Ministers. A full survey report and data set must be submitted by the Company, in writing, to the Scottish Ministers within 6 months following completion of any further baseline sandeel survey for approval, in writing, by the Scottish Ministers.

No earlier than 12 months following Final Commissioning of the Development, the Company must undertake a post-construction sandeel survey using a methodology agreed, in writing, with the Scottish Ministers. The post-construction sandeel survey will cover the area marked 'Sandeel Survey Area' shown on the MacColl Wind Farm Fish Monitoring Plan in Figure 2, unless prior written approval is sought and obtained from the Scottish Ministers. A full survey report and data set must be submitted, in writing, to the Scottish Ministers within 6 months following completion of any post-construction sandeel survey for approval, in writing, by the Scottish Ministers.

**Reason:** *To validate conclusions of impact assessments made in the ES on sandeel populations in the Moray Firth.*

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

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

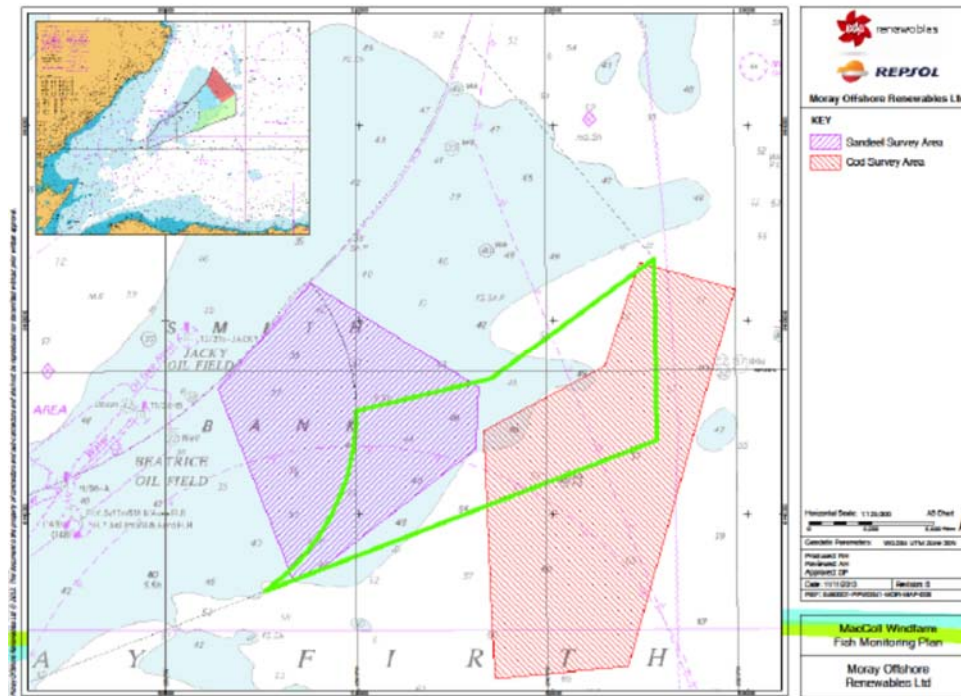


Figure 2. MacColl Post Construction Cod and Sandeel Survey Areas

## **Annex 3**

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

In this decision letter and in Annex 1 and 2:

“AA” means Appropriate Assessment.

“ABC” means the Acceptable Biological Change tool.

“Additional Ornithology Information” means the covering letter and report, submitted to the Scottish Ministers by Moray Offshore Renewables Limited on the 17<sup>th</sup> June 2013, concerning the reworking of bird data provided in the original Environmental Statement.

“the Application” means the Application letter and Environmental Statement submitted to the Scottish Ministers by Moray Offshore Renewables Limited, on behalf of MacColl Offshore Windfarm Limited, on 2<sup>nd</sup> August 2012, and the Additional Ornithology Information submitted to the Scottish Ministers by Moray Offshore Renewables Limited on the 17<sup>th</sup> June 2013.

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

“CFMS” means Commercial Fisheries Mitigation Strategy - the final document produced from consultation between Moray Offshore Renewables Limited and the Moray Firth Offshore Wind Developers Group - Commercial Fisheries Working Group (“MFOWDG-CFWG”), based on the draft Commercial Fisheries Mitigation Strategy (dated 1st July 2013 (Revision C) produced by Moray Offshore Renewables Limited).

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

“Commissioning of the First WTG” means the date on which the first wind turbine generator forming the Development has supplied electricity on a commercial basis to the National Grid.

“the Company” means MacColl Offshore Wind farm Limited, 1st floor, 14/18 City Road, Cardiff, CF24 3DL. Registration Number: 07386891.

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

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

“the Development” means the MacColl Offshore Wind Farm in the Outer Moray Firth.

“ECC” means East Caithness Cliffs Special Protection Area.

“ECOW” means Ecological Clerk of Works.

“EDA” means the Eastern Development Area of Zone 1 of Round 3 leasing agreements in the UK Renewable Energy Zone.

“EIA” means Environmental Impact Assessment.

“EMF” means electromagnetic fields.

“EPS” means European Protected Species.

“ES” means the Environmental Statement submitted to the Scottish Ministers by the Moray Offshore Renewables Limited on 2<sup>nd</sup> August 2012 as part of the Application as defined above.

“EU” means European Union.

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

“FLO” means a Fisheries Liaison Officer.

“GIS” means Geographic Information System.

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

“GW” means gigawatt.

“HAT” means Highest Astronomical Tide - the highest level of water which can be predicted to occur under any combination of astronomical conditions.

“HRA” means Habitats Regulations Appraisal.

“IALA Recommendation O-139” means the International Association of Marine Aids to Navigation and Lighthouse Authorities Recommendation O-139 On The Marking of Man Made Offshore Structures.

“Marine Guidance Note 371” means the Maritime and Coastguard Agency Marine Guidance Note 371 Offshore Renewable Energy installations (OREI’s) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues.

“MFOWDG-CFW” means Moray Firth Offshore Wind Developers Group - Commercial Fisheries Working Group. A group formed, and set up, to develop the



Commercial Fisheries Mitigation Strategy, and as forum to facilitate on-going dialogue with the commercial fishing industry.

“MFRAG” means Moray Firth Regional Advisory Group. A group yet to be formed, responsible for overseeing monitoring and mitigation on a regional scale, set up by the Scottish Ministers

“MW” means megawatt.

“NCC” means North Caithness Cliffs Special Protection Area.

“nm” means nautical miles.

“NRA” means Navigational Risk Assessment.

“OfTI” means the Offshore Transmission Infrastructure.

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

“OPEX” means Operational Expenditure.

“PBR” means Potential Biological Removal.

“the Planning Authorities” means Aberdeenshire Council, the Highland Council and Moray Council.

“the Planning Authority” means Aberdeenshire Council.

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

“the Proposal” means the proposed MORL development, consisting of all three wind farms; Telford Offshore Wind Farm, Stevenson Offshore Wind Farm and MacColl Offshore Wind Farm.

“PVA” means Population Viability Analysis

“SAC” means Special Area of Conservation.

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

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

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

“SEA” means Strategic Environmental Assessment.

“the Site” means the area shaded in green in Figure 1, attached to this consent at Annex 1.

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

“SPA” means Special Protection Area.

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

“SSSI” means Site of Special Scientific Interest.

“the Study Area” means Moray, Highland, Aberdeen City and Aberdeenshire.

“WDA” means the Western Development Area of Zone 1 of Round 3 leasing agreements in the UK Renewable Energy Zone.

“WGS84” means the World Geodetic System 1984.

“WTG” means wind turbine generator.

### Organisations

“ASFB” means The Association of Salmon Fishery Boards.

“BOWL” means Beatrice Offshore Windfarm Limited (Company Number SC350248) and having its registered office at Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ.

“CAA” means The Civil Aviation Authority.

“CoS” means The Chamber of Shipping.

“DECC” means Department of Energy and Climate Change.

“DIO” means The Defence Infrastructure Organisation (Ministry of Defence).

“IALA” means International Association of Marine Aids to Navigation and Lighthouse Authorities.

“JNCC” means The Joint Nature Conservation Committee.

“MCA” means The Maritime and Coastguard Agency.

“MFSTP” means Moray Firth Sea Trout Project.

“MMO” means Marine Management Organisation.

“MORL” means Moray Offshore Renewables Limited, and having its registered office at 1st floor, 14/18 City Road, Cardiff, CF24 3DL. Registration Number: 7101438.

“MPFSPG” Moray and Pentland Firth Salmon Protection Group.

“MS-LOT” means Marine Scotland Licensing Operations Team.

“MSS” means Marine Scotland Science.

“NATS” means National Air Traffic Service.

“NLB” means The Northern Lighthouse Board.

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

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

“RYA Scotland” means Royal Yachting Association Scotland.

“SAS” means Surfers Against Sewage.

“SCA” means – Scottish Canoe Association

“SEPA” means The Scottish Environment Protection Agency.

“SFF” means The Scottish Fisherman’s Federation.

“SMRU” means Sea Mammal Research Unit.

“SNH” means Scottish Natural Heritage.

“UNECE” means United Nations Economic Commission for Europe.

“UKHO” means United Kingdom Hydrographic Office.

“WDC” means Whale and Dolphin Conservation.

#### Plans, Programmes and Statements

“ACSSDP” means Aberdeen City and Shire Strategic Development Plan, proposed February 2013.

“ALDP” means The Aberdeenshire Local Development Plan, June 2012.

“CaP” means Cable Plan.

“CFMS” means Commercial Fisheries Mitigation Strategy.

“CMS” means Construction Method Statement.

“CoP” means Construction Programme.

“DIO Scheme” means Air Traffic Control Radar Mitigation Scheme.

“DS” means Design Statement.

“DSL P” means Development Specification and Layout Plan.

“EMP” means Environmental Management Plan.

“HRESPG” means Highland Renewable Energy Strategy and Planning Guidelines, May 2006.

“HwLDP” means The Highland – wide Local Development Plan, April 2012.

“LMP” means Lighting and Marking Plan.

“MES” means Moray Economic Strategy, October 2012.

“MLP” means The Moray Local Plan, November 2008.

“MMMP” means Marine Mammal Monitoring Programme.

“MSP 2007” means The Moray Structure Plan, April 2007.

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

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

“NSP” means Navigational Safety Plan.

“OMP” means Operation and Maintenance Programme.

“PEMP” means Project Environmental Monitoring Programme.

“PS” means Piling Strategy.

“SEIS” means Supplementary Environmental Information Statement.

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

“the Structure Plan” means Aberdeen City and Shire Structure Plan, August 2009.

“TRRMP” means Television and Radio Reception Mitigation Plan.

“TTP” means Traffic and Transportation Plan

“VMP” means Vessel Management Plan.

### Legislation

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

“the Electricity Act” means the Electricity Act 1989 (as amended).

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

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

“the 1990 Regulations” means the Electricity (Applications for Consent) Regulations 1990 (as amended).

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

“the 2000 Regulations” means the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended).

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

“the 2009 Act” means Marine and Coastal Access Act 2009 (as amended).

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

## **APPENDIX 3 – Potential Implications for the Marine Licences**

## POTENTIAL IMPLICATIONS FOR THE MARINE LICENCES

### 1) Telford Offshore Wind Farm (Licence Number 04629/13/0)

Within Section 2.2 "Description of Works"

- i. *"The individual generating capacities of the WTGs proposed are to be of a rating between 6 MW and 8 MW."*

Would be replaced with:

*"The individual generating capacities of the WTGs proposed are to be of a rating between 6 MW and 10 MW."*

### 2) Stevenson Offshore Wind Farm (Licence Number 04627/13/0)

Within Section 2.2 "Description of Works"

- i. *"The individual generating capacities of the WTGs proposed are to be of a rating between 6 MW and 8 MW."*

Would be replaced with:

*"The individual generating capacities of the WTGs proposed are to be of a rating between 6 MW and 10 MW."*

### 3) MacColl Offshore Wind Farm (Licence Number 04628/13/0)

Within Section 2.2 "Description of Works"

- i. *"An offshore wind electricity generating station, known as the MacColl Offshore Wind Farm, with a maximum generating capacity of up to 372 MW..."*

Would be replaced with:

*"An offshore wind electricity generating station, known as the MacColl Offshore Wind Farm, with a maximum generating capacity of up to 500 MW..." ; and*

- ii. *"The individual generating capacities of the WTGs proposed are to be of a rating between 6 MW and 8 MW."*

Would be replaced with:

*"The individual generating capacities of the WTGs proposed are to be of a rating between 6 MW and 10 MW."*

## **APPENDIX 4 – Technical Note by Royal HaskoningDHV**



Recipient; Cat Rei  
Moray Offshore Windfarm (East) Limited  
4th Floor, 40 Princes Street  
Edinburgh  
EH2 2BY

**HASKONINGDHV UK LTD.**

74/2 Commercial Quay  
Commercial Street  
Leith  
Edinburgh  
EH6 6LX

+44 131 5550506 **T**  
info.edinburgh@uk.rhdhv.com **E**  
royalhaskoningdhv.com **W**

Date:	31 October 2017	Contact name:	Benjamin King
Your reference:	PB2997	Telephone:	01315612299
Our reference:	I&BPB2997L001D0.1	Email:	benjamin.king@rhdhv.com
Classification:	Internal use only		

## Technical Note

### Review of updated project parameters with reference to EIA and AA compliance.

This Annex has been produced to support the applications to vary Section 36 consents for Telford, Stevenson and MacColl offshore windfarms (Moray East) and is based on the information provided in the *Offshore Consents Variation Application Report*.

Royal HaskoningDHV have undertaken a review of the proposed changes outlined in the Section 36 consent variation applications and the project descriptions outlined in previous consent application documents. We note the following points in relation to the updated design envelope;

- 1) The updated design envelope will continue to include 6MW rated turbines within its envelope and states a maximum number of turbines of 62 turbines per project, providing a total of 186 turbines between for all three projects. This is consistent with the worst case scenario that formed the basis for previous assessments in the EIA and HRA in terms of the worst case scenario for turbine numbers.
- 2) The updated design envelope will now include turbines with a capacity rating of up to 10MW. This is a change from the maximum rating of 8MW that was used as the basis for the EIA and HRA. However, the consent variation application states that physical parameters for turbines and associated infrastructure will remain the same for turbines rated between 8MW and 10MW. The impact assessments within the EIA are based on the physical parameters of the turbines and not the capacity of the turbine. Therefore, we are satisfied that all physical turbine parameters relevant to the environmental impact of the development, are included in the updated design envelope and are consistent with those used as the basis of assessment within the EIA, HRA.

As a summary, based on the information provided, it is understood that the higher capacity 10MW turbine will have the same physical parameters as the 7/8 MW turbines previously assessed. The proposed construction period and principles defining the layout are also within those previously assessed within the EIA.

Based on the understanding above, our review of the implications to EIA and AA receptors topics are as follows;

Receptor Topic	Implication
Physical Processes	The maximum number of turbines, maximum parameters of foundations and layout principles remain the same used for assessment in the EIA. Due to the lack of physical changes, there would be no change to effects assessed for coastal or physical processes impacts within the EIA and conclusions related to physical processes, including impacts on Natura 2000 interest features, within the EIA and HRA remain valid.
Benthic Ecology	The maximum number of turbines and maximum footprint of foundations remain the same as assessed in the EIA, and therefore conclusions on impacts to benthic ecology habitats or communities within the EIA remain valid and there would be no pathway that would affect conclusions regarding Natura 2000 interest features.
Fish Ecology	The maximum number of turbines, maximum parameters of foundations and, construction period remain the same as assessed in the EIA. As all design parameters remain the same, it is anticipated that there would no change to impacts on fish ecology receptors and conclusions within the EIA remain valid. This being the case, there would be no pathway that would affect conclusions regarding Natura 2000 interest features.
Marine Mammals	The maximum number of turbines, maximum parameters of foundations and construction period remain the same as assessed in the EIA. As all design parameters remain the same, it is anticipated that there would be no change to impacts on marine mammal receptors and the conclusions of the EIA remain valid. This being the case, there would be no pathway that would affect conclusions regarding Natura 2000 interest features.
Ornithology	The maximum number of turbines, layout principles and physical turbine parameters remains the same as included within the original design envelope. As all physical parameters remain the same it is anticipated there would be no changes in impacts on ornithology receptors and therefore the conclusions of the EIA and HRA remain valid.
Cultural Heritage and Marine Archaeology	The maximum number of turbines and maximum footprint of foundations remain the same as used for the basis of the EIA assessment, therefore it is anticipated that there would be no change to impacts to marine cultural heritage or archaeology assets as assessed and the conclusions of the EIA remain valid.
Shipping and Navigation	The maximum number of turbines, layout, turbine marking and foundation parameters are within the EIA design envelope. Therefore it is anticipated that there would be no change to impacts or navigation risk and the conclusions of the EIA remain valid.
Commercial Fisheries	The maximum number of turbines, layout, turbine marking, construction period and foundation parameters remain as outlined within the EIA design envelope. Therefore it is anticipated that conclusions in the EIA in relation to fishing vessels, effort or navigation risk remain valid. Maximum foundation parameters are within those assessed with the EIA, therefore the assessment of the EIA in relation to benthic and fish communities remain valid, and therefore conclusions related to availability of fishing resource within the EIA also remain valid.

Receptor Topic	Implication
SLVIA	As the physical parameters of turbines; the maximum number of turbines and layout principles remains the same, conclusions within the EIA in relation to SLVIA remain valid.
Other Human Activities	As the physical parameters of turbines, the maximum number of turbines, construction period and layout principles remain the same, conclusions within the EIA in relation to the Other Human Activities assessment remain valid.

In conclusion, as the total number and size of turbines, as well as associated foundations, are within those assessed within the EIA and HRA, the conclusions of impact assessments presented within the EIA and HRA remain valid.



# **MORAY EAST**

## **OFFSHORE WINDFARM**

### **Contact**

Moray Offshore Windfarm (East) Limited  
4<sup>th</sup> Floor, 40 Princes Street  
Edinburgh EH2 2BY  
Tel: +44 (0)131 556 7602