Beatrice Offshore Wind Farm Consent Plan

**Commercial Fisheries Mitigation Strategy** 

November 2015





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Project Title/ Location	Beatrice Offshore Wind Farm		
Project Reference Number	LF0000005		
Date:	November 2015		

# **Beatrice Offshore Wind Farm**

# **Commercial Fisheries Mitigation Strategy**

Pursuant to Section 36 Consent Condition 32 and the Marine Licence (Offshore Transmission Works) Condition 3.2.1.7

For the approval of the Scottish Ministers

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## **Commercial Fisheries Mitigation Strategy Overview**

#### Purpose and Objectives of the Plan

This Commercial Fisheries Mitigation Strategy (CFMS) has been prepared to address the specific requirements of the relevant conditions attached to Section 36 Consent and Marine Licences issued to Beatrice Offshore Windfarm Limited (BOWL).

The overall aim of the CFMS is to set out a strategy to effectively mitigate, where necessary, any proven adverse effects on each commercial fishery operating within the vicinity of Beatrice Offshore Wind Farm.

The CFMS confirms that a Fisheries Liaison Officer will play a key role in the implementation of this strategy particularly in relation to communication with local commercial fishery interests.

#### Scope of the Plan

The CFMS covers, in line with the requirements of Section 36 and Marine Licence conditions, and in line industry standards and good practice, the following:

- Appropriate mitigation procedures to be applied to the development throughout the construction, operation and decommissioning of the project;
- Best practice procedures in line with industry guidelines identified by the Fishing Liaison and Offshore Wind and Wet Renewables Group (FLOWW) (2014); and,
- The roles and responsibilities of key Project personnel and contractors during construction, operation and decommissioning with respect to commercial fisheries.

#### Structure of the Plan

The CMS is structured as follows:

Sections 1 to 3 set out the scope and objectives of the CFMS, provide an overview of the Project, and set out broad statements of compliance.

Section 4 provides detail on the process of ongoing consultation on commercial fisheries matters and how this will be facilitated throughout the project term.

Section 5 presents the mitigation that has been incorporated into the project design and proposed for the duration of the operational phase of the project.

Section 6 sets out compliance with relevant mitigation and management measures set out in the ES and SEIS.

Appendix A provides a detailed list of the ES and SEIS commitments in relation to commercial fishery interests.



#### **Plan Audience**

This CFMS is intended to be referred to by personnel involved in the construction and operation of the Beatrice Project, including BOWL personnel including the FLO, Key Contractors and Subcontractors. It will also serve as a key consultation document with Fisheries Industry Representatives (FIR).

Compliance with this CFMS will be monitored by the BOWL Consents and Licensing Team and the BOWL Fisheries Liaison Officer (FLO).

#### Plan Locations

Copies of this CFMS are to be held in the following locations:

- BOWL Head Office;
- At the premises of any agent, Key Contractor or Subcontractor acting on behalf of BOWL;
- The BOWL Marine Coordination Centre at Wick;
- With the FLO(s).



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## List of Abbreviations and Definitions

Term	Description		
BOWL	Beatrice Offshore Windfarm Limited (Company Number SC350248) and having its registered office at Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ.		
BMM	Brown and May Marine Ltd, nominated Fisheries Liaison Officer for $\operatorname{BOWL}$		
CaP	The Cable Plan as required for approval under Condition 19 of the S36 consent and Condition 3.2.2.10 of the OfTW Marine Licence.		
CFMS	Commercial Fisheries Mitigation Strategy		
CMS	Construction Method Statement as required for approval under Condition 11 of the S36 Consent and Condition 3.2.2.4 of the OfTW Marine Licence.		
Commercial Fishing Vessel	Any vessel legally licensed to engage in the capture of fish and shellfish species for profit		
Construction	As defined at section 64(1) of the Electricity Act 1989, read with section 104 of the Energy Act 2004		
EIA	Environmental Impact Assessment		
EMP	Environmental Management Plan as required for approval under Condition 15 of the S36 Consent and Condition 3.2.1.2 of the OfTW Marine Licence		
ES	The Environmental Statement submitted to the Scottish Ministers by the Company on 23 April 2012 as part of the Application as defined above		
FIR	Fisheries Industry Representative		
FLO	Fisheries Liaison Officer		
Licensee	Beatrice Offshore Windfarm Limited, a company registered in Scotland having its registered number as SC350248		
Licencing Authority	Marine Scotland Licensing and Operation Team on behalf of The Scottish Ministers		
LMP	Lighting and Marking Plan as required for approval under Condition 20 of the S36 Consent and Condition 3.2.2.14 of the OfTW Marine Licence.		
Marine Licences	The written consents granted by the Scottish Ministers under Section 20(1) of the Marine (Scotland) Act 2010, which were issued on 2 September 2014		
MCA	Maritime and Coastguard Agency		



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Term	Description
MFOWDG- CFWG	Moray Firth Offshore Wind Developers Group - Commercial Fisheries Working Group (the Moray Firth CFWG). A group formed as a forum for on-going dialogue with the commercial fishing industry to facilitate the development and delivery of a Commercial Fisheries Mitigation Strategy.
NSP	Navigational Safety Plan as required for approval under Condition 18 of the S36 Consent and Condition 3.2.2.9 of the OfTW Marine Licence.
OfTW	The Offshore Transmission Works. The OfTW includes the transmission cables required to connect the Wind Farm to the Onshore Transmission Works. This covers the OTMs and the cable route from the OTMs to the Mean High Water Springs (MHWS) at the landfall west of Portgordon on the Moray coast
ОТМ	Offshore Transformer Module means an alternating current (AC) offshore substation platform (OSP) which is a standalone modular unit that utilises the same substructure and foundation design as a wind turbine generator.
S.36 Consent	The written Consent granted by the Scottish Ministers under Section 36 of the Electricity Act 1989, on 19 March 2014
SEIS	The Supplementary Environmental Information Statement submitted to the Scottish Ministers by the Company on 29 May 2013 as part of the Application as defined above
Site	The area outlined in red in Figure 1 attached to the S36 Consent at Annex 1, and in black in the Marine Licences in Part 4, i.e. the boundary of the Wind Farm and OfTW.
Wind Farm	The offshore array development as assessed in the ES including wind turbines, their foundations, inter-array cabling and meteorological masts.
Works	The Beatrice Offshore Windfarm Ltd. Wind Farm or Offshore Transmission Works (the OfTW), as described in the Marine Licences.



## 1 Introduction

#### 1.1 Background

1.1.1 The Beatrice Offshore Wind Farm received consent under Section 36 of the Electricity Act 1989 from the Scottish Ministers on 19<sup>th</sup> March 2014 (the S36 Consent) and was granted two Marine Licences from the Scottish Ministers, for the Wind Farm and associated Offshore Transmission Works (OfTW), on 2<sup>nd</sup> September 2014 (the Marine Licences).

## **1.2** Objectives of this Document

- 1.2.1 The S36 Consent and Marine Licences contain a variety of conditions that must be discharged through approval by the Scottish Ministers/Licensing Authority prior to the commencement of any offshore construction works. One such requirement is the approval of a Commercial Fisheries Mitigation Strategy (CFMS) which is required to set out a strategy to effectively mitigate, where necessary, any proven adverse effects on each commercial fishery operating within the vicinity of Beatrice Offshore Wind Farm.
- 1.2.2 The relevant conditions setting out the requirement for a CFMS for approval, and which are to be discharged by this CFMS, are presented in full in Table 1.1.
- 1.2.3 This document is intended to satisfy the requirements of the S36 Consent and Marine Licence (OfTW) conditions by providing a CFMS that can be practically implemented during construction and operation to ensure proven effects on relevant commercial fisheries interests are mitigated.

Consent Condition Document Reference			
Section 36	Condition 32	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 a Commercial Fisheries Mitigation Strategy.	Section 4.0 (consultation) This document sets out the CFMS for approval by the Scottish Ministers.
		As part of any 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 [Wind Farm].	Section 5 (Mitigation Strategy)
		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.	Section 5.3 (Other potential mitigation)
		The CFMS to be implemented must be approved in writing by the Scottish Ministers.	Section 2 (BOWL commitments)

Table 1 1 - CEMS	consent conditions	s to be disch	arged by this	s document
	consent conditions		argea by tim	



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rice Comme	ercial Fisherie	s Mitigation Strategy	Page 10 of 28
Consent Document	Condition Reference	Condition Text	Reference to relevant Section of this CFMS
		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 [Wind Farm].	Section 5 (Mitigation Strategy) and Section 2 (BOWL commitments)
		Any contractors, or sub-contractors working for the Company, must cooperate with the fishing industry to ensure the effective implementation of said CFMS.	Section 5 (Mitigation Strategy), Section 2 (BOWL commitments) Section 3 (roles and responsibilities)
OfTW Marine Licence	3.2.1.4	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 a Commercial Fisheries Mitigation Strategy.	Section 4.0 (consultation) This document sets ou the CFMS for approval by the Scottish Ministers.
		As part of any 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 [OfTW].	Section 5 (Mitigation Strategy)
		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.	Section 5.3 (Other potential mitigation)
		The CFMS to be implemented must be approved in writing by the Licensing Authority.	This document sets out the CFMS for approval by the Licensing Authority.
		The Licensee must implement all mitigation measures committed to be carried out by the Licensee within the CFMS in so far as is applicable to the [OfTW].	Section 5 (Mitigation Strategy) and Section 2 (BOWL commitments)
		Any agents or their contractors or subcontractors working for Licensee, must co-operate with the fishing industry to ensure the effective implementation of said CFMS.	Section 5 (Mitigation Strategy), Section 2 (BOWL commitments) Section 3 (roles and responsibilities)

- 1.2.4 In addition to the requirement for a CFMS, a Fisheries Liaison Officer (FLO) must be appointed as set out by the requirements under Section 36 consent condition 33 and condition 3.2.2.13 of the OfTW Marine Licence. Whilst the FLO is not a requirement of this CFMS, it is anticipated that the FLO will play a role in the implementation of this CFMS, particularly in relation to communications with local fishing interests.
- 1.2.5 BOWL have provided details of the nominated FLO (Brown and May Marine Ltd (BMM)) to MS-LOT in respect of consent condition 33 of the S.36 Consent on 1st August 2014; this nomination was accepted by MS-LOT, on behalf of Scottish Ministers, on 10th October 2014. This CFMS has been drafted in part by BMM and BMM have attended the consultation events listed under Section 5 of this CFMS.



## 1.3 Linkages with other Consent Plans

- 1.3.1 This CFMS document sets out specific procedures relating to mitigation of effects on commercial fisheries. However, ultimately it will form part of a suite of approved documents that will provide the framework for the management of the construction and operation of the Development namely the other consent plans required under the Section 36 and OfTW Marine Licence.
- 1.3.2 The consent conditions relating to the development of this CFMS do not explicitly require cross reference to other consent plans. However, where they are relevant to the mitigation described in this CFMS other relevant consent plans are referred to.

#### 1.4 Structure of this CFMS

1.4.1 In response to the specific requirements of the S36 Consent and the OfTW Marine Licence conditions, this CFMS has been structured so as to be clear that each part of the specific requirements have been met and that the relevant information to allow the Scottish Ministers to approve the CFMS has been provided. The document structure is set out in Table 1.4.

Sectio	n	Summary of Content
1	Introduction	Background to consent requirements and overview of the CFMS scope and structure;
2	BOWL Statements of Compliance	Sets out the BOWL statements of compliance in relation to the CFMS consent conditions.
3	Project Overview	Provides an overview of the project relevant to the CFMS.
4	Consultation	Summarises the consultation with the commercial fishing sector since the application for consents was made, including consultation with MFOWDG-CFWG
5	Commercial Fisheries Mitigation Strategy	Sets out the mitigation strategy proposed in relation to commercial fishing
6	Compliance with the Application, ES and SEIS	Sets out confirmation of how the mitigation measures related to commercial fisheries identified in the ES and SEIS are to be delivered.

#### Table 1.4 – CFMS document structure



## 2 BOWL Statements of Compliance

#### 2.1 Introduction

- 2.1.1 The following sections are intended to re-affirm the BOWL commitment to ensuring that the Development is constructed and operated in such a manner as to meet the relevant legislative requirements set out by the project consents but also broader legislative requirements; specifically it sets out:
  - A number of statements of compliance relating to this CFMS and the broader requirements of the project consents; and
  - Matters related to vessels;
- 2.1.2 Reference is made throughout to other, relevant consent plans required by the project consents and to other sections of this CFMS where further detail is provided.

#### 2.2 Statements of Compliance

- 2.2.1 BOWL in undertaking the construction of the project will require compliance with this CFMS as approved by the Scottish Ministers.
- 2.2.2 BOWL in undertaking the construction and operation of the project will require compliance with other, relevant consent plans as approved by the Scottish Ministers.
- 2.2.3 BOWL in undertaking the construction and operation of the project will require compliance with the limits defined by the original application and the project description defined in the Environmental Statement and SEIS and referred to in Annex 1 of the Section 36 consent except in so far as amended by the terms of the S36 Consents (unless otherwise approved in advance by the Scottish Ministers) (see section 6 and Appendix A).
- 2.2.4 BOWL in undertaking the construction and operation of the project will require compliance with BOWL company HSE systems and standards, the relevant HSE legislation and such other relevant legislation and guidance so as to protect the safety of the wind farm construction personnel and other third parties.

#### 2.3 Vessels

- 2.3.1 BOWL will require that all vessels meet the required, recognised standards and will comply with the international maritime rules (as adopted by the flag state) and regulations. Where necessary, BOWL will conduct appropriate independent vessel audits on all construction vessels to ensure they meet these standards and are fit for purpose for their prescribed roles.
- 2.3.2 All construction vessels will be required to comply with the procedures and requirements set out in the relevant consent plans (the NSP, VMP, LMP, EMP, CMS and CaPs).



## 3 **Project Overview**

#### 3.1 Introduction

3.1.1 This section provides a brief overview of the Development relevant to the CFMS and sets out in relation, to BOWL and the Key Contractors, the main roles and responsibilities.

#### 3.2 Development Overview and Layout

- 3.2.1 The Development will consist of the following main components:
  - A total generating capacity of up to 588MW;
  - Up to 84 wind turbines of 7MW rated generating capacity;
  - Jacket substructures each installed on four pile foundations driven into the seabed;
  - Two AC substation platforms, referred to as offshore transformer modules (OTMs) to collect the generated electricity and transform the electricity from 33kV to 220kV for transmission to shore;
  - A network of circa 170 to 190km of inter-array, buried or (if burying is not possible) mechanically protected, subsea cables to connect strings of turbines together and to connect the turbines to the OTMs;
  - 2 buried or (if burying is not possible) mechanically protected, subsea export cables, totalling circa 130km in length, to transmit the electricity from the OTMs to the land fall at Portgordon and connecting to the onshore buried export cables for transmission to the onshore substation and connection to the National Grid network; and
  - Minor ancillary works such as the potential deployment of met buoys and permanent navigational marks.
- 3.2.2 Figure 3.1 below shows the location of the Development in the Moray Firth, and shows the route of the export cable route and the locations of the relevant ports that may be used during construction and/or operation.
- 3.2.3 Details of the construction programme for the construction works are provided in the construction programme (CoP) submitted for approval (required under Condition 10 of the s36 consent and Condition 3.2.2.3 of the OfTW Marine Licence). For ease of reference the key milestone dates for the construction works are provided in Table 3.1.



#### Table 3.1 - Summary of Key Milestone Dates for Construction Activity

Milestone and activity	Anticipated Installation Period
Offshore construction start	April 2017
Installation of foundation piles	April – November 2017; and April – September 2018 <sup>1</sup>
Installation of Jacket substructures (WTGs and OTMs)	May – September 2017; and April – September 2018
Installation of wind turbines	June 2018 – September 2018; and April – August 2019
Installation of OTM topsides	April 2018
Installation of inter-array cabling	July – September 2017; April – October 2018; and April – June 2019
Generation	1 <sup>st</sup> generation: July 2018; and Full generation: October 2019
Offshore construction ends	October 2019

## 3.3 Key Contractor

- 3.3.1 The Key Contractors, named as Seaway Heavy Lifting Offshore Contractors B.V. (SHL), Siemens Wind Power Ltd (SWPL) and Siemens Transmission and Distribution Ltd (STDL), will be responsible for constructing the Development as designed. They will also be responsible for complying with the relevant requirements of this CFMS.
- 3.3.2 In summary, the main roles and responsibilities of the Key contractors will be as follows:
  - SHL:
    - Wind turbine and OTM jacket foundation and substructure installation using SHL vessel(s) (with sub-contractors used for additional barges, anchor handling tugs and towing tugs as required);
    - OTM topside lift using SHL heavy lift vessel (with sub-contractors used for additional barges, anchor handling tugs and towing tugs as required);
    - Inter-array cable installation (using sub-contracted cable laying, trenching and support vessels and subcontractors).
  - SWPL:

<sup>&</sup>lt;sup>1</sup> Note that provision is also made in the programme for the possible continuation of piling over the 2017-2018 winter period although this is considered unlikely to be required.



- Management of the construction laydown port facility where the wind turbine components will be pre-assembled ready for installation;
- Wind turbine installation using a jack-up vessel
- Wind turbine cable connections and commissioning works (with subcontracted crew transfer vessels used to transport personnel to carry out completion and commissioning activities);
- STDL:
  - Export cable laying and trenching (using subcontractors (Nexans) and cable laying, trenching and support vessels).
  - OTM topside supply and commissioning (with sub-contracted crew transfer vessels used to transport personnel to carry out OTM completion and commissioning activities).
- 3.3.3 During the operational phase, BOWL and any appointed contractors will retain responsibility for operating and maintaining the Wind Farm in accordance with the requirements of this CFMS.
- 3.3.4 The OfTW assets will be sold to an OFTO and thereafter the responsibility for the implementation of this CFMS in so far as it applies to the OfTW assets will transfer to the OFTO. It should be noted that BOWL would prefer to maintain responsibility for managing the OfTW in this regard, providing that an agreement can be reached with the OFTO. However, in the absence of such an agreement being reached, the OFTO will be responsible for the implementation of this CFMS in relation to the operation of the OfTW.

## 3.4 CFMS - BOWL and Key Contractor Roles and Responsibilities

- 3.4.1 This CFMS has been prepared by BOWL and will be refined and implemented in consultation with the Moray Firth CFWG. It is BOWL's responsibility to ensure its implementation for the Development. This section details the Development team roles, responsibilities and lines of communication during the construction and operational phases in so far as they relate to commercial fisheries interests.
- 3.4.2 Figure 3.1 shows the structure of the Development team as relevant to this CFMS, the FLO and commercial fisheries interests. The FLO and Moray Firth CFWG would act as points of contacts for fisheries interest groups and individual fishermen as required.

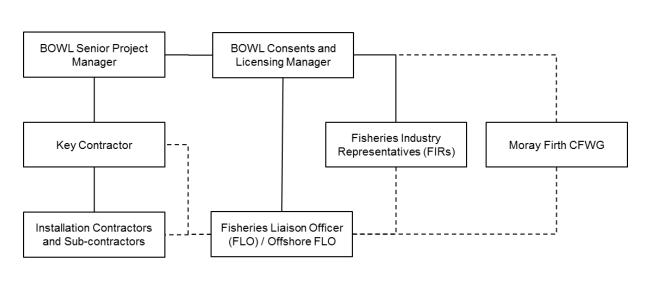


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#### Figure 3.1 - Development team organogram as relevant to this CFMS



Indicates lines of contractual responsibility
 Indicates lines of communication

#### 3.4.3 The responsibilities of the key roles detailed in Figure 4.1 are set out in Table 3.1.

Table	3.1 -	Roles	and	Res	ponsibilities
	••••				

Role	Responsibility			
Key Contractor	Company with overall responsibility for delivering the construction phase. Liaises with the BOWL Project Manager.			
Senior Project Manager	Employed by BOWL to oversee the effective delivery of the construction phase or of the whole Project.			
Consents and Licensing Team Manager	The Consents and Licensing Team Manager is responsible for the effective management of all consent, planning permission and land related activities through the Refinement and Execution phases of the project. Manages the ECoW, FLO and archaeological consultant roles.			
Fisheries Liaison Officer	The person appointed under Consent Condition 33 of the S.36 Consent and 3.2.2.13 of the OfTW Marine Licence. The FLO must establish and maintain effective communications between BOWL, any contractors or sub-contractors, fishermen and other users of the sea during the construction of the Development and communicate any amendments to the CMS and site environmental procedures, provide information to the fishing industry to minimise interference to fishing operations and allow safe fishing activity on the site of the Development, and ensure compliance with best practice guidelines whilst doing so.			
Offshore FLO	Employed by BOWL to act as the point of communication with fisheries interests at sea, directly and through consultation with FIRs.			



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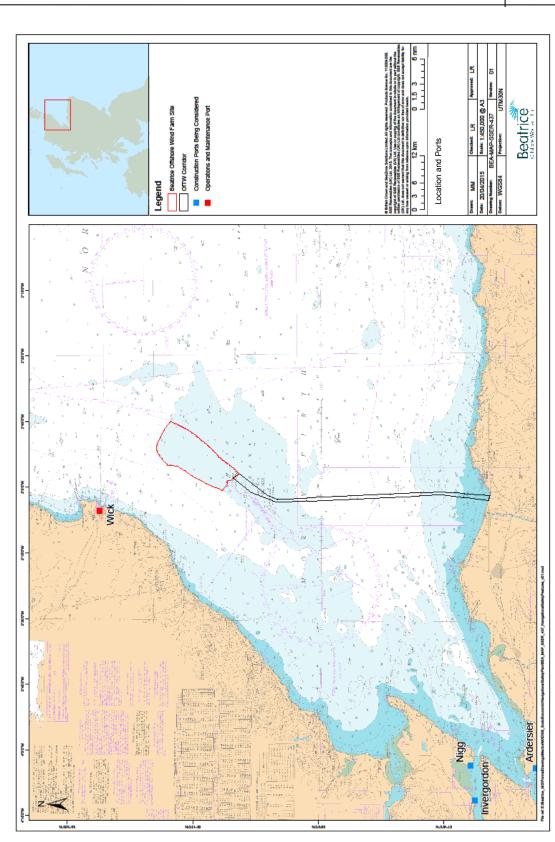


Figure 4.1 – Wind Farm location and OfTW cable route and Main Ports



## 4 Consultation

#### 4.1 Commercial Fisheries Consultation to Date

- 4.1.1 Prior to gaining consent in March 2014, BOWL undertook five years of constructive engagement and dialogue with the commercial fishing industry as part of the consenting process and developed an open and transparent relationship with stakeholders. Through this consultation, a number of concerns relating to commercial fisheries impacts were addressed. A detailed summary of pre-consent consultation is provided in the ES and SEIS documents.
- 4.1.2 This dialogue has continued since the time that the application for consent was made; Table 5.1 provides a summary of this ongoing consultation.

Date	Consultee	Issues discussed and outcomes
26/02/2013	CFWG meeting	BOWL, MORL project updates post ES submission. Discussion of FIR roles and CFWG objectives and membership
06/06/2013	CFWG meeting	Discussion of ES fisheries baseline and Marine Scotland VMS data. Discussion of potential opportunities for fishermen. Discussion of EMF
12/11/2013	CFWG meeting	Update on fishermen's register. BOWL, MORL project updates Discussion of overtrawlability surveys
12/05/2014	SFF and FIRs (BOWL only)	BOWL project update Discussion of consent conditions and CFWG Discussion of pre-construction surveys
30/06/2014	SFF (BOWL only)	BOWL project update. Discussion of cable installation plans and fishing plotter data
15/09/2014	CFWG meeting	BOWL, MORL project updates. Discussion of MORL revised export cable route.

Table 5.1 - Summary	/ of Kev	consultation i	undertaken	since ap	plication	submission.
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Date	Consultee	Issues discussed and outcomes
28/04/2015	SFF (BOWL only)	BOWL project update SFF fishing awareness presentation
24/09/2015	CFWG meeting	BOWL, MORL project updates. Discussion of cable installation methodologies. BOWL CFMS discussion. Request to SFF to come up with suggestions for appropriate and specific community funding. MSS to undertake research evaluating fishing patterns

- 4.1.3 In addition to the consultation set out in the ES and SEIS documents, due to the proximity of the two wind farm projects, BOWL and Moray Offshore Renewables Limited (MORL) formed the Moray Firth CFWG with fishing industry representatives. The Group was established and first met in early 2013. The Moray Firth CFWG will continue to provide the forum for ongoing discussions and liaison regarding the BOWL Development. The key objectives of the Moray Firth CFWG are to:
  - Engage regularly and effectively with the commercial fishing industry;
  - Ensure the fishing community is kept informed of the developments as they progress;
  - Enable the establishment of a clear and structured approach to liaison and open, transparent communication between the parties involved; and
  - Provide a forum for open discussion of potential mitigation options.
- 4.1.4 There are aspects of offshore renewables development that require ongoing engagement with the fishing industry, including the development of construction management plans and best practices, and identifying and developing feasible mitigation options where required. In addition, engagement is required during the operational and decommissioning phases. In order that the Moray Firth CFWG is able to progress and implement agreements, it is necessary that all involved parties are appropriately and satisfactorily represented.
- 4.1.5 Moray Firth CFWG meetings are held approximately twice a year. The two years of discussions at those meetings and elsewhere have informed the content of this CFMS. At the most recent CFWG meeting in Inverness (24/09/2015), with regards to mitigation options that could be applied to the project, the following main points were discussed:
  - It was accepted that there are considerable difficulties in quantifying and financially mitigating any potential impacts on commercial fisheries due to a number of significant but unrelated factors such as, quota allowances, variations in condition of the stocks of targeted species and other national and EU legislation;



- The SFF raised the issue of community funding and it was agreed that they would produce suggestions for specific community funding options by the next meeting; and
- It was stated that MSS would be undertaking research to evaluate whether changes in fishing patterns occur as a consequence of installation and operation of offshore wind farms. This research would provide valuable evidence for the assessment of the need for, and the type and scale, of community funded projects.
- 4.1.6 It is important to BOWL that the successful relationship already established continues throughout the lifetime of the Development and BOWL will therefore continue to engage with the industry over the coming years, prior to, during and post construction, on both Development specific matters and through the Moray Firth CFWG.

## 4.2 Fisheries Liaison Officer (FLO) and Fishing Industry Representatives (FIRs)

- 4.2.1 BMM were initially appointed as BOWL FLO in 2010, and have acted as the FLO since this time. This includes being formally appointed as the FLO to discharge consent condition 33 of the S.36 Consent in October 2014, ensuring that they will remain as the FLO during the construction of the Development.
- 4.2.2 BMM are the first point of contact for local fisheries stakeholders. The role of the FLO includes establishing and maintaining communication with the fishing industry, providing information on fishing activities and disseminating information relating to the development. This includes the distribution of Notice to Mariners (NtMs) via the Kingfisher Fortnightly Bulletins and via distribution lists. BMM also establish and maintain regular liaison with relevant fishermen's associations and fisheries stakeholders, organise and minute fisheries stakeholder meetings including the Moray Firth CFWG, obtain and transmit to the developer all relevant fishermen's concerns in respect of the various activities associated with the Development and coordinate the activities and responsibilities of the Development FIRs.
- 4.2.3 Additionally, BOWL has employed three FIRs to act as points of contact for specific fisheries in the Moray Firth. These are the inshore static gear fishery (crabs and lobsters); the mobile gear demersal fishery (whitefish and squid) and the mobile gear bottom trawl fisheries (Nephrops and scallops). The FIRs also sit on the Moray Firth CFWG and are responsible for providing and distributing information to fisheries stakeholders as required.

## 4.3 Consultation on CFMS

4.3.1 The draft CFMS was discussed with the CFWG at a meeting on 24th September 2015 and has been updated following that discussion. The focus of this CFMS is expected to evolve as the Development proceeds through design and into construction and subsequent operation. It is anticipated that refinement of this CFMS through continuing dialogue with Moray Firth CFWG will be an ongoing process.



#### 4.4 Best Practice Guidance

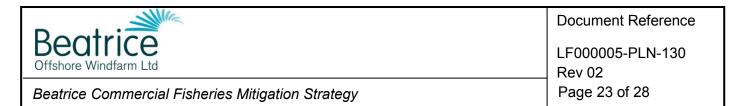
- 4.4.1 The Fishing Liaison and Offshore Wind and Wet Renewables Group (FLOWW) have published guidelines (FLOWW, 2014) aimed to encourage co-operation and long term co-existence between the commercial fishing industry and offshore developers.
- 4.4.2 The FLOWW document recommends the following best practice for consultation:
  - Establish a Fishing Liaison Plan (FLP), including appointing a Company Fishing Liaison Officer (CFLO) and as appropriate, Fishing Industry Representatives (FIRs). The FLP is to be an evolving document continuing into the operational phase.
    - The CFLO is delegated to represent the developer and is the primary point of contact for the fishing industry.
    - FIRs are individuals who have strong ties with the fishing industry and fully represent the interests of individuals.
  - Instigate and maintain regular contact with the relevant national and regional fishing industry bodies.
  - Disseminate information to the wider fishing industry through communication channels, such as emails, letters, Notice to Mariners and the Kingfisher Fortnightly Bulletin.
  - Establish and maintain liaison as necessary with the wider fishing industry which will continue into the operational phase.
- 4.4.3 BOWL is committed to following these guidelines in the implementation of this CFMS (the equivalent to the FLP). The BOWL FLO (the equivalent to the CFLO) will provide a direct channel for consultation with the fishing industry ensuring that consultation is not restricted to the Moray Firth CFWG meetings.



## **5** Commercial Fisheries Mitigation Strategy

#### 5.1 Introduction

- 5.1.1 As stated in the ES, no fisheries were identified as having the potential to be significantly impacted during the construction and operation of the Wind Farm and no objections were received during the consents process from the fishing community. Although potential significant impacts were identified on certain static gear inshore fisheries as a result of the installation of the export cable route, it is considered that this impact will be temporary and that fishing activity will be able to safely resume post installation. Therefore under the Section 36 Consent and OfTW Marine Licence, no specific mitigation strategy is currently required in this CFMS for any commercial fishery.
- 5.1.2 During the course of construction and operation, BOWL will maintain the required ongoing communication and liaison wherever possible to mitigate, where reasonably practicable, the risk of any significant impacts occurring.
- 5.1.3 The principal forum for discussing and agreeing any potential mitigation options will be the Moray Firth CFWG.
- 5.1.4 Suitable procedures to enable co-existence will evolve through discussions within the Moray Firth CFWG and as construction plans become more detailed, but are expected to include the following:
  - Communicating the relevant details of the Navigational safety Plan (NSP) to ensure that fishermen are aware of planned measures in respect of navigational safety and that any disruption of fishing activity is minimised;
  - Communicating the location, extent and duration of Safety Zones (under Energy Act 2004) at construction locations as fishing activities will not be permitted within these during construction activities, as described in the NSP. The Safety Zones will move as the construction activity moves to another location. The duration of a Safety Zone will be dependent on the construction activity with which it is associated. Further details of Safety Zones will be discussed with the Moray Firth CFWG once construction programmes are advanced;
  - Discussing cable laying plans, including potential areas where cable protection may be required, with the Moray Firth CFWG and presenting this information within BOWL specific fisheries meetings. BOWL will be in a position to discuss cable laying plans following the appointment of cable installation contractors and the completion of the Cable Plans (CaPs).
  - Where suppliers of cable protection material (e.g. concrete mattressing) claim that their products are overfishable, evidence supporting such claims will be requested, where this may be used.



## 5.2 Embedded Mitigation for Co-existence Planning

- 5.2.1 Throughout the development, refinement and delivery process of the Development, various forms of embedded mitigation will be implemented by BOWL such as:
  - Requiring that inter-array cables and export cables are protected from third parties, primarily by seabed burial to the required depth to achieve the desired level of protection against assessed local threats/seabed activities. The target burial depth, where ground conditions are suitable, is up to 1.7m for export cables and up to 1m for inter array cables. Where sufficient cable burial depth is not achieved or cable burial is not possible, BOWL will require the installation of suitable cable protection, with consideration to fisheries interests when selecting cable protection methods. The CaPs will detail the cable protection measures and will be informed by the array cable and OfTW ground investigation surveys;
  - Ensuring minimal disruption to fishing activities during survey works and preventing damage to both the fishing and survey gear, by continuing the successful liaison with static gear fishermen operating in the survey areas to seek to negotiate removal of any gear for the period of the survey. This policy will continue during the construction phase of the project;
  - Continue, wherever possible, to require the utilisation of appropriately accredited local fishing vessels for survey, guard vessel and other works as appropriate and require the employment of suitably qualified local fishermen as offshore FLOs (as is current practice during site investigations). This will continue throughout the life of the Development, as required;
  - Imposing specific obligations on contractors, such as requiring that any Development related debris accidentally dropped during construction and maintenance activities is removed as practicably and safely as is feasible (following the procedures set out in the Environmental Management Plan (EMP));
  - In relation to objects deposited on the seabed, BOWL will require transport audit sheets to be maintained in accordance with consent conditions 3.2.2.1 and 3.2.2.2 of the Wind Farm Marine Licence and consent conditions 3.2.3.3 and 3.2.3.4 of the OfTW Marine Licence;
  - Requiring that all vessels under contract with BOWL maintain polite, proactive and professional communications with commercial fishing vessels during offshore operations; and
  - Undertaking post-construction surveys, as required, to assess the seabed status in the vicinity of installation activities following the completion of the construction phase, to enable safe resumption of fishing activity, where feasible.

#### 5.3 Other potential mitigation options

5.3.1 At present, there is no accepted standard methodology for quantifying loss or disturbance to commercial fishing activity which may occur from offshore construction



activities. BOWL will follow standard procedures as outlined in the FLOWW (2014) best practice guidance, which states:

"Commercial compensation should only be used as a last resort when there are significant residual impacts that cannot otherwise be mitigated. Compensation should only be paid on the basis of factually accurate and justifiable claims. There is therefore an obligation upon affected fishermen to provide evidence (such as three years' worth of catch records and VMS data) to corroborate any such claims".

- 5.3.2 In addition, where practicable, BOWL will adhere to the following published guidelines:
  - FLOWW: Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Disruption Settlements and Community Funds
  - Scottish Government: Good practice principles for community benefits from offshore renewable Energy developments
  - SeaFish: Best Practice Guidance for Fishing Industry Financial and Economic Impact Assessments
- 5.3.3 As with pre-construction surveys, to minimise any potential disruption to fishing activities during the construction phase, BOWL will liaise with local fishermen to seek to negotiate the removal of static gear legitimately located within areas of construction activities.
- 5.3.4 BOWL is willing in principle to participate in trials of scallop trawl gear modifications, in collaboration with other wind farm developers, which would be accepted by the UK Scallop fishing industry as a replacement to traditional gears to enable scallop dredging to continue within an operational wind farm, should this be considered appropriate for the BOWL site.
- 5.3.5 BOWL will continue to monitor commercial fishing activities during the construction and post construction phases of the project.
- 5.3.6 In addition, as demonstrated to date whereby BOWL has contracted services from the fishing community totalling approximately £500,000, BOWL will continue to invite the services of suitably certified fishing vessels and personnel for the undertaking of tasks such as, surveys, FIRs, OFLOs and guard vessel duties.



## 6 Compliance with the Application, ES and SEIS

#### 6.1 Introduction

6.1.1 In addition to the conditions presented in Table 1.1, Condition 8 of the S36 Consent states:

"The Development [Wind Farm] must be constructed and operated in accordance with the terms of the Application and related documents, including the accompanying ES, the SEIS and Annex 1 of this letter, except in so far as amended by the terms of this section 36 consent."

6.1.2 Sections 8.2 sets out information from the ES/SEIS with regard to compliance with the mitigation and management measures set out in the ES/SEIS with regard to commercial fisheries matters.

#### 6.2 Compliance with the ES/SEIS

- 6.2.1 The ES and SEIS set out a number of commitments in relation to various aspects of the Development (design, monitoring, mitigation etc). The effects of the Development on commercial fishing activities were assessed in the ES and SEIS on the basis that these commitments would be implemented. The commitments were made to ensure that the Development followed good practice in relation to its interaction with commercial fisheries interests. Appendix A provides an overview of the commitments made in the ES and SEIS which are relevant to this CFMS, FLO and commercial fishing interests. It also highlights where the commitments are addressed in this CFMS.
- 6.2.2 It is important to note the findings of the Environmental Statement (ES) and Supplementary Environmental Information Statement (SEIS) which identified no likely significant effects upon commercial fishing activities for the construction and operation of the Wind Farm. However, likely temporary significant effects were identified for the construction phase of the OfTW, as a result of loss or restricted access to traditional fishing grounds and displacement of commercial fishing vessels into other areas for Nephrops, squid, scallops and creels. No other likely significant effects were predicted for the Development alone. Likely significant cumulative effects were identified as a result of loss or restricted access to fishing grounds during the construction/decommissioning of the Development where this coincides with that of the Moray Firth Round 3 Zone. However, it is currently envisaged that construction period as the timelines for these two projects are now unlikely to overlap completely.
- **6.2.3** During operation of the Development it is considered that fishing activity would be able to continue within the site, subject to the individual judgement of the skippers of fishing vessels when deciding whether to continue fishing.



## 7 References

FLOWW (2014) FLOWW Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Liaison. January 2014.

FLOWW (2015) Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Disruption Settlements and Community Funds. August 2015.

Scottish Government (2015) Good practice principles for community benefits from offshore renewable Energy developments. July 2015.

SeaFish (2012) Best Practice Guidance for Fishing Industry Financial and Economic Impact Assessments. August 2012.



Document Reference

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## Appendix A: ES and SEIS Commitments

Document	Chapter No.	Chapter	Ref (page, para)	Details of Commitment	Reference to Section in CFMS
ES	16	Commercial Fisheries	16-42, p.191	BOWL will develop an approach in consultation with the fishing industry to ensure that the safety risks posed to fishing vessels as a result of the installation and operation of inter-array cables are within an appropriate and reasonable standard determined in consultation with the fishing industry, and remain within, acceptable limits throughout the construction/ decommissioning and operation phases of the development.	Section 5
ES	16	Commercial Fisheries	16-42, p.192	Dialogue will be ongoing with fishermen prior to and during the construction phase to ensure that project information is effectively disseminated to fishermen, as well as allowing for issues to be raised by the fishing community. Working practices will also be discussed to achieve any possible reduction in interference.	Section 5
ES	16	Commercial Fisheries	16-42, p.192	A construction management plan will be defined in consultation with fishing interests which clearly establishes protocol for engagement between the developer and fishermen throughout the construction period.	Section 5 of this CFMS
ES	16	Commercial Fisheries	16-42, p.192	<ul> <li>In order that the various fishing sectors are appropriately represented, as well as the developer and the regulatory body, a Working Group will be established that facilitates the following:</li> <li>Ongoing dialogue between the fishing community and wind farm development throughout the pre-construction and construction phase;</li> <li>Protocol for the navigation of wind farm construction and works vessels to and from the site (i.e. agreement of transit lanes to minimise interference to fishing activities);</li> <li>Established procedures in the event of interactions between wind farm construction and fishing activities (i.e. claims for lost and/or damaged gear); and</li> <li>Protocol for removal of seabed</li> </ul>	Section 4 (consultation) and Section 5



**Document Reference** 

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Document	Chapter No.	Chapter	Ref (page, para)	Details of Commitment	Reference to Section in CFMS
				obstacles post-construction. In order that there is ongoing dialogue between BOWL and the fishing industry throughout the operational phase of the Wind Farm, the Working Group will continue to provide a forum for ongoing engagement.	
ES	27	Commercial Fisheries OfTW	27-47, p.193	<ul> <li>The post installation status of the OfTW will enable fishing activities to be safely resumed. Measures to facilitate this includes:</li> <li>Cable burial where feasible (minimum 55%);</li> <li>Protection of surface laid (unburied) cables; and</li> <li>Post construction surveys will be undertaken to assess the seabed status in the immediate vicinity of construction and installation activities to ensure that the seabed is at an appropriate and reasonable standard determined in consultation with the fishing industry for fishing activities to be safely resumed.</li> </ul>	Section 5
ES	27	Commercial Fisheries OfTW	27-54, p.225	Consultation will be ongoing with fisheries interests to minimise, where possible, the effect of construction activities that will result in the temporary loss of fishing grounds.	Section 4 (consultation) and Section 5
SEIS	12	Commercial Fisheries	12-3, Table 11.1	Mitigation to be developed through the forum of the Fisheries Working Group. A final scheme of defined mitigation cannot be determined until a detailed design of the Project is realised.	Section 5
SEIS	12	Commercial Fisheries	12-3, Table 11.1	Require understanding of the ongoing effects, from construction through to decommissioning upon important local fisheries, including scallops, seine netting for haddock, squid and the <i>Nephrops</i> fishery. Development of appropriate monitoring programme.	Section 5
SEIS	12	Commercial Fisheries	12-3, Table 11.1	Communication will be ongoing with commercial fishery stakeholders via working group regarding project design and construction/ decommissioning management programmes.	Section 4 (consultation) and Section 5