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Marine Works (Environmental Impact Assessment) Regulations 2007 (Regulation 22)

Environmental Impact Assessment Consent Decision

Project Title: Neart na Gaoithe Offshore Wind Farm

Applicant: Neart na Gaoithe Offshore Wind Limited

Location: Approximately 15.5 KM off Fife Ness, East Coast of Scotland

1. Introduction

This document constitutes an environmental impact assessment ("EIA") consent decision under regulation 22 of the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) ("MWR"), in respect of which applications have been submitted by Neart na Gaoithe Offshore Wind Limited ("NNGOWL") to Marine Scotland, the licensing authority on behalf of the Scotlish Ministers, for—

- i. A marine licence to be considered under the Marine (Scotland) Act 2010 ("the 2010 Act") by the Company to deposit any substance or object and to construct, alter or improve any works in relation to the Neart na Gaoithe Offshore Wind Farm;
- ii. A marine licence to be considered under the 2010 Act by the Company to deposit any substance or object and to construct, alter or improve any works in relation to the Offshore Transmission Works within the Scottish marine area; and
- iii. A consent under section 36 of the Electricity Act 1989 (as amended) ("the Electricity Act") for the Neart na Gaoithe Offshore Wind Farm in the Firth of Forth ("the Development")

The works described in this Consent Decision comprise part of a project listed at Annex II 3(i) of the Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment ("EIA Directive"). The EIA Directive has been transposed into UK law for marine works (including works requiring a marine licence) by the MWR. The project in this instance comprises the marine

elements (which are all elements of the project other than the onshore infrastructure) of the NNGOWF, to be sited in:

The Outer Firth of Forth, within the area bounded by joining the following points:

NNGOWF Lease Boundary

Within the Site in the outer Firth of Forth, within the Scottish marine licensing area approximately 15.5 km (minimum) from Fife Ness, off the East coast of Scotland, within the area bounded by joining the following points:

002° 09.898' W	56° 15.271' N
002° 09.255' W	56° 12.721' N
002° 13.998' W	56° 12.752' N
002° 16.293' W	56° 12.766' N
002° 19.628' W	56° 15.479' N
002° 20.055' W	56° 15.827' N
002° 20.232' W	56° 17.430' N
002° 17.826' W	56° 19.752' N
002° 16.518' W	56° 20.312' N
002° 14.910' W	56° 20.171' N

Export Cable Corridor

Within the Site in the outer Firth of Forth, and export cable corridor to landfall at Thorntonloch, within the Scottish marine area off the East coast of Scotland, corridor shown via centre line (+/- 150 m either side) by joining the following points:

002° 18.370' W	056° 14.400' N
002° 22.600′ W	055° 57.800' N
002° 22.724′ W	055° 57.784' N
002° 22.975′ W	055° 57.751' N
002° 23.641' W	055° 57.665' N
002° 18.358' W	056° 14.447' N

The application made to Marine Scotland was supported by an environmental statement ("ES") and supporting information as required by regulation 12 of the MWR. NNGOWL were required to produce further information in support of their application and submitted a Supplementary Environmental Information Statement ("SEIS").

2. Project Description

NNGOWL is proposing to develop an offshore wind farm in the Outer Firth of Forth approximately 15.5 km from Fife Ness and 16 km from the Isle of May, known as the Neart na Gaoithe Offshore Wind Farm ("NNGOWF").

The total area of the wind turbine layout is approximately 82.7 km² with water depth on the wind turbine locations ranging from approximately 40 to 60 m below Lowest Astronomical Tide ("LAT").

The NNGOWF would include a maximum of 75 three bladed wind turbines at 6MW each, to provide a maximum power generation of up to 450 MW, inter array cables, export cables to shore at Thorntonloch, to the South of Torness Power Station, and turbine foundations.

3. The Environmental Statement

The principal potential impacts of the project, as detailed in the ES, are upon/are:

Air Quality Nature conservation Ornithology Marine Mammals Benthic Ecology Fish and Shellfish Commercial Fisheries Shipping and Navigation Military and Aviation Archaeology Climate Change Ordnance SLVIA Other users Socioeconomics Geology and Bathymetry **Physical Processes**

3.1 Environmental sensitivities

Scottish Natural Heritage ("SNH") and the Joint Nature Conservation Committee ("JNCC") advised that the proposal is likely to have a significant effect upon several European protected sites. On reviewing the original ES, SNH and the JNCC advised that the proposal would likely have a significant effect upon certain qualifying interests of various Special Protection Areas ("SPAs") and Special Areas of Conservation ("SACs"). SNH and the JNCC also advised that, as the Competent Authority, Marine Scotland would be required to undertake an Appropriate Assessment ("AA") in view of the conservation objectives for the sites.

SNH and the JNCC cited a number of SPAs that should be considered in any appraisal. These were Buchan Ness to Collieston Coast, Fowlsheugh, Forth Islands and St Abb's Head to Castle. The qualifying interests where likely significant effect was identified were kittiwake, gannet, puffin, razorbill, guillemot, herring gull, lesser black-backed gull, fulmar, and common and Arctic tern.

SNH and the JNCC also advised that a number of SACs' qualifying interests could, directly or indirectly, be adversely impacted upon by the proposal. SNH identified the proposal as likely to have a significant effect upon the Moray Firth, Firth of Tay and Eden Estuary, Isle of May, Berwickshire & North Northumberland Coast, River South Esk, River Tay, River Teith SACs, (the River Dee and River Tweed SACs were also

included in the AA due to concerns raised by other consultees). SNH and the JNCC advised that the following qualifying interests could be adversely affected by the proposal: bottlenose dolphins, grey seals, common (harbour) seals, Atlantic salmon and freshwater pearl mussels and lamprey species. These interests are not present at all of the aforementioned SACs.

3.2 The appropriate assessment

The proposed works required an AA under Regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994. The AA completed was a regional assessment for the Forth and Tay wind farms and included the Development, ICOL and the SWEL developments. The SWEL developments lie outside 12 nm and are required to be considered under Regulation 25 of the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007, therefore the AA was completed under both sets of regulations. The AA concluded, subject to appropriate conditions being attached to any consent, that the NNGOWL development alone or in-combination with ICOL and SWEL (or where appropriate for consideration, other developments already licenced) would not adversely affect the integrity of the Natura sites that could be potentially impacted by the Development. SNH and the JNCC did not agree with all the conclusions of the AA with respect to some of the SPAs, however MS-LOT consider that the most up to date and best scientific evidence available has been used in reaching the conclusion that the developments will not adversely affect the integrity of the Natura sites and are satisfied that no reasonable scientific doubt remains. Full details are provided in the AA.

4. Consultation

This section summarises the project consultation undertaken by Marine Scotland in 2012 (application and ES) and 2013 (SEIS).

4.1 Public consultation

In accordance with Regulation 16(1)(b) of the MWR Marine Scotland instructed NNGOWL to place a public notice in relevant newspapers for two successive weeks. These public notices were "combined" with those required under The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended). The public notice contained details of:

- the applicant's name and address
- that an application had been made under Part 4 of the Marine (Scotland) Act 2010
- a statement of the nature and location of the project
- the address details of where the application and ES could be inspected during office hours
- notice that parties could make such requests and representations to Scottish Ministers on the ES (and later SEIS) by specified dates

Notice of the application and ES appeared in the following publications:

The Scotsman
The East Lothian Courier
The Edinburgh Gazette
The Fishing News
The Courier
30th July 2012 & 6th August 2012
31st July 2012 & 7th August 2012
31rd August 2012 & 10th August 2012
31rd August 2012 & 10th August 2012
30th July 2012 & 6th August 2012

Notice of the SEIS appeared in the following publications:

•	The Scotsman	21 st June 2013 & 28 th June 2013
•	The Courier and Advertiser	21 st June 2013 & 28 th June 2013
•	The Fishing News	21 st June 2013 & 28 th June 2013
•	The Edinburgh Gazette	21 st June 2013 & 28 th June 2013

Under The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended) the applicant was required to place public notices following the first statutory consultee response, hence additional notices which were placed (at the same time and in the same publications as the notice of the SEIS above) in:

•	The Scotsman	21 st June 2013 & 28 th June 2013
•	The Courier and Advertiser	21 st June 2013 & 28 th June 2013
•	The Fishing News	21 st June 2013 & 28 th June 2013
•	The Edinburgh Gazette	21 st June 2013 & 28 th June 2013

The application, ES and SEIS were made available for public inspection at the following locations:

- Shepherd and Wedderburn LLP, 5th floor, 1 Exchange Crescent, Conference Square, Edinburgh EH3 8UL
- Shepherd and Wedderburn LLP, 5th Floor, 191 West George Street, Glasgow, G" 2LB
- Dunbar Library, Bleachinfield Centre, Dunbar EH42 1DX
- St Andrews Library, Church Square, St Andrews KY16 9NN
- Carnoustie Library, 21 High Street, Carnoustie DD& 6AN

Marine Scotland received twenty three (23) representations from members of the public during both consultation periods. Of these, sixteen (16) object to the Application, five (5) support it, and two neither objected to nor supported the Application with one (1) relating to the onshore cable route and subsequent onshore planning application, and one (1) relating to information used to assess the Development's potential impact on bats.

A number of representations received were from members of the public who currently reside in the area local to the Application.

Members of the public who objected to the Application stated concerns including, but not limited to, the visual impact of the Application, impact on tourism, detrimental to human health, failure to meet the requirements of the Aarhus Convention, inefficiency of the technology, the expense of constructing and operating wind farms,

impacts on the Ministry of Defence and other communications infrastructure, impacts on the marine environment including marine mammals, fish and benthic ecology as well as birds.

Representations which noted support for the project were of the belief that the Application would offer benefits such as the creation of jobs, economic opportunities for the area, and lead to a reduction in emissions from utilising a clean energy source. Additionally, it was felt that the visual impact was lessened due to the turbines being situated offshore compared to terrestrial projects.

Representations deemed to be neutral did not offer any support or objection to the Application however it was queried what studies had been undertaken to assess the possible impact on bats from the Application. Another representation was submitted that dealt with terrestrial interests covering possible disruption to a person's land during cable laying and removal operations. This representation deals with concerns out with the remit of Marine Scotland and was provided to the Planning Authority for their consideration of the onshore planning application.

Of the public representations made concerning the Application none were received from elected representatives.

4.2 Consultees

As part of the consideration of the application and ES, Marine Scotland conducted a consultation with advisory and regulatory bodies for comment on the validity of the ES document and the conclusions of environmental impact drawn. The consultation on the ES opened on 30th July 2012 and closed on the 10th September 2012 with Local Authorities permitted additional time in accordance with The Electricity (Applications For Consent) Regulations 1990 (as amended). A second consultation was undertaken on the SEIS and opened on 21st June 2013 and closed on the 1st August 2013. Extensions to provide comments were permitted to consultees if required.

4.2.1 Consultee List The application, ES and SEIS were sent to:

Consultee	Consultee
Angus Council	Fife Fish Producers Organisation
Dundee City Council	Firth of Forth Lobster Hatchery
East Lothian Council	Fishermen's Mutual Association
	(Pittenweem) Limited
Fife Council	The Health and Safety Executive
Scottish Borders Council	Historic Scotland
Scottish Natural Heritage	Joint Radio Company
the Joint Nature Conservation	Marine Scotland Compliance
Committee	
Scottish Environment Protection	Marine Scotland Science
Agency	
10 Metre and Under Association	The Maritime & Coastguard Agency

The Association of Salmon Fishery Boards	Ministry of Defence
Bristow Helicopters	National Air Traffic Services
British Telecom	The Northern Lighthouse Board
The Chamber of Shipping	The Royal Society for the Protection
	of Birds Scotland
Civil Aviation Authority	Marine Safety Forum
Esk District Salmon Fishery Board	Marine Scotland Compliance
	Aberdeen
The Royal Yachting Association	Marine Scotland Compliance
	Eyemouth
The Scottish Fishermen's Federation	National Trust for Scotland
The Scottish Seabird Centre	North Sea Regional Advisory
	Council
South East Inshore Fishery Group	Planning Aid Scotland
East Coast Inshore Fishery Group	Salmon Net Fishing Association of
	Scotland
Surfers Against Sewage	Scallop Association
Tay District Salmon Fishery Board	Scottish Canoe Association
Transport Scotland	Scottish Enterprise
Transport Scotland (Ports & Harbours)	Scottish Environment Link
Whale and Dolphin Conservation	Scottish Federation of Sea Anglers
Arbroath Sailing & Boating Club	Scottish Fisherman's Organisation
Bond Helicopters	Scottish Surfing Federation
CHC Helicopters	Scottish Whitefish Producers
-	Association
Dunbar Fisherman's Association	Scottish Wildlife Trust
Dunbar Harbour Trust	Seagreen Wind Energy
Eyemouth Harbour Trust	Torness Power Station
Forth District Salmon Fishing Board	Tweed District Salmon Fishing
	Board
Forth Estuary Forum	
Forth Ports	
Inch Cape Offshore Limited	

4.2.2 Consultee Responses

Statutory Consultees

Angus Council ("AC") did not object to the Development however they made a number of comments relating to landscape and visual impacts as well as impacts on cultural heritage arising from the Development.

AC acknowledged that the Development will have a degree of impact on Landscape Character Types ("LCTs") and Regional Seascape Units ("RSU") within the Angus area. However AC were content that the proposed Development will not have an adverse or significant impact on Angus in landscape terms with only minor direct impact on the quality and character of these landscape resources. In terms of landscape and seascape character, AC considered that there would be significant

impacts arising from the Development however these were not considered to be unacceptable.

AC also considered landscape impacts in terms of local and national landscape designations and also sites of landscape value in the Angus area. Two sites were identified by AC as potentially being subject to significant effects from the Development – Dunninald and The Guynd. These were both excluded from the further assessment in the ES as the effects were not found to be significant and AC accepted this conclusion.

AC felt that there was a fundamental weakness in the ES as it did not consider impacts from shipping navigation and aviation lighting and the possible impacts from this. In this respect AC were concerned about possible impacts from the Development on the Bell Rock Lighthouse and considered that there was the potential for significant impacts on the night time seascape. AC suggested that infrared aviation lights be used on the turbines however it was acknowledged that these may not be suitable for shipping navigation purposes. AC concluded that, provided a technical solution to the night light issue was identified, then the effects arising from night time lighting would be not be unacceptable.

AC also considered the issue of cumulative landscape and visual impacts and considered that the assessment, which included other proposals in the Firth of Forth, understated the potential for impact. AC contended the Company's findings that there will not be a significant or adverse cumulative effect on Angus as the Development, together with the ICOL, SAWEL and SBWEL proposals, would collectively clearly extend the horizontal extent of the seaward horizon which would be seen as wind turbines or a wind farm. Moreover, AC felt that the presence of future development of wind turbines closer to Angus, specifically the ICOL proposal would inevitably draw increased attention to the existence of all three wind farm proposals. This would, AC noted, be a significant cumulative effect on Angus however it was not felt to be considered as unacceptable at this stage.

In terms of views of offshore turbines, together with the additional impact of all other cumulative wind farms identified on land, AC were content with the assessment undertaken by the Company and agreed with the findings that the proposed development would not result in an unacceptable adverse cumulative visual impact from all visual receptor types.

AC noted that a key cumulative consideration is the relative height and design of the three different offshore projects. Whilst AC felt that the Development itself was not unacceptable, they advised caution that the replicating of turbines of the size proposed for the Development closer to Angus and the Bell Rock lighthouse as part of future applications may not be considered acceptable and that design options available may become limited if the current Application is approved with turbines of a height of 197 metres.

AC advised that two cultural assets had the potential to be affected by the Development – Bell Rock Lighthouse and Ladyloan Signal Tower which are both Category A listed structures. Both are structures whose purpose, location and setting are significant within the seascape particularly Bell Rock Lighthouse which is visible

from land and sea. AC noted that Historic Scotland were content that there would be no significant adverse indirect or cumulative impact on Bell Rock Lighthouse or the Ladyloan Signal Tower as a result of the Development. However, AC contended that the ES underplayed the significance of the effect the Development would have on Bell Rock Lighthouse. AC were of the opinion that the appropriate level of significance is more accurately described as "moderate significance" although this is not considered to be unacceptable to AC nor does it warrant any mitigation measures to be implemented.

Turning to Ladyloan Tower, AC noted similar conflicts in the rated vulnerability and significance of impact in the ES. However, given the significant increase in distance and the judgement that this structure has a smaller setting it is considered that there will be less of an effect on the significance of impact. This would result in a "moderate significance" on the listed building which is again not considered by AC to be unacceptable.

In both the case of the Ladyloan Tower and Bell Rock Lighthouse, whilst AC felt there was scope for a moderately significant impact it was not of such significance that an objection would be merited.

AC concluded by stating that the aviation and shipping lighting raised a concern as lights would appear visible from Angus at a similar height to the Bell Rock Lighthouse. Unless mitigated against, these effects could be significant and unacceptable. Furthermore, AC raised concern regarding cumulative effects arising from the height and size of the Development and other proposals nearby. If the turbine heights proposed for this Development are approved then a precedence is set which, if replicated closer to Angus by other offshore wind farms, might not be acceptable. Should mitigation measures be taken into account, AC was content to not raise an objection to the Development.

Where appropriate, enforceable conditions will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

Dundee City Council ("DC") did not object on the original application and confirmed they had no planning comments to make on the SEIS.

East Lothian Council ("ELC") did not object to the Development, however they raised a number of concerns relating to landscape and visual issues arising from the proposal, specifically that the ES had underestimated the significance of the impacts on landscape and visuals receptors in East Lothian. ELC state that the main impact will be from the introduction of turbines, associated lighting and structures into an area of formerly open sea. This will lead to changes in the perception of the seascape and landscape character as well as impact on visual amenity.

ELC did not agree with a number of the findings in the ES resulting from assessments undertaken by the Company namely the understating of significance of impacts arising from the Development on a number of receptors. These include, but are not limited to, an understating of the assessment of visual impact from Viewpoint 17 (North Berwick Law), an understating of the assessment of visual impact from

Viewpoint 19 (West Steel), concerns regarding information on cumulative impacts at North Berwick Law and an understating of the visual impact, lack of consideration of potential impacts on terrestrial heritage assets in East Lothian and lack of an explanation of the design concept for the Development.

ELC also noted in their response that the Development will create a dense line of wind turbines along the horizon broadly from the Isle of May to the Bass Rock. The turbines will form the horizon and backdrop to these islands and will result in a significant change to the seascape setting of these islands from the North Berwick area. As referred to above, ELC disagreed with the assessment by the Company which stated that the impact was considered as moderate. ELC consider the impact from the Development on the North Berwick area as major.

ELC also concluded that there would be a cumulative impact with other proposed offshore wind farms in the Firth of Forth Inch Cape and Seagreen (should they receive consent) and also other onshore developments. The effect of the Development with these other proposals will be to extend the length of the horizon containing turbines and intensify the concentration of turbines as well as bringing turbine development closer to the coast and increase the number of days an offshore wind farm development will be visible. Furthermore, this will lead to a reduction in the areas within East Lothian were a wind farm will not be visible. ELC caveat this statement by noting that Fallago Rig and Soutra onshore wind farms were not included in the cumulative analysis.

Further to the issues detailed above, ELC also raise concerns regarding cumulative impacts at North Berwick Law specifically querying the accuracy of the concluded effect of Moderate – Minor. ELC note that visitors climbing North Berwick Law will see a wind farm development in a direction where previously there was none in addition to already extensive development to the South and South East.

ELC queried what design process had been followed to explain the design concept for the wind farm and stated that consideration should be given to possible design options within the Rochdale Envelope to identify possible mitigation measures to minimise seascape and / or landscape impacts. In general, ELC were of the opinion that the ES had underestimated the significance of the impacts on landscape and visual receptors in East Lothian.

ELC note that the ES does not consider potential impacts on terrestrial heritage assets in East Lothian other than Historic Gardens and Designated Landscapes. ELC felt that there are clear impacts on the historic environment of East Lothian on both designated and undesignated sites and monuments. Of concern was monuments that may be impacted which are linked with the seascape. ELC stated that the Development had a high potential to alter how the historic towns of North Berwick and Dunbar, including their conservation areas, feel as the seascape is important to the setting of both.

ELC requested that Marine Scotland ensure that the particular impact assessments highlighted within the landscape and seascape section of their response were reassessed and the implications of any change from this assessment considered

fully before any decision on the Development is made. A summary of the review regarding particular visual concerns raised by ELC can be found below.

Further to comments on the original application, ELC responded during the SEIS consultation to state that the original comments remain and also to provide some further comment on a number of topics.

ELC noted that the SEIS provided a reduction in the number of turbines and an increase in the air gap however stated that these changes do not appear to have a significantly different effect in landscape and visual terms than the maximum height scenario in the original.

ELC highlight their preference for more, larger turbines, as seen in the SEIS over fewer smaller turbines, as featured within the design envelope of the original ES as this, in their view, would reduce cluttering of the Development. ELC recognise that it would be difficult to entirely avoid stacking (whereby one turbine is seen in front of others) and welcome the fact that within the indicative layouts, as presented in the SEIS, this is not particularly evident from their key viewpoints.

ELC welcomed both the inclusion of further wireframes at the Seabird Centre and Tantillon Castle and also the increased quality of the photomontages however disagreed with the assessment by the Company of the significance of impact on the Seabird Centre as Moderate.

ELC highlight the Military and Aviation Appendix which gives a scheme of lighting and sound to warn maritime and flying users of the area that the scheme is there. ELC state that, without compromising safety, it would be desirable if both sound and light could be restricted to the minimum necessary for safety to reduce visibility / audibility from the shore. ELC suggest powering down lighting during conditions of good visibility. Within the SEIS and the response sent to ELC via MS-LOT, the Company provide a Proposed Scheme of Aviation and Maritime Marking and Lighting Scheme which was produced to ensure safety requirements are fully satisfied and to minimise the onshore impact of such equipment as much as possible and ELC appreciate that efforts will be made to keep lighting and sound to the minimum necessary.

ELC commented that without SNH input [at the time of their response] it was not clear whether the cumulative impact of all of the proposed Firth of Forth Windfarms on Firth of Forth SPAs would be acceptable, but for ELC, the greatest impact of these developments would appear at present to be the landscape and visual impacts associated with Neart na Gaoithe. ELC concluded that whilst these impacts are not deemed unacceptable given the need to produce renewable energy, they would like this taken into account should the total amount of development which can be accommodated within the Firth of Forth is limited by impact on Natura 2000 sites.

The Company acknowledged and addressed the points raised above via a letter sent to MS-LOT dated 02 May 2013. The following conclusions and commitments were made by the Company and submitted as part of a response to ELCs comments:

The Company largely responded to the comments above by reviewing the ELC report against the findings of the Seascape and Landscape Visual Impact Assessment ("SLVIA") presented in the ES and feel satisfied that the assessments are appropriate. The Company also highlights that changes to the design of the wind farm, within the parameters of the design envelope, are unlikely to affect the outcome of the assessment. ELC replied to the Company's response and summarises that it remains their view that the ES underestimates the landscape and visual impact on East Lothian.

In order to ensure that the particular impact assessments highlighted in 'landscape and seascape' section of the ELC report (paragraphs 3.09 to 3.26), MS commissioned third party reviewer, CH2M HILL, to undertake an assessment of both the visuals as presented by the Company, and the subsequent comments provided by ELC.

CH2M HILL used adapted Institute of Environmental Management and Assessment ('IEMA') guidance to take into account the themes associated with an IEMA ES review: regulatory compliance, the context and influence of the ES, the content of the ES and the presentation of the ES. These themes were reviewed alongside key guidance documents produced by SNH and also the Guidelines for Landscape and Visual Impact Assessment, CH2M HILL provided comments on the baseline, the assessment and environmental mitigation and management. A copy of this document was provided to ELC however they did not review it for comment as their visuals member of staff had since retired. In summary, the review found the SLVIA to be acceptable and answered the questions that formed part of the review but note that there is some slight issue relating to the allocation of sensitivity which gives rise to concerns from ELC. The review also provided a number of criteria which a magnitude of change to the character areas could be based which CH2M HILL feel could give a more transparent assessment. One particular omission from the ES is reported to be a rigid matrix setting out the possible combinations of sensitivity and magnitude to provide significance of effects and whilst this omission is explained in the text of the ES, the review deems that the reasoning behind the allocation of each specific impact is not clearly documented and transparent for reasoned justification of particular allocations of impact significance.

CH2M HILL review covers points raised by ELC, as requested. The following outlines these points and the response provided:

ELC raised concerns relating to the sensitivity allocated to Seascape Area (SA) 17, Eyebroughty to Torness Point, that the Company had assessed as medium sensitivity. The review finds that where SA17 divided into two subsections, as per the two national seascape units that it covers, the allocation of a low sensitivity to the South East and a high sensitivity to the North West would be appropriate. The assessment of medium across the two is reported to mask a potentially high sensitivity around North Berwick given the views of the Bass Rock and the Isle of May.

ELC contest the allocation of the assessed magnitude of impact, as low to negligible, on the character of the seascape within East Lothian. The review finds that, with the exception of SA18 where the turbines are 30km away and the magnitude appears to

be reasoned, the magnitude of medium would seem to apply to the area around North Berwick with the views of Bass Rock and the Isle of May. Given the extent of SA17, this magnitude of impact is diluted by the other sections of the coast however low to negligible does appear to underestimate the impact. CH2M HILL state that whilst the wind farm is a considerable distance off shore, the impact is clearly not negligible.

ELC question the magnitude of impact on the viewpoint at North Berwick Law stating that the magnitude should be "high" rather than "low" although CH2M HILL note that ELC have quoted the incorrect magnitude criteria. Whilst the CH2M HILL review finds that an allocation of medium impact might be more appropriate the significance of effect of "moderate" arising from the allocation of the original "low" magnitude it is identified as significant within the ES and so amending the magnitude does not affect the ES output.

ELC state that the sensitivity and magnitude of impact on the viewpoint at West Steel should be high rather than medium as this is reported as a core path used by walkers and a receptor of this nature would usually be allocated a high sensitivity. The allocated magnitude of impact of low is also disputed by ELC however CH2M HILL report that the definition of low magnitude does seem to fit as the wind farm is 35km away and is seen behind the smoke plume of cement works. CH2M HILL state that neither of the amendments proposed by ELC would likely re-categorise the significance at West Steel.

Regarding the cumulative visual effect on the viewpoint at North Berwick Law, ELC criticize the cumulative wireframe and dispute the allocation of a moderate-minor effect. ELC state that the wireframe is confusing and that no explanation is given as to why the Isle of May and ICOL are obscured. ELC does not accept that the cumulative effect on North Berwick viewpoint is Moderate-Minor as set out in the ES. The review notes that the cumulative effect is set out however there is no description as to how the judgement is made – the ES allocates a low magnitude of effect. The review finds that it is not unreasonable to state that the additional impact of the Development as one of many visible wind farms, would be low and also that the combination of the low magnitude with high sensitivity would give a "moderate" significance of impact using the standard rigid model but that no explanation is given as to why a "moderate minor" value is allocated.

ELC also query the impact on the coastal Areas of Great Landscape Value ("AGLVs") in East Lothian, specifically the allocated magnitude of impact of "low". The review finds that the significance of distance from the turbines is a key factor in the magnitude however the wide visibility of the turbines and the relative importance of the sea view to the character of the AGLV would suggest that an allocation of increased magnitude would not be inappropriate. Medium / Low magnitude is stated for East Fife AGLV. The review suggests that a minor effect is probable which would perhaps better indicate the likely effect on the coastal AGLVs however this would still not constitute a significant effect.

Finally, ELC criticises the lack of explanation of the design concept for the wind farm however the report highlights the inclusion of a paragraph within the ES that states that a Design Sensitivity Analysis was undertaken on behalf of the Forth and Tay

Offshore Wind Developers Group ("FTOWDG") within which generic layouts for each of the three proposed offshore wind farms (the Company's, ICOL, SAWEL and SBWEL) were compared in terms of their potential impacts and the results of this were provided to, among others, local authorities. The Company was able to confirm that a copy of these minutes had been sent to ELC

Fife Council ("FC") did not object to the Development and recommended conditions for inclusion on any consent. FC provided some comments with respect to the Development as follows.

FC noted that the wind farm, although approximately 15 km from the Fife coastline, raised the potential for noise impacts. The possibility of construction related noise and vibrations being heard or experienced on the developed Fife coastline was a concern that FC raised and one that required to be addressed due to the large scale nature of the works although there was no evidence within the ES that construction noise would be controlled and monitored. Whilst FC was not absolutely certain that construction works could create noise and vibrations that could be audible or felt on the coastline, conditions to mitigate any potential issues were recommended including, for example, limiting the hours of operation for construction. Company has responded to this point by outlining that the possible effects of an increase in airborne noise from the construction and operation of offshore turbines was screened out of the ES due to the distance from shore and that it will adhere to industry standards during the construction phase. The Company is developing a Construction Environmental Management Plan ("CEMP") which will provide additional details on the standards and construction protocols. FC are content with this approach.

FC recommended the implementation of detailed archaeological mitigation strategy for each specific turbine and cable trenching footprint so as to ensure a full and detailed assessment of seabed archaeology being undertaken to minimise disturbance to the sea bed. The Company has is committed to producing an Archaeological Written Scheme of Investigation ("WSI") and Protocols for Archaeological Discoveries with Marine Scotland. Historic Scotland and the relevant Local Authorities will be consulted on this document. FC are content with this approach.

FC expressed concern for the Development's potential to impact on commercial fishing interests in the area. FC noted that the fishing industry has a limited capacity to cope with displacement, is constrained by lack of capital and also licence / quota regulations from fishing in other areas or diversifying into other fisheries.

A lack of clarity of exactly what the Development comprises was cited as the main reason for concern amongst fishing interests. One such example given was the lack of information on whether or not exclusion zones would operate and if these would act as a permanent displacement of all fishing activity. The Company has responded to this point to highlight that a rolling safety zone of 500m will be enforced around the construction works and that for operational works they reserve the right to apply for permanent safety zones of up to 50m around all installed structures, as described within chapter 16 of the ES, The Company does not intend to exclude any vessels

from the wind farm area during day to day operations. FC is content with this approach.

Furthermore, FC felt that the fishing industry in Fife was not convinced that the suggested business opportunities for the sector would materialise specifically the potential for fishermen to gain income through maintenance and supply contracts for the project as it is felt that the Company would favour its own specialist suppliers and contractors. The Company advises that it has remained open about the intention to work with the fishing industry and through the Forth and Tay Offshore Wind Developers - Commercial Fisheries Working Group ("FTOWDG-CFWG") discussions are ongoing to provide the fishing community with advice on opportunities to work in the renewables industry as these arise. FC is content with this approach.

FC stated that it was aware that there was a strong demand from local fishermen for assurance that they would be compensated for loss of income following disruption to or exclusion from fishing grounds resulting from the Development. FC requested that this be considered by Marine Scotland when determining the Application. The Company states that it does not intend to exclude any vessel from the wind farm area during day to day operations however accepts that there may be temporary disruption during the construction phase. Any restrictions that result from the rolling safety zone during construction will be publicised well in advance in order to minimise disruption to fishing activities and other users of the sea. The Company commit to continue working with the local and national fishing communities through the FTOWDG-CFWG. FC is content with this approach.

FC requested that the fisheries working group, which has been set up by developers within the Forth and Tay area, ensures that meetings are held as frequently as considered necessary by the fishing industry, and at a time of the week that suits fishermen so that they can readily take part. The Company have stressed that they remain committed to the FTOWDG-CFWG and highlights that the terms of reference were agreed alongside developer and fishing industry representatives. FC is content with this approach.

Where appropriate, enforceable conditions will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

Scottish Borders Council ("SBC") did not object to the Development. SBC commented that the Application did not include any information on the transportation of components and materials to the site by road. SBC Roads Planning Officer recommended that, if any of the transportation involves public roads within the SBC network, a Traffic Management Plan ("TMP") should be submitted for approval and this point was reinforced in their response to the SEIS. The Company responded to the request by stating that it does not anticipate any significant loads will be transported by road through the SBC area, however, should this occur, they will prepare a Traffic Management Plan for consultation with SBC and other affected Local Authorities.

SBC considered that the overall visual impact of the Development will be within acceptable limits in respect of their areas of interest. Whilst SBC acknowledged

there would be changes to views at night, through the introduction of navigational and aviation lights, this is not considered to add significantly to their impact from receptors in the Borders.

Cumulatively, SBC noted there are some concerns about the overall impact that this scale of offshore development will have on the east coast of Scotland by spreading large development along the coastline, but in terms of immediate impact on the views from the Borders, it is considered that, although there will be a noticeable intensification of visual impact, it would not be so sufficient as to warrant an objection.

Where appropriate, enforceable conditions will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

Scottish Natural Heritage ("SNH") and the Joint Nature Conservation Committee ("JNCC") SNH, a statutory consultee, provided a response to the Application on 23 November 2012 stating they were still in the process of reviewing the ES, but wished to provide key issues that the Company should address where they believed there was lack of clarity, or conflicting information, within the ES. This advice was followed up by a meeting with the Company and a meeting between MSS and the Company to determine what information was required. SNH also provided a separate letter on the 23 November 2012 with regard the cumulative SLVIA, within which they raised serious concerns regarding the illustrative material presented for the Development and what information was going to be available for the cumulative SLVIA. Following the Company's submission of the SEIS in June 2013, which incorporated advice of responses from 23 November 2012, as well as advice from other consultees on the original application, SNH and the JNCC provided their combined regional formal advice on 7 March 2014. Further advice was also received as detailed below:

- 15th April 2014 advice on gannet population modelling and update to the threshold
- 30th May 2014 advice on marine mammal and freshwater fish interests included in the draft appropriate assessment for NNGOWL (also relevant for these Applications)
- 6th June 2014 advice on ornithology interests included in the draft appropriate assessment for NNGOWL
- 10th June 2014 advice on increased turbine spacing and displacement assessment for SAWEL and SBWEL
- 17th June 2014 advice on increased turbine spacing and displacement assessment for ICOL
- 2nd July 2014 collision risk modelling undertaken to include the commitment by SAWEL and SBWEL to increase the blade clearance by 4m from LAT
- 4th July 2014 advice on puffin displacement rates and assessment methods
- 11th July 2014 letter to Marine Scotland advising that the closer effects are to thresholds the greater the risks of adverse effects and detailing appropriate post-consent monitoring (should the Minister grant consent)
- 16th July 2014 updated advice on appropriate displacement rates for quillemot, razorbill and kittiwake at the SAWEL, SBWEL and ICOL sites.

SNH and the JNCC advised that the Development is likely to have a significant effect on the qualifying interests of a number of SACs and SPAs. Both advised MS-LOT to carry out an AA in view of the conservation objectives for these sites.

SNH and the JNCC undertook their own appraisal of the Development following a series of meetings between SNH, JNCC, MSS, the Company, ICOL, SAWEL and SBWEL to resolve "common currency" issues to support a more reliable cumulative impact assessment and comparison between the four development proposals. SNH concluded that the Environmental Impact Assessment ("EIA") and HRA have shown that some SPA seabird species are the key natural heritage interest which will constrain the Development in combination with the ICOL, SAWEL and SBWEL proposals. Impacts on birds including collision risk and displacement will occur over the operational lifespan of the wind farm. SNH and the JNCC highlighted kittiwake, gannet and puffin as being of particular concern, followed by common guillemot, razorbill, herring gull, lesser black-backed gull, Northern fulmar and common & Arctic tern species. For all species other than gannet and puffin, SNH and the JNCC used a reduced uncertainty method of acceptable biological change ("ruABC") in their appraisal to determine whether levels of impact would be acceptable under the Habitats Regulations. In their appraisal for gannet, Strategic Ornithological Support Services ("SOSS") Population Viability Analysis ("PVA") was used, and for Puffin, both potential biological removal ("PBR") and thresholds from proxy species of razorbills and guillemots was used.

In their advice on 7 March 2014 SNH and the JNCC advised that the **Development in combination with ICOL, SAWEL and SBWEL**:

- would adversely affect the site integrity of the Forth Islands SPA with respect to kittiwake, gannet and puffin; and
- would adversely affect the site integrity of the Fowlsheugh SPA with respect to kittiwake.

Of the remaining species and sites requiring consideration in the AA, SNH and the JNCC advised that neither collision nor displacement (as a consequence of the Development in combination with ICOL, SAWEL and SBWEL wind farms) **would not** adversely affect the integrity of:

- Buchan Ness to Collieston Coast SPA with respect to guillemot, herring gull, fulmar, and kittiwake;
- Forth Islands SPA with respect to guillemot, razorbill, herring gull, lesser black backed gull, fulmar, common tern and Arctic tern;
- Fowlsheugh SPA with respect to guillemot, razorbill, herring gull and fulmar; or
- St Abb's Head to Fast Castle SPA with respect to kittiwake, guillemot, razorbill and herring gull.

In their advice dated 6 June 2014 SNH and the JNCC advised that due to the finalisation of the CEH report they were now also advising that adverse effect on site integrity could not be ruled out for Forth Islands SPA with respect to razorbill.

This advice was reviewed by MSS who provided MS-LOT with a detailed justification as to why the methods used by SNH and the JNCC in reaching their conclusions were not the most appropriate and in their view did not use the best available evidence.

SNH and the JNCC also highlighted that effects on species not covered under HRA also require consideration (i.e. individuals breeding out with SPAs and non-breeding individuals). For some species, e.g. kittiwake, additional potential mortality from the Forth and Tay developments could contribute a significant proportion of total UK cumulative mortality. In respect of gannet, great-black backed gull, lesser black-backed gull and razorbill there may be significant cumulative impacts at a UK-level arising from consented and proposed wind farm development in UK waters.

One of the challenges in assessing non-breeding season effects is that currently no appropriate reference populations have been defined that would allow a suitable assessment to be undertaken. However, Marine Scotland Science are contributing to a project being led by Natural England that will define non-breeding season populations for the first time. This will allow appropriate thresholds of change to be identified, and be a significant step towards allowing such assessments to be carried out in the future.

SNH and the JNCC advise that with regard to impacts on migratory waders and wildfowl they support the strategic collision risk assessment commissioned by Marine Scotland and undertaken by the Wildfowl & Wetlands Trust ("WWT") and MacArthur Green Ltd. This project presents a strategic assessment of potential collision risk to migrating wildfowl, waders and other non-seabird species from all current offshore wind farm proposals in Scotland and Robin Rigg, in operation. The modelling confirms that the risk presented by this Development would not be significant on its own, nor cumulatively with the other Forth and Tay developments or recently consented Moray Firth offshore wind farms, to any of these migratory non-seabird populations.

Following a meeting held on 7th July 2014 between Marine Scotland and SNH, SNH followed up with a letter of 11th July which stated they had the opportunity to review and discuss aspects of their advice where conclusions reached by SNH & JNCC on Special Protection Areas are at variance from those reached by Marine Scotland Science. This was done in an effort to understand the nature and origin of the differences, and the extent to which they were germane to the decisions facing the Scottish Ministers with regards to this Application and the other applications for wind farms in the Forth and Tay.

In the letter, SNH noted that there was agreement between their advisers on the vast majority of the issues raised by the Forth and Tay proposals in terms of their effects on the natural heritage and in particular on protected species of seabird. SNH also noted there were precautionary elements in the approaches taken and the models recommended by SNH & JNCC, and by Marine Scotland Science.

SNH stated that what level of precaution is appropriate is not a matter that can be determined precisely, and judgements have to be made. They went on to say that this is a new and fast developing area of scientific study and that approaches are

continually developing and being tested. Many of the methods underpinning assessment (such as collision risk modelling) are based on assumptions for which it may take a long time to get field data to provide verification. So again judgements had to be made where empirical analysis is unable to provide certainty.

SNH outlined several areas of ornithology monitoring which they recommended should be included in any consent granted. These were:

- the avoidance behaviour of breeding seabirds around turbines;
- flight height distributions of seabirds at wind farm sites;
- displacement of kittiwake, puffin and other auks from wind farm sites; and
- effects on survival and productivity at relevant breeding colonies.

Where appropriate, enforceable conditions requiring this monitoring will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

With regard to marine mammals, SNH and the JNCC concluded that, subject to conditions, there would be no long-term effects from underwater noise disturbance on the bottlenose dolphin population from the Moray Firth SAC, or the harbour seal population from the Firth of Tay & Eden Estuary SAC. It was also concluded that there would be no long-term effects from underwater noise disturbance on the grey seal population from the Isle of May or Berwickshire & Northumberland Coast SACs and thus no adverse effect on site integrity. SNH and the JNCC advised that it has not been established whether there is a link between the use of ducted propellers and the corkscrew injuries which have been recorded in seal species over the last couple of years. Research in this regard has been commissioned by Marine Scotland and SNH and is currently being undertaken by the Sea Mammal Research Unit ("SMRU"). Where appropriate, an enforceable condition requiring a VMP will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland. The VMP will consider measures to mitigate potential corkscrew injuries to seals, and SNH and the JNCC will be consulted on this plan.

With regard to Atlantic salmon and sea lamprey, SNH and the JNCC advise likely significant effect from the proposals due to the possibility that the fish could be disturbed by construction noise associated with the Development (not the cable route) and / or possible effects of electro-magnetic fields ("EMF") arising from installed cables. Given that Atlantic salmon are integral to the Freshwater Pearl Mussel, SNH and the JNCC advise likely significant effect on this species and requested that indirect impacts to Freshwater Pearl Mussel were considered in the AA.

SNH and the JNCC advised that an EPS licence would be required due to the potential for disturbance to cetacean species. An EPS licence(s) will be applied for, by the Company, when the final wind farm layout, design and foundation options have been confirmed.

A key concern of SNH and the JNCC in respect of marine fish, relates to underwater noise impacts from pile-driving of the WTG foundations during construction on cod

and herring. It was recommended by SNH and the JNCC that soft start for piling operations could mitigate noise impacts on these species. SNH and the JNCC also recommended pre construction monitoring of sandeels be carried out in order to map densities across the site and ascertain whether it is possible to micro-site turbines away from higher density areas. It is also noted that gravity bases may not be recommended in key areas recorded for sandeels due to the larger footprint over piled foundations.

Benthic surveys by the Company did not identify any Priority Marine Features ("PMF") within the wind farm site or the cable corridor.

For Visuals, SNH stated that the key landscape, seascape and visual impacts of the Development, together with the ICOL, SAWEL and SBWEL proposals to develop another three offshore wind farms adjacent to the Development site, would cause widespread and significant adverse landscape and visual impacts along the Scottish East coast from St Cyrus in Aberdeenshire, through Angus and Fife, South to Dunbar in East Lothian. SNH recommended that landscape consultants continue to be involved post-consent to work with the project and engineering teams to scope and finalise the wind farm design.

SNH highlighted that the main impacts of the Development would be experienced along three stretches of coast: South Aberdeenshire/Angus; East Fife; and East Lothian. Furthermore, in combination with ICOL, SAWEL and SBWEL, the Development would result in significant cumulative effects on views and coastal character. The Development would have a particularly significant effect on the East Fife coastline given its proximity.

SNH also advised that the Development (mainly in combination with ICOL) would change the night time character of the sea, extending lit-ribbon development from along the Fife and East Lothian coasts out into the Forth.

SNH state that because final designs could not be assessed at this stage, they highlight the importance of wind farm design in mitigating landscape and visual impacts. As such, SNH recommends that the Company should employ a qualified and experienced landscape architect to be involved in the post consent design process and to 'sign off' the final wind farm design alongside project engineers. SNH also recommend that if more than one development is consented, the cumulative effects of wind farm design should be assessed, particularly where visual impacts are currently assessed as major. It is also stated that visualisations could be provided post-consent to illustrate the finalised wind farm from key representative viewpoints which would be for public information only and not for consultation.

SNH and the JNCC requested that conditions be attached to any consent to mitigate their concerns. Where appropriate, enforceable conditions will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

The **Scottish Environment Protection Agency ("SEPA")**, a statutory consultee, stated that it had no objection to the Development. SEPA did however note that measures should be taken to minimise the likelihood of marine non-native species

("MNNS") being accidentally introduced into the marine environment. SEPA advised that a Construction Method Statement ("CMS") should be produced which should include measures to minimise the risks of spreading MNNS.

SEPA also provided advice with respect to the cable landfall at Thorntonloch recommending that horizontal direct drilling ("HDD") would be preferable so as to minimise the impact on sand dune habitats. However, if the Company decides to trench through the sand dunes then SEPA recommend that the CMS includes justification for this as well as demonstrating how the sand dunes would be restored and potential for erosion problems will be avoided. SEPA also advised that any beach works at Thorntonloch take place out with the bathing water season which is 1st June to 15th September.

The Company replied to the consultation response to provide commitment to the production of a CEMP which will be done in consultation with SEPA and other stakeholders. The CEMP will include measures to mitigate potential impacts on the water environment including MNNS and the guidance SEPA has produced will be taken into account. The CEMP will also include details of the final method at the intertidal area and will include measures to protect the dunes and monitor their integrity post-construction.

With respect to the beach works at Thorntonloch, the Company responded stating that it will endeavour to undertake this work outside the bathing water season although it is not possible to commit to this at this stage. Details of timing will be contained within the CMS.

SEPA responded to comments by the Company to state that they do not have any further comments to make with this regard.

Where appropriate SEPAs requests will be captured under wider, enforceable, conditions for environmental management, monitoring and mitigation to be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

SEPA have confirmed that some of the onshore works are likely to require authorisation, and that the Company must comply with the Water Environment (Controlled Activities) (Scotland) Regulations 2011. The Company is committed to consulting with SEPA and East Lothian Council regarding licensing requirements for crossing the Thornton Burn. This highlighted in the response to SEPA

Non Statutory Consultees

The 10 Metre and Under Association ("10MUA"), representing fishermen who are either engaged in fishing on boats which are 10 metre overall length and below, or on boats which are under 15 metres overall length operating in the non-sector, did not object to the Development however they raised a number of concerns regarding the project and how it would negatively impact on the fishing interests of the 10MUA.

The 10MUA restricted their comments to issues concerning commercial fishing activity. The 10MUA queried why the ES did not acknowledge that the highest

percentage of fishing in the area affected by the proposed Development is for vessels less than 15 metres in length for which, the Company claims, there is no data. The 10MUA were of the opinion that this undermines the importance of the local fishery and raises queries about the quality of the Application. The Company responded to this point by providing assurance within their response that there is no attempt to undermine the importance of a local fishery and highlighted where this aspect has been addressed within the ES where it is specifically highlighted that the majority of vessels operating in the region are under 15m in length. The Company also noted that the 10MUA does not agree with all conclusions of the Commercial Fisheries chapter however remain of the opinion that the overall conclusions within the chapter remain valid.

The proposal to establish a regional working group facilitating future engagement of the fishing industry was welcomed. The proposed FTOWDG-CFWG should, in the view of the 10MUA, be a condition of any consent that may be granted to the Company. The 10MUA recommended that local associations are members of any such group if one was to be established. The Company highlight the FTOWDG-CFWG and a monitoring sub-group which are now firmly established with a work programme and meeting schedule in place. The Company state their commitment to this group and will commit to allocating staff time and resources to suit any increase in efforts of the group should consent be granted. The Company also state their commitment to the continued use of a dedicated Company Fishing Liaison Officer and Fisheries Liaison Officer ("FLO") as described in the Fisheries Liaison and Offshore Wind and Wet Renewables ("FLOWW") guidelines.

Concerns were raised regarding burial depths for cables which might lead to possible exclusion of fishing vessels from the area. The 10MUA raised concerns that burying cables at the depths proposed in the Application, (0 - 1 metre), would mean that vessels would not be able to operate trawl gear between turbines and therefore be excluded from the area and, as a result, raises questions about the accuracy of the "not significant" assessed impact. The 10MUA felt that there would be a loss of fishing grounds beyond what is described in the ES, specifically with regards to the export cable which runs for approximately 33 kilometres over what the 10MUA claim are important fishing grounds. The 10MUA requested that export and inter array cables are buried to industry standard or alternative methods of protection should be utilised. In its response, the Company recognise the inconsistency and provides clarity that it is the intention, where physically possible, to bury inter-array cables to 1.5m in depth and export cables to 3m in depth. Where this is not physically possible, the Company state that rock placement or mattresses will be used. The Company claim they are committed to the production of a Maintenance Plan which will be adhered to. This Maintenance Plan will include regular inspection and any remedial / repair work for both the inter-array and export cables. The Company recognise the risk that exposed cabling would pose to fishing activities and therefore post burial, over-trawlability surveys, will be taken - methodologies for this activity will be agreed with the 10MUA either through the FTOWDG-CFWG or individually.

The 10MUA stated that the greatest impact on the fish population and fishermen will take place during the construction and decommissioning phases of the Development. The 10MUA requested that there should be conditions attached to any consent that would see the seabed restored to a reasonable and acceptable

standard for fishing activities to be safely resumed and include an obligation that any accidentally dropped objects into the marine environment are reported and that any obstacles deposited during construction are removed. The 10MUA called for any CEMP to be formulated prior to any consent being issued. The Company has responded to state that it is fully committed to developing a procedure to address these issues through the FTOWDG-CFWG or wider renewables and commercial fishing groups such as FLOWW. Should this effort fail to implement a suitable system, the Company has committed to producing a bespoke system to cover the proposed Development.

The 10MUA proposed that continual assessments of the fish and shellfish stock should be made to monitor the populations and the information shared with the fishing industry and other interested parties. The Company responded to this point to state that not only is there work being considered by the FTOWDG-CFWG, which includes monitoring plans to address the issues raised above, but also highlights that Marine Scotland are also undertaking two pieces of work – research to assess the potential social-economic impact of renewable energy developments at Scottish fleet and individual vessel scales, and also that Marine Scotland are committed to commissioning a piece of work to look at the actual impact on fisheries from displacement around the Forth and Tay and Moray Firth offshore wind farm developments should they be consented.

If the information contained within the Application was found to be flawed, and impacts from the Development are greater than those assessed, the 10MUA called for compensation to fishermen to be considered such as the reimbursement of additional fuel costs from displacing the fleet elsewhere. Whilst not contained within the response to 10MAU, in response to the East Coast Inshore Fisheries Group ("ECIFG"), the Company accept that temporary displacement of those fishing in the Development area during construction is inevitable but that all efforts will be made to minimise any displacement. As per the response to the original South East Inshore Fisheries Group ("SEIFG") comment, the Company states that funds will be allocated for compensation payments to fishermen who are displaced by construction activities. This however is a matter between the Company and the respective fishermen and is not part of this determination.

Finally, the 10MUA requested that the cumulative impacts of neighbouring developments in the Firth of Forth should also be considered. This cumulative aspect is included within the ES produced in support of the application.

The FTOWDG-CFWG has been set up and both the Company and the SFF attend.

Where appropriate, enforceable conditions such as the appointment of a Fisheries Liaison Officer will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

The Association of Salmon Fishery Boards ("ASFB") objected to the Development and, having discussed the proposal further with the Company and reviewed the SEIS, maintain their objection until adequate monitoring and mitigation strategies are put in place. The ASFB also responded to the Company's response to

the consultation advice and welcomed the further detail provided, the willingness of the Company to consider contributing to strategic monitoring, and potentially building mitigation into the construction schedule. Despite this, the ASFB maintain their objection on their belief that there remains insufficient information to make an adequate assessment of the potential effect on salmonid populations whilst recognising that these information gaps can only reasonably be filled by large-scale strategic research which would be required to assess risk.

The ASFB stated that the development had the potential to directly and indirectly impact on Atlantic salmon and sea trout and that there was an expectation on the Company to assess the potential impacts arising from the Development on fish during the deployment, operation and decommissioning phases. The Company has stated that it is committed to working with the ASFB, District Boards and MSS to develop appropriate mitigation and monitoring programmes and will engage in the Scottish Salmon Monitoring Strategy at local level. This has been welcomed by the ASFB who respond to state that they will continue to engage positively in this process, in order to develop and help deliver a credible and effective research strategy.

The ASFB cited a number of concerns arising from the Development which might impact on Atlantic salmon and sea trout including, but not limited to, subsea noise during construction and operation, EMFs arising from cabling and operation of the devices, disturbance or degradation of the benthic environment and aggregation effects.

The ASFB did not feel that the Habitats Regulations Appraisal was appropriate for the development as it failed to include information on the River Dee or River Tweed. Furthermore, information on migration to natal rivers for Atlantic salmon and sea trout was not included in the assessment. The Company responded by including information on both the River Dee and River Tweed within an updated HRA as part of the SEIS whilst noting that the SACs included within the original ES were based on advice from SNH and MSS.

The ASFB noted that whilst considering time of migration to and from natal rivers, the Company has only included the migration of Atlantic salmon and sea trout smolts from natal rivers and highlight that it is important to note that adult Atlantic salmon return to Scottish rivers in all 12 months of the year and that sea trout would be expected to return to natal rivers during the Autumn. The Company responded to state that the reason for this was that mortality of Atlantic salmon is believed to be most severe during the first few months after which smolt enter the marine environment and that adult fish returning to their natal rivers to spawn are generally considered to be at peak fitness, therefore may be less susceptible to disturbance. The ASFB raise the point that any delay in migration to returning fish may result in the fish remaining in the coastal environment for a longer period, thereby making them more susceptible to predation.

Whilst the ASFB welcomed the proposal to adopt a soft start approach for piling during construction activities the lack of information on the duration of the soft start meant that it was difficult to provide accurate advice. However, the ASFB recommended that soft start piling should be a condition of any consent and should

be of a duration that is appropriate to the swimming speeds of the fish to allow them time to move out of the zone of effect. Furthermore, the ASFB recommended that no impact piling should take place during the period from March to June (inclusive). The Company responds by highlighting the assessment within the ES which outlines that the significance of impact on salmon, caused by noise, is minor however the ASFB remain concerned and believe that this is a key area for further research and monitoring during the construction phase. Having proposed to adopt a soft start approach, the Company state that the duration of soft start is not yet known as it will be determined by the precise local ground conditions on site and foundation selection. The Company are committed to producing a CEMP as a condition and consideration to swimming speed of species in question will be included. This inclusion is welcomed by ASFB. When addressing the point raised regarding piling during the period from March to June, the Company highlight an assessment within the ES that concludes that a halt to piling over this period is not necessary given salmonids' low hearing sensitivity as well as the small area of their migratory area / marine habitat that is likely to receive noise exposure evidence at levels that may cause injury. The ASFB did not respond further on this point.

Concerns were also raised regarding the possibility if impacts from EMFs arising from the export cable to shore. The Department of Energy and Climate Change ("DECC") guidance recommends that cables are buried to a minimum of 1.5 metres so as to ensure the cable is kept below the most active biological layer. However the Company has stated that cable burial depth will vary across the site up to 1.5 metres. The ASFB requested that all cables should be buried to a minimum of 1.5 metres or, where this is not possible, cabling should be covered by placing a suitable shielding material above the cable to an equivalent depth. The Company responded to this point by committing to bury cables to a depth of 1.5 metres where possible and, where not possible, to use rock armouring in order to provide similar distance between the cable and fish receptors. The ASFB replied to welcome this commitment by the Company and state their belief that it should form a condition of consent.

The lack of salmonid specific monitoring programme was noted by the ASFB who recommended that any monitoring strategies musty include pre-construction monitoring in order that baseline information on salmon and sea trout movement, abundance, swimming depth and feeding behaviour can be gathered. The ASFB called for more mitigation measures than cable protection / burial and soft start piling. The Company accepts that monitoring fish species will be part of a PEMP should consent be granted.

ASFB concluded by stating that they object to the Development until adequate monitoring and mitigation strategies have been put in place. The ASFB recommended that strategic research on the movement, abundance, swimming depth and feeding behaviour of salmon and sea trout should be undertaken as part of wider monitoring. One aspect that the ASFB felt should be considered immediately was the installation of fish counters, particularly in SAC rivers, to allow real time collation of salmon abundance. This, the ASFB felt, should be a condition of any consent. The ASFB also recommended that developers should work together to fund strategic monitoring. Finally, ASFB recommended that an expert group be set

up to consider the best way forward to resolve knowledge gaps and that the ASFB would be keen to participate in such a group.

Where appropriate, enforceable conditions will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland. These will include The requirement for the Company to contribute at a local level (Forth and Tay) to a monitoring strategy being developed from "The Scope of Research Requirements for Atlantic Salmon, Sea Trout and European Eel in the Context of Offshore Renewables"

Bristow Helicopters did not object to the Development.

British Telecom did not object and did not offer any comments.

The Chamber of Shipping did not object to the Development and did not raise any objections to the Development in isolation, provided the identified mitigation measures in the Company's Navigational Risk Assessment ("NRA") were adhered to. However, the COS raised concerns regarding the cumulative impact from this Development and other proposals in the Firth of Forth area stating that the current project boundaries did not present a tolerable level of navigational safety risk. The COS noted that should the Development be approved then this would significantly reduce the likelihood of subsequent approval from the COS for the other proposals in the area.

An enforceable condition requiring NNGOWL to adhere to the mitigation measures identified in the NRA will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

The Civil Aviation Authority ("CAA") did not object to the Development however requirements to light the turbines in accordance with appropriate CAA guidance must be a requirement of any consent. This requirement will be covered by an enforceable condition in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

The **Esk District Salmon Fishery Board ("EDSFB")** fully supported the response from the ASFB and objected to the Development. The Company issued a response to the points raised by EDSFB who responded to instruct that they support the ASFB going forwards and is reflected below.

Whilst the EDSFB welcomed the proposal to adopt a soft start approach for piling during construction activities the lack of information on the duration of the sort start meant it was difficult to provide accurate advice. However, the EDSFB recommended that sort start piling should be a condition of any consent and should be of a duration that is appropriate to the swimming speeds of the fish to allow them time to move out of the zone of effect. Furthermore, the EDSFB recommended that no impact piling should take place during the period from March to June (inclusive). The Company responded to this point that given the swimming speeds of fish, soft start is not considered to be an effective approach for fish in the vicinity of a piling operation, although it may enable them to flee from a localised area where noise

levels may be injurious. The Company also provides detail on each piling event which consists of a period of piling, a period of drilling and a further period of drilling over 120 minutes with one pile to be installed at a time and operating over a 24 hour period. The Company are committed to producing a CEMP as a condition and consideration to swimming speed of species in question will be included. This inclusion is welcomed by ASFB. When addressing the point raised regarding piling during the period from March to June, the Company highlight an assessment within the ES that concludes that a halt to piling over this period is not necessary given salmonids' low hearing sensitivity as well as the small area of their migratory area / marine habitat that is likely to receive noise exposure evidence at levels that may cause injury. The ASFB did not respond further on this point.

Where appropriate, enforceable conditions will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

The **Fife Fish Producers Organisation ("FFPO")** did not object to the Development however they supported the comments made by the Fishermen's Mutual Association (Pittenweem) Limited ("FMA") and the 10MUA and therefore it is inferred that the FFPO object by proxy. The FFPO commented that it was essential their members did not have any further restrictions placed upon their ability to pursue their fishing activities. The FFPO felt that there would be an economic loss to their members and that they would pursue compensation for loss of earnings.

The Company responded to the FFPO to provide copies of letters as sent to both the Fisherman's Mutual Association and 10MUA. Please see above for individual comments and relevant commitments and note that each of FMA and 10MUA did not specifically comment on the letters from the Company however now support the position of the SE-IFG, now known as the EC-IFG.

The **Firth of Forth Lobster Hatchery** ("**FOFLH**") did not object to the Development however they expressed concern that there had been no in-depth surveys or consideration of the benthic lobster population, specifically regarding the cable coming ashore at Thorntonloch.

The FOFLH also disagreed with the assessment of impacts on commercial fisheries which concluded impacts would be of minor significance. The use of lobster hatcheries along the coast was encouraged by the FOFLH to assist with alleviating some of the disruption the work might cause.

The Company responded to this to highlight the inclusion within the ES of extensive geophysical and benthic surveys including camera, video and grabs on the wind farm site and export cable route, including the inter-tidal area at Thorntonloch. Whilst the Company accept that there is likely to be some temporary displacement to fishermen at the site and export cable route area during construction, they commit to making all efforts to minimise this and outlined various measures including the use of onshore and offshore FLOs. The Company fully expect that lobster creel fishing at the wind farm site and within the vicinity of the export cable to be able to continue unhindered. The Company also made clear that they have worked with fishermen to create the FTOWDG-CFWG and a monitoring sub group to which they are

committed, through which different fishing sectors, including creelers, are brought together with developers and regulators to facilitate communication and agreed approaches.

Where appropriate, enforceable conditions will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

The Fishermen's Mutual Association (Pittenweem) Limited ("FMA") did not object to the Development however they raised a number of significant concerns regarding the proposed Development. The FMA requested that towed gear should not be excluded from the site of the Development except during construction, exclusion zones should be a maximum of 500 metres during construction and 50 metres at all other times, cables should be trenched and backfilled and subject to routine inspection and maintenance, a data gathering programme for commercial species in the inner and outer Firth of Forth should be initiated to monitor fish stocks, establishment of a FTOWDG-CFWG, the fishing industry should be consulted on monitoring and decommissioning plans and the seabed should be returned to its original state after decommissioning with the work only deemed to be complete after consultation with the fishing industry. The FMA also raised the issue of compensation being paid to fishermen who might suffer a loss of earnings or damage to gear as a result of the Development.

The Company responded to the comments raised by FMA to address each of the concerns raised. Within this response the Company outlined and clarified the use of a rolling safety zone of 500m around the construction works in the interests of safety and that it reserves the right to apply for a 50m safety zone around each operational turbine. The Company confirms that burial of cables is a key construction issue and highlighted the importance of cable maintenance. The Company confirmed there would be regular inspection followed by any remedial or repair work. In order to reduce the recognised risk of exposed cabling on fishing activity, the Company is committed to over-trawlability surveys and these will be agreed with FMA through either the FTOWDG-CFWG or individually through the Company.

It should be noted that the FMA did not respond to the comments provided by the Company, rather they moved to support the position of the SE-IFG, now known as EC-IFG.

Where appropriate, enforceable conditions including continued membership of the FTOWDG-CWFG, commitment to a CFMS and use of a Fisheries Liaison Officer ("FLO")will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

The Health and Safety Executive ("HSE") did not object to the Development and had no specific comments to make.

Historic Scotland ("HS") did not object to the Development and stated that they were content that, in respect of the offshore works, there will be no direct impacts on any terrestrial assets within their statutory remit. HS also considered indirect impacts

on assets within their remit and concluded that there will be no significant adverse indirect or cumulative impact as a result of the Development.

HS noted that there were nine recorded or chartered wrecks identified within the offshore site and that seven of these sites were considered as 'live' sites as well as a number of anomalies of high and medium archaeological potential identified from the geophysical survey along the offshore site and cable corridor. HS stated that they were content with the predicted impacts on these sites during construction, operation and maintenance as well as the proposed mitigation measures which includes the production of a Written Scheme of Investigation ("WSI") and a Protocol for Archaeological Discoveries.

The requirement for a WSI and Protocol for Archaeological Discoveries will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

The **Joint Radio Company** ("**JRC**") did not object to the Development and cleared the proposal with respect to radio link infrastructure operated by Scottish Power.

Marine Scotland Compliance ("MSC") did not object to the Development however noted that the area proposed for the Development has historically been well used by demersal trawlers but this has now changed with more boats pursuing *nephrops*, scallops, squid and other shellfish. Whilst the number of vessels may have reduced, MSC advised that there are still a number of vessels using the area through a variety of different fishing methods.

MSC noted that the position of the export cable is likely to have more of an effect on vessels working from the Southern side of the Forth such as Dunbar, Port Seton and North Berwick.

MSC commented that the ES only refers to vessels greater than 15 metres in length which, for vessels working out of the Anstruther district, comprises of just one vessel. The rest of the fleet, approximately 104 vessels, are all less than 15 metres in length. These numbers do not include vessels that work from Arbroath which are covered by the Aberdeen MSC office.

Marine Scotland Science ("MSS") did not object to the Development however a number of different monitoring requirements were detailed in their response to both the ES and the SEIS.

With regard to marine mammal, benthic ecology and migratory fish aspects, MSS are in agreement with the advice as provided by SNH and the JNCC.

MSS is of the opinion that the geophysical survey work has been undertaken using operators who have a history of surveying in the marine environment on similarly scaled projects. The data has been collected to international standards, where appropriate, producing an excellent baseline dataset to guide site selection and impact assessment.

MSS found that the coastal baseline descriptions, modelling, and impact assessments conducted by Intertek and Metoc in support of the ES is comprehensive and rigorous. MSS stated that it shows an impressive understanding of the relevant physical and coastal processes within the region – both at the near field and far-field scales and that the work is well backed up with relevant met-ocean measurements. Whilst no significant concerns were raised, MSS highlighted that scouring around the bases of jackets was likely to have the largest effect on the bed and suspended sediments, as well as temporarily for sandeels due to short term changes to the sediment transport as a result, and would encourage longer term monitoring of changes to the transport, erosion and deposition of finer grained sediment, and the possible development of bedforms after consultation with relevant biological/ecological experts

With specific regard to sandeels, MSS state that if gravity bases are to be utilised, then there is the possibility that sandeels will be vulnerable to habitat disturbance or loss during the preparation of ground for the gravity bases. Whilst sandeels were observed in the bird survey, MSS are in agreement with the conclusions of the ES that the development area is not of key importance for the population level although highlight that they may have importance for other species that prey upon them. Overall, MSS conclude that in terms of fish ecology they are in agreement with the impact of minor significance.

With regard to sediment settlement and smothering, whilst considering fish ecology, MSS agree with the general assessments made by the developer that there would be low significance to the population level however at the extremes of the proposed level of sediment deposition suggest that this would have a profound effect on animals in the immediate vicinity

With regards to noise on fish ecology, MSS are in agreement with the assessments made by the Company for both lethal or traumatic injury and behavioural response highlighting that most species with a high-medium sensitivity will have the ability to leave the area if the Company follow a proposed soft-start piling mitigation measure.

MSS find that with regard the export cable impacts, key impacts are highlighted and they are in general agreement with the assessed impact significances.

MSS suggest that with the levels of uncertainty surrounding EMF on fish, cables are buried to a depth of at least 1 metre where possible and state that it would be useful to monitor emitted EMF and associated fields for a period of time in order to aid understanding in this area.

MSS acknowledge the Company's commitment to use soft-start piling techniques to mitigate against lethal/traumatic injury from noise and suggest further measures such as barrier methods which may have potential benefits for other receptors such as marine mammals.

MSS recognise the commitment from the Company to carry out meaningful fish surveys within safety constraints and would be open to working with the Company to help develop these surveys where possible.

MSS comment that with regard to commercial fisheries, impacts from displaced fishing activity on fish and shellfish populations has not been assessed and that although this would be perceived to be of minor significance on a single site basis there may be a higher concern when taken in context with other developments in the Firth of Forth and further afield.

With regards to commercial fisheries, MSS recommended that the Company aims to bury cables to depths of at least 1-1.5m, and where burial is not possible, then adequate cable protection should be employed as stated elsewhere in the ES.

MSS contributed towards the marine mammals section of the AA and expect the JNCC piling guidelines to be followed. MSS would look to develop strategies that would minimise the impacts of disturbance to all marine mammal species. MSS have also requested that monitoring be carried out to validate predictions made in their ES regarding levels of disturbance and their effect on populations of marine mammals.

With regard to ornithology, MSS have provided significant input into the AA. MSS have worked with SNH, the JNCC, the Company, ICOL, SAWEL and SBWEL to allow a robust cumulative assessment for the Forth and Tay region.

Where appropriate, enforceable conditions will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

The Maritime & Coastguard Agency ("MCA") did not object to the proposals however they noted that the Development had the potential to impact on navigation through displacement of vessel traffic in the area and called for careful monitoring of the potential effects that Development might have on vessel traffic. In response to this, the Company responded to advise they were working with the MCA and other developers in the Forth and Tay area in order to progress any necessary monitoring. The MCA accepted this and stated that they need to be able to monitor traffic activity and trends following the construction of the wind farm to establish if the predictions of the NRA have proven to be adequate, or if not, what further mitigation may be required. MCA request that a condition is included in any consent to address this.

The MCA noted that export cable routes, burial protection and cable protection are issues that are still to be developed and that due cognisance is required to address these issues, especially in navigable waters where depth may become significant. The MCA recommended avoiding existing charted anchorage areas. The Company responded to this point with a commitment to ensuring all export and inter-array cables are buried or sufficiently protected with rock dumping and mattresses. The MCA accepted this response and requested this be addressed by condition.

The creation of a full Emergency Response Cooperation Plan ("ERCoP") remains to be fully completed and requires to be properly documented to satisfy the requirements of MCA Marine Guidance Note 371. The MCA stated that an approved ERCoP must be in place prior to any consent being determined. In response to this point, the Company provided a 'skeleton' ERCoP to MCA for review. MCA are content subject to construction not commencing until an agreed ERCOP has been signed by MCA.

Conditions requested by the MCA will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

The **Ministry of Defence ("MoD")**, initially objected to the Development due to the Development causing unacceptable interference to Air Traffic Control ("ATC") radar at RAF Leuchars, Precision Approach Radar ("PAR") at Leuchars, and Air Defence ("AD") radar at Brizlee Wood.

After discussions with the Company, during which the Company submitted a technical proposal to overcome the unacceptable impacts of the proposed Development on ATC at RAF Leuchars, the MoD undertook a reassessment of the Development and confirmed that they were content to remove their objection. The reassessment concluded that the MoD had no concerns regarding the impact of the Development on the PAR at RAF Leuchars, the AD radar at Brizlee Wood and, subject to conditions being included on any consent, the ATC radar at Leuchars.

The MoD stated that there would be a requirement to light all turbines with 200 candela omni – directional red lighting or the new approved 2000cd/IR combination maritime lights at the highest practicable point.

The MoD confirmed that there would be no physical impacts from the Development on off shore defence interests.

Conditions requested by the MoD will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

National Air Traffic Services ("NATS") did not raise any objection to the Development.

The Northern Lighthouse Board ("NLB") did not object to the Development and specified a number of lighting and marking requirements relating to the installation and operation of the Development that must be adhered to, however they advised exact requirements for the operational phase could not be provided until the final turbine layout has been produced. Furthermore the NLB advised that lighting and marking requirements for the decommissioning stage of the Development will be required and that there is an obligation for the Company to liaise with the NLB to agree appropriate measures at such a time as when the Development is decommissioned.

The NLB also stated a requirement for the nature and timescale of the works to be placed in Notice(s) to Mariners, Radio Navigation Warnings and publication in appropriate bulletins as well as appropriate markings for vessels engaged in the works. The NLB requires that there must be contingency measures in place to ensure adequate lighting and marking of the site is maintained and that faults are quickly returned to operational service. The NLB also advised of the potential requirement for the lighting and marking of the Development to be amended subject

to other offshore proposals in the area. The Company is required to cooperate fully in such an event.

Finally, the NLB require that, once agreed, the final number, layout and positions of each turbine, along with any subsea infrastructure, is provided to the UK Hydrographic Office so that relevant nautical charts are correctly updated.

Conditions requiring the Company to submit final plans on layout (Development Specification and Layout Plan), lighting (Lighting and Marking Plan) and navigational safety (Navigational Safety Plan) for approval will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

The Royal Society for the Protection of Birds Scotland ("RSPB Scotland") objected to the Development due to fundamental issues that the RSPB Scotland required to be addressed which included resolving inaccuracies and discrepancies in the presented data which leads to incorrect interpretation and assessment of potential effects, inappropriate application of the Rochdale envelope approach which makes appraising the Application difficult and lack of available information on other proposals in the area which does not allow for a robust cumulative impact assessment to be undertaken.

The RSPB Scotland stated that the reporting of information in the ES includes fundamental inaccuracies and discrepancies in the presented data which leads to incorrect interpretation and assessments of potential effects and conclusions.

The RSPB Scotland also noted the degree of flexibility between the minimum and maximum parameters offered by adopting the Rochdale envelope approach leads to widely varying conclusions for the same potential impacts. The RSPB Scotland claim that this meant it was difficult for them to judge the acceptability of the Development, as the worst case scenario results in unacceptable environmental impacts. The RSPB Scotland called for better definition of the Development parameters to increase the accuracy of the assessment.

At the time of the original application, the RSPB Scotland claimed that a lack of information on the other offshore wind developments proposed for this area, namely the ICOL, SAWEL and SBWEL proposals, meant that any cumulative impact assessment would not be as robust as it should be. The RSPB Scotland recommended postponing the cumulative impact assessment for the Development until such a time when sufficient information was made available. The RSPB Scotland also expressed concern that significant effects under the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 and the effects on integrity of the conversation objectives of the Natura network under the Conversation (Natural Habitats & c) Regulations 1994 (as amended) have not been adequately addressed in the environmental assessment as currently presented.

On receipt of the SEIS and subsequent meetings with the Company, the RSPB Scotland confirmed that the above inaccuracies and discrepancies had largely been addressed and that the further information was welcomed. However, the RSPB Scotland maintained their objection to the Development pending further information

and discussion on flight height data and the publication of two research projects which were directly relevant to the Development. The RSPB Scotland stated that the above would provide important contextual information from which they would be able to reassess their position.

The RSPB Scotland requested that, if the Development was to be consented, that site management and monitoring plans should be a condition of any consent and that the RSPB Scotland wished to be consulted on these plans.

Further to the completion of the two research projects as mentioned, and the provision of SNCB advice, RSPB Scotland provided a cumulative response to the Forth and Tay region but highlighted in correspondence with MS-LOT before doing so that they were reluctant to provide a full and final response until such time as the Companies with applications within the region had committed to refining their design envelopes to reach a most likely scenario for the final build out. The RSPB Scotland states that the response provided clarifies their position and key concerns regarding the proposals.

On the basis of the provision of information as above, RSPB Scotland continues to object to the Forth and Tay offshore wind proposals for the following reasons:

- 1. RSPB Scotland believe that there has been insufficient time between information becoming available and the consultation deadline to fully assess all environmental information. They believe that this may be contrary to the requirements of the EIA regulations.
- 2. RSPB Scotland states that it cannot be ascertained that the environmental impacts of the proposals, alone and in-combination, would not adversely affect the integrity of the Forth Islands, Fowlsheugh and St Abbs to Fast Castle SPAs.
- 3. RSPB Scotland states that the environmental impacts, alone and incombination, of the proposals would likely result in unacceptable harm to seabird species, most notably gannet, kittiwake and puffin. Furthermore, RSPB Scotland states that the national and regional population trends of some of these species are deteriorating, which exacerbates these concerns.
- 4. RSPB Scotland states that the high levels of uncertainty inherent in the methodologies applied to the assessment of environmental impacts and their subsequent interpretation means that a commensurate level of precaution needs to be included when considering whether it can be ascertained that there will not be an adverse effect of integrity of the SPAs. The RSPB Scotland state that this precaution has not been applied.
- RSPB Scotland state that further environmental information and assessment is required to enable a robust consideration of the potential environmental effects of all the Forth and Tay proposals to support the decision making process.

Information which has come forward to inform the AA including modelling work commissioned by Marine Scotland and information provided by the Company does not require consultation under the EIA regulations. Under the Habitats Regulations "a person applying for consent shall provide such information as the competent authority may reasonable require for the purposes of the assessment"; there is no statutory consultation period and the public do not need to be consulted. This information has however been shared with the RSPB Scotland. The AA completed for the Proposal has shown that effects from the Proposal alone and in combination with the other Forth and Tay developments are within acceptable limits and has concluded no adverse effect on integrity for any of the SPAs of concern. MS-LOT fully recognise the uncertainty in the assessment methodologies however feel that the assessment process has used the best available evidence. MS-LOT do not consider that further assessment would add value to the decision making process.

The Company responded to RSPB Scotland to acknowledge the concerns raised by RSPB Scotland throughout the consultation process and to make commitments that affect both the extent of potential environmental impacts of the proposal and the robustness of monitoring undertaken post the granting of any consents. RSPB Scotland welcomes these commitments, most notably as the reduction in the number of turbines, and increase in hub heights, is likely to reduce the overall scale of environmental risks. Furthermore, RSPB Scotland supports the efforts to maximise the robustness of a monitoring programme and commitments to continued support of the Offshore Renewables Joint Industry programme ("ORJIP"). RSPB Scotland also responded to state that a primary focus should be ensuring that wider strategic monitoring programmes and priorities are supported by each individual consented project and that this will require consent conditions that ensure consistency across projects.

RSPB Scotland states that should the Scottish Ministers be minded to consent some, or all of the turbines currently applied for, then without prejudice to their current objection, any consents must be made subject to conditions requiring an agreed programme of research and monitoring with the aim of validating the various model outputs and underpinning assumptions, particularly in terms of their predicted effects on the SPA and their qualifying species. The RSPB Scotland confirms that they would be happy to be involved as a stakeholder to assist in advising on and steering research and monitoring programmes that are established as conditions of any consents.

RSPB Scotland whilst not removing their objection, have been involved in talks with Marine Scotland relating to the acceptable capacity of development. Discussions have also been on-going to develop a National Strategic Bird Monitoring Framework ("NSBMF"). This NSBMF will be conditioned on all offshore wind farms consented by Marine Scotland in the future. Based on this framework, an enforceable condition will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

The Royal Yachting Association ("RYA") stated that they did not feel that either the cable landfall or the layout of the wind farm and associated structures would pose any problems from a navigational perspective either during the day or at night.

The RYA did however note that it would not be supportive of the establishment of 50 metre operational safety zones around any offshore structures as part of the Development. Whilst accepting that temporary safety zones may be required during construction and specified maintenance or decommissioning of the Development, the RYA would object to any application to establish a permanent operational safety zone.

The Company responded to note that they accept that there will be a number of licensing and / or consent conditions required to cover the points raised by the RYA however maintain that whilst all efforts will be made to avoid applying for a 50m Safety Zone around structures this cannot be ruled out at this stage of the development process. The Company therefore reserves the right to apply for a 50m Safety Zone should it be deemed necessary. Safety Zones are a matter for DECC and will be assessed by DECC on a case by case basis taking into account site specific conditions.

The Scottish Fishermen's Federation ("SFF") objected to the Development unless it could be shown that the proposal would not be damaging to the fishing industry that utilises the area. The SFF also requested a number of conditions to be included on any consent.

The SFF welcomed the proposal for a Fisheries Working Group, the (FTOWDG-CFWG, and the potential to participate in such a group. The SFF advised that such a group should be formed as soon as possible so that mitigation and cooperation measures could be developed to achieve co-existence between the fishing industry and the Development. The Company responded to highlight the now formed FTOWDG-CFWG and a monitoring sub-group which are now established with a work programme and meeting schedule in place. The SFF sits on this group.

The SFF disagreed with the assertion by the Company that through the exclusion of mobile fishing gear by the Development the area would be restored, citing the longstanding fishing effort in the area. The SFF stated that it was important to understand the significance of the area that would be lost to the Development on both the local industry and also that the fishing fleet may not have the ability to migrate to new fishing grounds elsewhere which would impact on the local economy. The Company responded to clarify that this assertion was made on the basis of the SNH response to the Scoping Report published in 2009, and does not reflect the Company's assessment of the current or future status of the benthic environment. The Company acknowledges that the surrounding area is an important ground for both local and national fishing fleets, and confirmed it is not their intention to exclude or otherwise prevent sea users from safely navigating or working within the wind farm area. The Company explains the use of a rolling 500m safety zone during construction and reserves the right to apply for a 50m safety zone around all installed structures to minimise the risk of danger, entanglement and damage to vessels or the structure once construction is completed. The Company has also committed to over-trawlability surveys as a means to ensuring that fishing activities can safely resume within the area following construction.

The SFF also disagreed with some statements in the NRA which claimed that the Development is not in a heavily fished area which contradicted parts of the

Application elsewhere such as the chapter on commercial fisheries. The SFF called for a condition on any consent that involves the commencement of a scientific and socio economic assessment on whether the physical presence of the turbines impact on fish behaviour and whether they are displaced over time. The SFF also called for measures to be taken to verify the effects of displacement from the Development on the earnings of the fishing fleet and an outline of actions to mitigate losses. Considering the concern regarding data gathering on commercial fish stocks, the Company responded to state that work is being considered by the FTOWDG-CFWG, which includes monitoring plans to address the issues raised above. Marine Scotland are also undertaking two pieces of work – research to assess the potential social-economic impact of renewable energy developments at Scottish fleet and individual vessel scales, and also the commissioning of a piece of work to look at the actual impact on fisheries from displacement around the Forth and Tay and Moray Firth offshore wind farm developments should they be consented.

The SFF requested that the current 'Rochdale Envelope' be reduced and a final design statement finalised so the fishing industry can receive clarity on all aspects of the proposed construction. This should include the turbine type and size, spacing (the SFF expressed a preference for turbines to be situated as far apart as possible) and inter array cabling. Furthermore, the construction phase should also be agreed and timed in order to minimise disruption to the fishing fleet. When the Development is decommissioned the SFF called for an appropriate plan for decommissioning to be included as a condition on any consent which would involve complete removal and reinstatement of the sea bed. Should consent be granted, there will be opportunity for the SFF, and other fisheries organisations, to comment and further influence the construction, operation and decommissioning of the project through consultation with the Scottish Ministers on various documents including, for example, the CMS, EMP, NRA, and VMP.

The SFF called for the development of a mechanism to disseminate information regarding the Development in accordance with the FLOWW guidelines. The SFF requested that the Company should enter into an agreement regarding damage caused by debris from the Development, and a clear procedure for compensation is put in place. The Company is committed to the continued use of a dedicated FLO as described in the FLOWW guidelines and currently has onshore FLOs in place representing the needs of the fishermen in the geographical areas and fisheries sectors potentially impacted by the development. Offshore FLOs have also been employed for geotechnical surveys and the Company recognises the use of fishermen as offshore FLOs to minimise impacts from activities.

The SFF also had a number of comments regarding cabling and pipelines citing a preference for them to be trenched and buried to the normal offshore industry standard depth, ideally the maximum burial depth possible. If this is not feasible then the next pursuable option should be rock dumping in line with industry standards with the use of concrete mattresses investigated as a last resort. In all instances the SFF required that appropriate trawl over procedures were undertaken as soon as possible after the work has been completed. The Company have confirmed that the effective burial of cables is a key construction issue for the development and all efforts will be made to achieve the maximum burial depth. Whilst not within the response to SFF, the Company has made clear to other consultees that where burial

to a depth of 1.5 metres is not possible, there is a commitment to utilise rock dumping and mattressing. The risks of exposed cabling is recognised by the Company and commit to over-trawlability surveys to be undertaken with SFF agreement on methodology.

The SFF request that if any dredging was to be undertaken during the course of the Development then any such activity would not occur on identified spawning grounds for commercial fish species. The Company replied that dredging would only be required should gravity base foundations be deployed and that in so far as the Company is aware, there is limited potential for spawning grounds on the site and therefore unlikely that any dredging will take place on identified spawning grounds but commit to further consideration during the siting of turbines should gravity base foundations be selected.

Going forward the SFF expected to see reliable scientific assessments of any effects from EMFs on the habitats of scallops, *nephrops*, crab, starfish, lobsters and general demersal species. This issue has now been discussed at the FTOWDG-CFWG monitoring sub-group alongside other potential impacts and how effects could be monitored and measured. The Company is committed to considering this further and it will be considered as part of the monitoring work by the group.

The SFF requested that the Company also seek to design a strategy for economic and / or employment opportunities for local fisherman and fishing communities as part of a mitigation package. As stated above Marine Scotland are undertaking two pieces of work to consider the potential social-economic impact of renewable energy developments at Scottish fleet and individual vessel scales, and also the actual impact on fisheries from displacement around the Forth and Tay and Moray Firth offshore wind farm developments should they be consented.

The SFF continue to state that as it is the intention of the proposed mitigation measures to be developed and defined through the medium of the FTOWDG-CFWG, they would expect an on-going commitment from the Scottish Ministers to monitor the group and ensure that its outputs continue to be meaningful and relevant to the process of mitigating the effects of the Development on the commercial fishing industry, with the full expectation that there will be an obligation on the Company to comply with that requirement.

A condition to ensure the Company continues its membership of the FTOWDG-CFWG and its commitment to the Commercial Fisheries Mitigation Strategy, also the requirement for a FLO is will be reflected in any consent granted by Scottish Ministers under Section 36 of The Electricity Act (1989) and/or any marine licence granted. Since November 2012, there have been a number of meetings of the FTOWDG-CFWG which have provided an effective forum for discussion between the commercial fishing industry and the offshore wind industry in the Forth and Tay. On the 12 August 2014, the developers forwarded to the Scottish Ministers a Shared Position Statement to confirm the areas of agreement that have been achieved so far within the FTOWDG-CFWG. This Shared Position Statement seeks to provide the basis for moving the discussions forward and rightly states it is desirable that consistent approaches in relation to the interactions with commercial fishing activities

are agreed through by FTOWDG-CFWG, and adopted by the Company as far as possible.

The Scottish Seabird Centre ("SSC") did not object to the Development however they noted that the project was to be situated in a particularly sensitive area with major seabird and seal colonies nearby. The SSC supported the response from the RSPB Scotland on the need for further work on any likely environmental impact assessment and recommended that detailed monitoring should be undertaken from the start of construction continuing during operation to compare predicted impacts with actual impacts.

The South East Inshore Fishery Group ("SEIFG") later referred to as East Coast Inshore Fishery Group ("ECIFG") represents fishermen who fish commercially in the area between the Scottish/English border in the South and North Esk River near Montrose in the North. SEIFG provided two responses to the consultation dated 20 August 2012 and 06 November 2012. It was requested that the latter response supersede the initial one however without confirmation from the sender of the initial response, both have been taken into consideration and presented separately below.

Their original response of 20 August 2012 did not object to the proposal however asked that the Company commit to a monitoring programme of all commercial species caught in the Inner and Outer Firth of Forth region that is to continue for the duration of the wind farm and to be overseen by Marine Scotland. This is to provide a benchmark and any economic impacts experienced by the fishing industry, as a result of the Development, to be recompensed by the Company via a ring fenced budget. The Company states that it is committed to the FTOWDG-CFWG which provides a forum to discuss any issues and potential mitigation in relation to the Development.

With regard to compensation, the Company states that funds will be allocated for compensation payments to fishermen who are displaced by construction activities and highlight statements by other fisheries bodies that they would expect developers to sign up to a system whereby agreement would be reached on who is responsible for any debris or damage caused by such, and a clear procedure for compensation is in place, this to be in line with FLOWW recommendations. The Company is fully committed to developing this procedure through the FTOWDG-CWFG and should a suitable system fail to be implemented from this group, commit to producing a bespoke system for the Neart na Gaoithe development. The matter of compensation between the Company and the respective fishermen is not part of this determination.

The second response, dated 06 November 2012, objected to the Development with major concerns surrounding the loss of fishing grounds, a lack of consultation with Fishermen's Associations and about snagging danger from unburied cables.

With regard to the loss of fishing grounds, the Company responded as per their response to the SFF i.e. to highlight the use of 500m rolling safety zones around construction works in the interests of safety and also that they retain the right to apply for a 50m safety zone around each structure once installed, again on safety grounds and also to minimise the risk of damage to vessels or the structure. The Company accept that temporary displacement of those fishing in the Development

area during construction is inevitable but that all efforts will be made to minimise any displacement. As per the response to the original SEIFG comment, the Company states that funds will be allocated for compensation payments to fishermen who are displaced by construction activities.

The SEIFG raised a concern regarding the use of VMS data as this is only related to vessels over 15 metres in length and felt that the Application did not acknowledge that the majority of fishing vessels using the area affected by the Development are under 15 metres in length. SEIFG feel that this is an attempt to undermine the importance of the inshore fishery and questions whether reliance can be placed on the assessed low level of fishing activity in the area and the summary of predicted impacts contained within the Application. Further to this, SEIFG state that the figures used to express losses by fishermen are given as a percentage of national landings. The SEIFG argue that the actual losses suffered could be as much as 100% of small boat fishermen in the area and expressed concern that if commercial fishing was not able to resume within the wind farm owing to operational safety zones then any displacement effect would become more significant than the "minor significance" as recorded in the Application. The under 15m vessels are considered within the Company's ES where it is specifically highlighted that the majority of vessels operating in the region are under 15m in length. The Company also highlights within the ES where the landing value by vessel length can be found and shows that the under 10 metre and under 15 metre vessel landings are of great importance.

The SEIFG made recommendations for conditions to be included on any consent including the establishment of a regional working group to facilitate the future engagement of the fishing industry, cables should be buried to industry standard or appropriate protection used, a comprehensive fisheries assessment to establish the baseline data followed on by a continuous monitoring programme to assess the effect of the Development in fishing activity in the area should be implemented and a mechanism to assess the loss of fishing revenue due to displacement of the fleet and strategies to alleviate any losses.

The ECIFG commented that they still have some concerns regarding the potential timetable for over-trawlability surveys / reinstatements. The ECIFG wish to see a phased re-opening of areas as soon as possible after each construction phase is complete, and would like clarification on how this could be achieved with a clear commitment from the Company to work with the FTOWDG-CFWG towards achieving this. The Company has stressed that they remain committed to the FTOWDG-CFWG and highlight that the terms of reference were agreed alongside the Company and fishing industry representatives.

The ECIFG is keen to see the results of the two surveys commissioned by MS as described in the Company's response. In particular, ECIFG is interested in the potential social-economic impacts and also impacts of displacement in order that they can assess whether these will provide the baseline data for comprehensive fisheries assessment as requested in the original response.

The ECIFG also noted the Company's stated aims to work with ECIFG and other fisheries bodies to minimise the potential impacts from the Development. The ECIFG

formally requested that they are retained as a consultee / recipient of updates in addition to the FTOWDG-CWFG in order that all members remain informed.

ECIFG concluded that, on behalf of its members, it has to take the position that it is opposed to the development of offshore wind farms until it can be proved that such wind farms will not adversely affect the fishing industry.

The FTOWDG-CFWG is established and both the Company and the SFF are members.

A condition to ensure the Company continues its membership of the FTOWDG-CFWG and its commitment to the Commercial Fisheries Mitigation Strategy, also the requirement for a FLO will be reflected in any consent granted by Scottish Ministers under Section 36 of The Electricity Act (1989) and/or any marine licence granted.

Surfers Against Sewage ("SAS") did not object to the Development, however they noted that there was the possibility for the Development to impact on swell reaching the coast, particularly if gravity base foundations were to be used, and therefore impact upon wave regimes. Furthermore, swell could also be reduced further down the coast and SAS recommended that modelling was undertaken to assess the possible impact on the wave regime as a result of the Development. The Company has undertaken numerical modelling of predicted changes to wave heights from the proposed wind farm for both the offshore site and the cable route and the results presented within the ES. This study provides strong evidence of low to negligible effects on the wave climate, which would not, therefore, impact recreational surfing in the region.

SAS disagreed with the Company's conclusion that vulnerability of surfers is considered to be low due to alternative beaches and sites for surfing. SAS argued that, as each wave is unique, and even beaches close together and apparently similar in bathymetry will experience very different wave types, so an alternative beach or site may not offer a tangible replacement for the wave that may be lost as a result of the Development. SAS requested that the impacts from rock dumping to protect the cable should also be assessed. The Company have confirmed that access restrictions will be limited to a relatively short period on health and safety grounds whilst beach works and inshore cable laying are under way, and that consultation with stakeholders, including surfers, will be undertaken before works commence once the area and duration of restriction has been confirmed. The Company has stated that it will seek to keep any disturbance to access to Thorntonloch to a minimum. The ES concluded that the presence of the subsea cable and associated rock armour, with a raised profile of around 1 metre, would not cause significant effects, mainly as the seabed profile is known to be uneven in that area. At the request from SAS to remain a consultee throughout all stages of the planning process for the project, the Company have offered to add SAS to its stakeholder database to ensure they receive all notifications relating to the project.

The letter that the Company responded to the points above was provided to SAS on 22nd November 2013 with a deadline of 2 December 2013. SAS did not respond and a reminder was presented on 10th February with a deadline of 14th February within which it was stated that should MS-LOT not receive correspondence from SAS, it

would be considered that all comments have been suitably addressed by the Company. There has been no further correspondence from SAS.

The **Tay District Salmon Fishery Board ("TDSFB")** objected to the Development. The TDSFB endorsed the response provided by the ASFB. Further to this, the TDSFB stated that the part of the coast where the Development is proposed does not experience strong winds and queried the siting of the project.

Transport Scotland ("TS"), did not object to the Development had no comments to make on the Application.

Transport Scotland (Ports & Harbours) did not object to the Development had no comments to make on the Application.

Whale and Dolphin Conservation ("WDC") objected to the Development due to outstanding concerns regarding the uncertainty of potential negative effects on harbour seals and bottlenose dolphins and the integrity of the Firth of Tay and Eden SAC and the Moray Firth SAC respectively. Furthermore, WDC did not consider that the Development was compatible with the requirements of the Habitats Directive.

WDC recommended that Marine Scotland undertake an AA and that non Natura species, such as minke whales, harbour porpoise and white beaked dolphins, should also be given adequate consideration in any assessment.

Whilst WDC understood the Rochdale envelope approach being undertaken by the Company it was felt that this made it difficult for WDC to provide detailed comments on the Application.

WDC noted concerns regarding the use of vessels which utilise ducted propellers in relative proximity to the Firth of Tay and Eden Estuary SAC where impacts on harbour seals have been demonstrated, particularly on juveniles and pregnant / lactating females, where the population is already undergoing dramatic declines.

WDC recommended the implementation of a Seal Corkscrew Injury Monitoring Scheme ("SCIMS") including a marine mammal observer to search for seal carcasses to determine if injuries to seals are occurring. The SCIMS would also incorporate regular beach searches to locate any carcasses, that may wash up on the shore, as quickly as possible so that the cause of death may be determined. WDC advised that should any incident result in mortality during the construction phase then all activities should be halted immediately until an investigation can be completed.

WDC referred to studies in England where piling activity during the installation of an offshore wind farm coincided with a significant decline in the haul out count of harbour seals. WDC disagreed or expressed concern with some of the assessments of significance made in the Application including, but not limited to, potential for Permanent Threshold Shift ("PTS") impacts on harbour seals from noise impacts arising from the Development, loss of individuals from the population as a result of PTS and changes to behaviour.

In such instances, WDC felt that the assessment of significance should be greater than what was stated in the Application. For example, permanent, or even temporary loss of hearing, may have significant effects on the breeding success for the population which is already in decline and therefore there would be a likely significant effect on the Firth of Tay and Eden Estuary SAC population. WDC called for any pile driving to take place outside of the harbour seal pupping and breeding season (June – August) to avoid displacement of pregnant and / or nursing females.

Whilst it is expected that bottlenose dolphins will exhibit strong avoidance of the area of the Development during pile driving, WDC recommended that monitoring should continue throughout construction to observe any potential displacement of animals as a result of pile driving and / or increased vessel activities.

WDC supported some of the mitigation measures proposed, such as soft start for piling, however they called for more mitigation measures to be proposed and noted that this is not a proven mitigation measure and it is not adequate to ensure that marine mammals are protected from injury, including PTS. WDC do not consider soft start to be industry best practice. WDC advised that if / when an animal is sighted within a predetermined radius of activities where an injury could occur then the activities should be shut down. If this radius cannot be seen and therefore cannot be effectively monitored then alternative and proven mitigation measures, such as the use of bubble curtains, should be utilised. WDC also did not encourage the use of acoustic mitigation devices particularly when the Development is in such close proximity to a harbour seal SAC.

WDC recommended a number of conditions for inclusion on any consent including, but not limited to, restrictions on the use of ducted propellers unless they are guarded, in field monitoring to ground truth collision modelling calculations, monitoring of the harbour seal population to detect any further declines due to all aspects of the Development, scientific monitoring and photo identification work in relation to bottlenose dolphins, involvement in the formulation of an Environmental Management Plan and the obtention of a licence to disturb EPS. WDC advised that a timetable needs to be developed that includes all proposed developments within the ranges of bottlenose dolphins, harbour and grey seals so that cumulative impacts are better understood and appropriate mitigation developed.

WDC acknowledge the Company's commitment to investigate noise reduction methods and their willingness to work towards resolving the issue of ducted propellers associated with seal mortalities. WDC also commented to note the ongoing uncertainties as to effective and feasible mitigation measures to deal with both localised injury immediately around the source as well as wider disturbance issues for marine mammals.

WDC further wrote to Marine Scotland, via Client Earth, on 30 April 2014 to provide comments on advice provided to the Scottish Ministers by SNH and the JNCC. Within this response, WDC write to disagree with the conclusions of the advice on a number of counts; particularly that the construction and operation of the Forth and Tay proposals, in combination with MORL and BOWL in the Moray Firth, will not have an adverse impact on site integrity of the Moray Firth SAC, subject to conditions. WDC believe that SNH and the JNCC have failed to apply the correct

legal tests to assess whether the proposed wind farms, in combination with the Moray Firth wind farms, will adversely affect the integrity of the Moray Firth SAC. WDC also raise concerns about the advice on the Firth of Tay & Eden Estuary SAC with regard the rapidly declining harbour seal population. The points raised in this letter by WDC are fully addressed in the AA.

Where deemed appropriate the conditions suggested by WDC will be included in any consent granted by Scottish Ministers under Section 36 of the Electricity Act 1989 and / or any marine licence granted by Marine Scotland.

The Arbroath Sailing & Boating Club, Bond Helicopters, CHC Helicopters, Dunbar Fisherman's Association, Dunbar Harbour Trust, Eyemouth Harbour Trust, Forth District Salmon Fishing Board, Forth Estuary Forum, Forth Ports, Inch Cape Offshore Limited, Joint Nature Conservation Committee, Marine Safety Forum, Marine Scotland Compliance Aberdeen, Marine Scotland Compliance Eyemouth, National Trust for Scotland, North Sea Regional Advisory Council, Planning Aid Scotland, Salmon Net Fishing Association of Scotland, Scallop Association, Scottish Canoe Association, Scottish Enterprise, Scottish Environment Link, Scottish Federation of Sea Anglers, Scottish Fisherman's Organisation, Scottish Surfing Federation, Scottish Whitefish Producers Association, Scottish Wildlife Trust, Seagreen Wind Energy, Torness Power Station and the Tweed District Salmon Fishing Board were consulted but no responses were received.

5. Conditions

Following consideration of all relevant information, including the ES, SEIS, supporting documents and consultation responses, Marine Scotland consider that the following conditions must be included in a Marine Licence to cover the offshore transmission works. Similar conditions will also be included in any section 36 consent or Marine Licence granted for the wind farm. Marine Scotland are satisfied that the conditions included in each of these consents or licences associated with the project will sufficiently address environmental concerns to allow a positive EIA consent decision.

5.1 General conditions

5.1.1 Licence conditions binding other parties

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

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

The Licensee must provide, as soon as reasonably practicable in advance of their engagement in any Licensable Marine Activity, the name and function of any vessel, vehicle, agent, contractor or sub-contractor appointed to engage in the Works. Where applicable the

notification must include the master's name, vessel type, vessel IMO number and vessel owner or operating company.

Any changes to the supplied details must be notified to the Licensing Authority, in writing, prior to any vessel, vehicle, agent, contractor or sub-contractor engaging in a Licensable Marine Activity.

Only those vessels, vehicles, agents, contractors or sub-contractors notified to the Licensing Authority are permitted to carry out any part of the Works.

The Licensee must satisfy themselves that any masters of vessels or vehicle operators, agents, contractors or sub-contractors are aware of the extent of the Works for which this licence has been granted, the activity which is licensed and the terms of the conditions attached to this licence. All masters of vessels or vehicle operators, agents, contractors and sub-contractors permitted to engage in the Works must abide by the conditions set out in this licence.

The Licensee must give a copy of this licence, and any subsequent variations made to this licence in accordance with section 30 of the 2010 Act, ensuring it is read and understood, to the masters of any vessels, vehicle operators, agents, contractors or sub-contractors permitted to engage in the Works.

5.1.3 Force Majeure

Should the Licensee or any of their agents, contractors or sub-contractors, by any reason of force majeure deposit anywhere in the marine environment any substance or object, then the Licensee must notify the Licensing Authority of the full details of the circumstances of the deposit within 48 hours of the incident occurring (failing which as soon as reasonably practicable after that period of 48 hours has elapsed). Force majeure may be deemed to apply when, due to stress of weather or any other cause, the master of a vessel or vehicle operator determines that it is necessary to deposit the substance or object other than at the Site because the safety of human life or, as the case may be, the vessel, vehicle or marine structure is threatened. Under Annex II, Article 7 of the Convention for the Protection of the Marine Environment of the North-east Atlantic, the Licensing Authority is obliged to immediately report force majeure incidents to the Convention Commission.

5.1.4 Material alterations to the licence application

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

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

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

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

5.1.6 Submission of reports to the Licensing Authority

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

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

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

5.1.7 Chemical usage

The Licensee must ensure that all chemicals which are to be utilised in the Works have been approved in writing by the Licensing Authority prior to use. All chemicals utilised in the Works must be selected from the List of Notified Chemicals assessed for use by the offshore oil and gas industry under the Offshore Chemicals Regulations 2002, unless approved in writing by the Licensing Authority.

5.1.8 Environmental protection

The Licensee must ensure that all reasonable, appropriate and practicable steps are taken at all times to minimise damage to the Scottish marine area and the UK marine licensing area caused by any Licensable Marine Activity.

The Licensee shall ensure appropriate steps are taken to minimise damage to the beach and foreshore by any Licensable Marine Activity.

The Licensee must ensure that any debris or waste material placed below MHWS during the construction and operation of the Works is removed from the Site, as soon as is reasonably practicable, for disposal at a location above the MHWS approved by the Scottish Environment Protection Agency ("SEPA").

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

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

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

5.1.9 Availability of the licence for inspection

The Licensee must ensure that copies of this licence and any subsequent amendments or variations are available for inspection at any reasonable time by any authorised marine enforcement officer at:

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

5.1.10 Inspection of the Works

Any persons authorised by the Licensing Authority, must be permitted to inspect the Works at any reasonable time. The Licensee must, as far as reasonably practicable, on being given reasonable notice by the Licensing Authority (of at least 72 hours), provide transportation to and from the Site for any persons authorised by the Licensing Authority to inspect the Site.

5.1.11 Emergencies

If the assistance of a Government Department (to include departments of Devolved Administrations) is required to deal with any emergency arising from:

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

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

5.2 Conditions specific to the Works

5.2.1 Conditions applicable to all phases of the Works

5.2.1.1 Project Environmental Monitoring Programme ("PEMP")

The Licensee must, no later than 6 months prior to the Commencement of the Works, submit a PEMP, in writing, to the Licensing Authority for their written approval. Such approval may only be granted following consultation by the Licensing Authority with Scottish Natural Heritage ("SNH"), the Joint Nature Conservation Committee ("JNCC"), Whale and Dolphin Conservation ("WDC"), the Association of Salmon Fishery Boards ("ASFB") and any other ecological advisors as required at the discretion of the Licensing Authority. The PEMP must be in accordance with the Application as it relates to environmental monitoring.

The PEMP must set out measures by which the Licensee must monitor the environmental impacts of the Works. Monitoring is required throughout the lifespan of the Works where this is deemed necessary by the Licensing Authority and specifically, monitoring for cable exposure as specified in condition 5.2.2.10 parts f and g. 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 Works. Monitoring may also serve the purpose of verifying key predictions in the Application. Additional monitoring may be required in the event that further potential adverse environmental effects are identified for which no predictions were made in the Application.

The Licensing Authority may agree that monitoring may cease before the end of the lifespan of the Works.

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

- a) Pre-construction, construction (if considered appropriate by the Licensing Authority) and post-construction monitoring surveys as relevant in terms of the Application and any subsequent surveys for:
 - 1. Diadromous fish;
 - 2. Benthic communities:
 - 3. Seabed scour and local sediment deposition; and
 - 4. Sandeels (if using Gravity Bases).
- b) The participation by the Licensee in surveys to be carried out in relation to marine mammals as set out in the Marine Mammal Monitoring Programme.

All the initial methodologies for the above monitoring must be approved, in writing, by the Licensing Authority and, where appropriate, in consultation with the Forth and Tay Regional Advisory Group ("FTRAG"), referred to in conditions 5.2.2.18 and 5.2.3.10 of this licence. Any pre-consent surveys carried out by Licensee 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 Licensing Authority, at timescales to be determined by the Licensing Authority, in consultation with the FTRAG to identify the appropriateness of on-going monitoring. Following such reviews, the Licensing Authority may, in consultation with the FTRAG, require the Licensee to amend the PEMP and submit such an amended PEMP, in writing, to the Licensing Authority for their written approval. Such approval may only be granted following consultation with the FTRAG and any other ecological, or such other advisors, as may be required at the discretion of the Licensing Authority. The PEMP, as amended from time to time, must be fully implemented by the Licensee at all times.

The Licensee must submit written reports of such monitoring surveys to the Licensing Authority at timescales to be determined by the Licensing Authority in consultation with the FTRAG. Subject to any legal restrictions regarding the treatment of the information, the results are to be made publicly available by the Licensing Authority, or by such other party appointed at their discretion.

5.2.1.2 Environmental Management Plan ("EMP")

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

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

- a) all construction as required to be undertaken before the Final Commissioning of the Works; and
- b) the operational lifespan of the Works from the Final Commissioning of the Works until the cessation of electricity transmission (Environmental management during decommissioning is addressed by condition 5.2.2.2).

The EMP must set out the roles, responsibilities and chain of command for the Licensee personnel, any contractors or sub-contractors in respect of environmental management for the protection of environmental interests during the construction and operation of the Works. It must address, but not be limited to, the following over-arching requirements for environmental management during construction:

- a) Mitigation measures to prevent significant adverse impacts to environmental interests, as identified in the Application and pre-consent and pre-construction surveys, and include the relevant parts of the Construction Method statement ("CMS");
- b) A completed Written Scheme of Investigation ("WSI") approved by Historic Scotland;
- c) A Marine Pollution Contingency Plan ("MPCP") to include but not necessarily limited to provision in respect to spills and collision incidents occurring during construction and operation of the works, whilst taking into account existing plans for all operations including offshore installations that may have an influence on the MPCP; Practices used to refuel vessels at sea which must confirm to industry standards and to relevant legislation. The MPCP must also set out how any oil leaks within the structures are to be remedied and that such relevant repairs are required to be undertaken without undue delay:
- d) Management measures to prevent the introduction of marine non-native marine species;
- e) Measures to minimise, recycle, reuse and dispose of waste streams; and
- f) The methods for responding to environmental incidents and the reporting mechanisms that will be used to provide the Licensing Authority and relevant stakeholders (including, but not limited to, SNH, the JNCC, SEPA, Maritime and Coastguard Agency ("MCA") and the Northern Lighthouse Board ("NLB")) with regular updates on construction activity, including any environmental issues that have been encountered and how these have been addressed.
- g) Details of how the Licensee will give consideration to the European Commission Designated Bathing Waters at Thortonloch, with respect to minimising water quality and amenity impacts during construction. Works must take place out with the bathing season of 1st June to the 15th September, unless agreed in writing with the Licencing Authority

The Licensee must, no later than 3 months prior to the Final Commissioning of the Works, submit an updated EMP, in writing, to cover the operation and maintenance activities for the Works to the Licensing Authority for their written approval. Such approval may be given only following consultation with SNH, the JNCC, SEPA and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. The EMP must be regularly reviewed by the Licensee and the FTRAG (refer to conditions 5.2.2.18 and 5.2.3.10) over the lifespan of the Works, and be kept up to date (in relation to the likes of construction methods and operations of the Works in terms of up to date working practices) by the Licensee in consultation with the FTRAG.

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

5.2.1.3 National Research and Monitoring Strategy for Diadromous Fish (NRMSD)

The Licensee must participate in the monitoring requirements as laid out in the 'National Research and Monitoring Strategy for Diadromous Fish' so far as they apply at a local level (the Forth and Tay). The extent and nature of the Licensee's participation is to be agreed by the Licensing Authority in consultation with the FTRAG.

5.2.1.4 Forth and Tay Offshore Wind Developers Group - Commercial Fisheries Working Group ("FTOWDG-CFWG")

The Licensee must continue its membership in the FTOWDG-CFWG, or any successor group formed to facilitate commercial fisheries dialogue to define and finalise a Commercial Fisheries Mitigation Strategy ("CFMS"). As part of the finalised CFMS, the Licensee must produce and implement a mitigation strategy for each commercial fishery that can prove to the Licensing Authority that they will be adversely affected by the Works. The CFMS to be implemented must be approved in writing by the Licensing Authority. The Licensee must implement all mitigation measures committed to be carried out by the Licensee within the CFMS, so far as is applicable to the Works. Any agents or their contractors or subcontractors working for the Licensee, must co-operate with the fishing industry to ensure the effective implementation of said CFMS.

5.2.1.5 Health and safety incident

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

5.2.1.6 Bunding and storage facilities

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

5.2.1.7 Restoration of the Site to its original condition

The Licensee must take all reasonable, appropriate and practicable steps to restore the Site to its original condition before any Licensable Marine Activity was undertaken, or to as close to its original condition as is reasonably practicable, in accordance with the PEMP and the Decommissioning Programme ("DP") to the satisfaction of the Licensing Authority. Should all Licensed Marine Activity be discontinued prior to Completion of the Works, the Licensee must inform the Licencing Authority in writing of the discontinuation of the Works. This licence will be varied under section 30(3) of the 2010 Act following procedures laid out under section 31 of the 2010 Act to allow the removal of Works already installed.

5.2.2 Prior to the Commencement of the Works

5.2.2.1 Commencement date of the Works

The Licensee must, prior to and no less than 1 month before the Commencement of the Works, notify the Licensing Authority, in writing, of the date of Commencement of the Works.

5.2.2.2 Decommissioning Programme ("DP")

Where the Secretary of State has, following consultation with the Licensing Authority, given notice requiring the Licensee to submit to the Secretary of State a DP, pursuant to section 105(2) and (5) of the Energy Act 2004, then construction may not begin on the Site of the Works until after the Licensee has submitted to the Secretary of State a DP in compliance with that notice.

5.2.2.3 Construction Programme ("CoP")

The Licensee must, no later than 6 months prior to the Commencement of the Works, submit a CoP, in writing, to the Licensing Authority for their written approval. Such approval may only be granted following consultation by the Licensing Authority with SNH, the JNCC, SEPA, MCA, NLB, East Lothian Council and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. The CoP must be in accordance with the Application.

The CoP must set out:

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

5.2.2.4 Construction Method Statement ("CMS")

The Licensee must, no later than 6 months prior to the Commencement of the Works submit a CMS, in writing, to the Licensing Authority for their written approval. Such approval may only be granted following consultation by the Licensing Authority with SNH, the JNCC, SEPA, MCA, NLB, East Lothian Council and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. The CMS must set out the construction procedures and good working practices for constructing the Works. The CMS must also include details of the roles and responsibilities, chain of command and contact details of company personnel, any contractors or sub-contractors involved during the construction of the Works. The CMS must be in accordance with the construction methods assessed in the Application and must include details of how the construction related mitigation steps proposed in the Application are to be delivered.

The CMS must, so far as is reasonably practicable, be consistent with the Design Statement ("DS"), the EMP, the Vessel Management Plan ("VMP"), the Navigational Safety Plan ("NSP"), the Piling Strategy ("PS") (if required), the Cable Plan ("CaP") and the Lighting and Marking Plan ("LMP").

5.2.2.5 Piling Strategy ("PS")

In the event that pile foundations are to be used to construct the OSPs, the Licensee must, no later than 6 months prior to the Commencement of the Works, submit a PS, in writing, to the Licensing Authority for their written approval. Such approval may only be granted following consultation by the Licensing Authority with SNH, the JNCC and any such other advisors as may be required at the discretion of the Licensing Authority.

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 Licensing Authority.

The PS must be in accordance with the Application 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; grey 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.

5.2.2.6 Development Specification and Layout Plan ("DSLP")

The Licensee must, no later than 6 months prior to the Commencement of the Works, submit a DSLP, in writing, to the Licensing Authority for their written approval. Such approval may only be granted following consultation by the Licensing Authority with the MCA, NLB the Chamber of Shipping ("CoS"), SNH, the JNCC, the Scottish Fisherman's Federation ("SFF"), the East Coast Inshore Fisheries Group ("ECIFG"), the Civil Aviation Authority ("CAA") and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.

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

- a) A plan showing the proposed location of each individual OSP, seabed conditions, bathymetry, confirmed foundation type for each OSP and any key constraints recorded on the Site:
- A list of latitude and longitude co-ordinates accurate to three decimal places of minutes of arc for each OSP, this should also be provided as a geographic information system ("GIS") shape file using WGS84 format;
- c) A table or diagram of each OSP;
- d) The finishes for each OSP; and
- e) The length and proposed arrangements on the seabed of all cables.

5.2.2.7 Design Statement ("DS")

The Licensee must, prior to the Commencement of the Works, submit a DS, in writing, to the Licensing Authority that includes representative visualisations from key viewpoints agreed with the Licensing Authority, based upon the DSLP, as approved by the Licensing Authority (as updated and amended from time to time by the Licensee). The DS must be provided, for information only, to East Lothian Council, SNH, the JNCC and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. The DS must be prepared and signed off by at least one qualified landscape architect, instructed by the Licensee prior to submission to the Licensing Authority.

5.2.2.8 Vessel Management Plan ("VMP")

The Licensee must, no later than 6 months prior to the Commencement of the Works, submit a VMP, in writing, to the Licensing Authority for their written approval. Such approval may only be granted following consultation by the Licensing Authority with SNH, the JNCC, WDC and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.

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

- a) The number, types and specification of vessels required;
- b) Working practices to minimise the 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 VMP must, so far as is reasonably practicable, be consistent with the CMS, the EMP, the PEMP, the NSP, and the LMP.

5.2.2.9 Navigational Safety Plan ("NSP")

The Licensee must, no later than 6 months prior to the Commencement of the Works, submit a NSP, in writing, to the Licensing Authority for their written approval. Such approval may only be granted following consultation by the Licensing Authority with MCA, NLB and any other navigational advisors or organisations as may be required at the discretion of the Licensing Authority. The NSP must include, but not be limited to, the following issues:

- a) Navigational safety measures;
- b) Construction exclusion zones;
- c) Notice(s) to Mariners and Radio Navigation Warnings;
- d) Anchoring areas;
- e) Temporary construction lighting and marking;
- f) Emergency response and co-ordination arrangements for the construction, operation and decommissioning phases of the Works; and
- g) Buoyage.

The Licensee must confirm within the NSP that they have taken into account and adequately addressed all of the recommendations of the MCA in the current Marine Guidance Note 371, and its annexes, that may be appropriate to the Works, or any other relevant document which may supersede said guidance.

5.2.2.10 Cable Plan ("CaP")

The Licensee must, no later than 6 months prior to the Commencement of the Works, submit a CaP in writing, to the Licensing Authority for their written approval. Such approval may only be granted following consultation by the Licensing Authority with SNH, the JNCC, MCA, the SFF, the ECIFG and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. The CaP must be in accordance with the Application.

The CaP must include the following:

- a) Details of the location and cable laying techniques for the cables;
- b) The results of survey work (including geophysical, geotechnical and benthic surveys) which will help inform cable routing
- c) The need for a pre-construction survey for Annex 1 habitat and priority marine features to inform cable micro-siting and installation methods in consultation with the Licensing Authority and their advisors;
- d) Technical specification of all cables, including a desk based assessment of attenuation of electro-magnetic field strengths and shielding;
- e) A burial risk assessment to ascertain burial depths and, where necessary, alternative suitable protection measures;

- f) Methodologies for over trawl surveys of the cables through the operational life of the Works where mechanical protection of cables laid on the sea bed is deployed; and
- g) Methodologies for cable inspection with measures to address and report to the Licensing Authority any exposure of cables.

5.2.2.11 Traffic and Transportation Plan ("TTP")

The Licensee must, no later than 6 months prior to the Commencement of the Works submit a TTP, in writing, to the Licensing Authority for their written approval. Such approval may only be granted following consultation by the Licensing Authority with Transport Scotland, East Lothian Council, Angus Council, Fife Council, Scottish Borders Council, and any such other advisors as may be required at the discretion of the Licensing Authority. The TTP must set out a mitigation strategy for the impact of road based traffic and transportation associated with the Works.

5.2.2.12 Ecological Clerk of Works ("ECoW")

Prior to the Commencement of the Works, the Licensee must at its own expense, and with the approval of the Licensing Authority in consultation with SNH and the JNCC appoint an ECoW or ECoW team. The ECoW(s) must be appropriately qualified and a member of a recognised organisation such as Association for Ecological / Environmental Clerk of Work, Chartered Institute of Ecology and Environmental Management, Institute of Environmental Management and Assessment. The ECoW must be appointed in time to review and approve the final draft version of the first plan or programme submitted under this Licence to the Licensing Authority for approval, until the Final Commissioning of the Works.

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 licence:
- b) Provide advice to the Licensee on compliance with licence 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 Licensing Authority at timescales to be determined by the Licensing Authority; and
- e) Inducting site personnel on the Site/the Works environmental policy and procedures.

The ECoW role may be carried out by a party appointed by the Licensee or by a third party appointed to carry out an equivalent role pursuant to other consents or licences granted in relation to the Works and subject to the written approval of the Licensing Authority.

5.2.2.13 Fisheries Liaison Officer ("FLO")

Prior to the Commencement of the Works, a FLO, approved by Licensing Authority in consultation with the FTOWDG-CFWG, must be appointed by the Licensee for the period from Commencement of the Works until the Final Commissioning of the Works. The Licensee must notify the Licensing Authority of the identity and credentials of the FLO before Commencement of the Works by including such details in the EMP (refer to condition 5.2.1.2). The FLO must establish and maintain effective communications between the Licensee, any contractors or sub-contractors, fishermen and other users of the sea during the construction of the Works, and ensure compliance with best practice guidelines whilst doing so.

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

- a) Establishing and maintaining effective communications between the Licensee, any contractors or sub-contractors, fishermen and other users of the sea with a fisheries interest concerning the Works 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 Works; and
- c) Ensuring that information is made available and circulated in a timely manner to minimise interference with fishing operations and other users of the sea.

The FLO role may be carried out by a party appointed by the Licensee or by a third party appointed to carry out an equivalent role pursuant to other consents or licences granted in respect of the Works and subject to the written approval of the Licensing Authority.

5.2.2.14 Navigational and Aviation Safety and Charting

The Licensee must, as soon as reasonably practicable prior to Commencement of the Works, notify the UK Hydrographic Office ("UKHO") of the proposed works to facilitate the promulgation of maritime safety information and updating of nautical charts and publications through the national Notice to Mariners system.

The Licensee must, as soon as reasonably practicable prior to the Commencement of the Works, ensure that local mariners, fishermen's organisations and HM Coastguard, in this case Maritime Rescue Coordination Centre Aberdeen, are made fully aware of the Licensable Marine Activity through local Notice to Mariners or any other appropriate means.

The Licensee must consult with any local Harbour Master where appropriate, who may wish to issue local warnings to alert those navigating in the vicinity to the presence of the Works during construction.

The Licensee must ensure that details of the Works are promulgated in the Kingfisher Fortnightly Bulletin, as soon as reasonably practicable prior to the Commencement of the Works to inform the Sea Fish Industry of the vessel routes, the timings and the location of the Works and of the relevant operations.

The Licensee must prior to Commencement of the Works, complete an "Application for Statutory Sanction to Alter/Exhibit" form and submit this to the NLB for the necessary sanction to be granted.

The Licensee must, no later than 6 months prior to the Commencement of the Works, submit a LMP, in writing, to the Licensing Authority for their written approval. Such approval may only be granted following consultation by the Licensing Authority with MCA, NLB, the CAA, the Ministry of Defence ("MOD") and any such other advisors as may be required at the discretion of the Licensing Authority. The LMP must provide that the Works be lit and marked in accordance with the current MCA, CAA and MOD navigational and aviation lighting policy and guidance that is in place as at the date of the Licensing Authority approval of the LMP, or any such other documents that may supersede said guidance prior to the approval of the LMP. The LMP must also detail the navigational lighting requirements detailed in International Association of Marine Aids to Navigation and Lighthouse Authorities ("IALA") Recommendations O-139 or any other documents that may supersede said guidance prior to approval of the LMP.

The LMP must make provision for the marking and lighting of the OSPs to be amended as required by NLB or the CAA in the event that the OSPs are constructed prior to the

construction of wind turbine generators forming part of the Neart na Gaoithe Offshore Wind Farm within the Site so that the marking and lighting of any OSP suits the layout of wind turbine generators located within the Site.

The Licensee must provide the LMP to East Lothian Council, Angus Council, Fife Council, SNH, the JNCC and any other bodies as may be required at the discretion of the Licensing Authority.

The Licensee must, prior to the Commencement of the Works, and following confirmation of the approved DSLP by the Licensing Authority, provide the precise location and maximum heights of all OSPs, and construction equipment over 150 m above lowest astronomical tide ("LAT"), and details of any lighting fitted to all OSPs, to the UKHO for aviation and nautical charting purposes.

5.2.2.15 Third Party Certification or Verification ("TPC" or "TPV")

The Licensee must, no later than 3 months prior to the Commencement of the Works, provide the Licensing Authority (unless otherwise agreed, in writing, with the Licensing Authority) with TPC or TPV (or suitable alternative as agreed, in writing, with the Licensing Authority) for all OSPs foundations, jacket and OSP platform structures.

5.2.2.17 Noise Registry

The Licensee must, in the event that pile foundations are to be used, submit the appropriate completed noise registry form to the Licensing Authority and the JNCC stating, the proposed date(s), location(s) and nature of the piling activities under authority of this licence.

5.2.2.18 Forth and Tay Regional Advisory Group ("FTRAG")

The Licensee must participate in any FTRAG established by the Licensing Authority for the purpose of advising the Licensing Authority on research, monitoring and mitigation programmes for, but not limited to, diadromous fish, marine mammals and commercial fish. Should a Scottish Strategic Marine Environment Group ("SSMEG") be established (refer to condition 5.2.2.19 and 5.2.3.11), the responsibilities and obligations being delivered by the FTRAG will be subsumed by the SSMEG at a timescale to be determined by the Licensing Authority.

5.2.2.19 Scottish Strategic Marine Environment Group ("SSMEG")

The Licensee must participate in any SSMEG established by the Licensing Authority for the purpose of advising the Licensing Authority on research, monitoring and mitigation programmes for, but not limited to, diadromous fish, marine mammals and commercial fish.

5.2.3 During the construction of the Works

5.2.3.1 Compliance with and amendments to approved plans

The Licensee must, at all times, construct the Works in accordance with the approved CoP, CMS, PS (if required), DSLP, VMP, NSP, CaP, TTP and LMP (as updated and amended from time to time by the Licensee).

Any updates or amendments made to the CoP, CMS, PS (if required), DSLP, VMP, NSP, CaP, TTP, and LMP by the Licensee, must be submitted, in writing, by the Licensee to the Licensing Authority for their written approval.

5.2.3.2 Operation and Maintenance Programme ("OMP")

The Licensee must, no later than 3 months prior to the commissioning of the first OSP, submit an OMP, in writing, to the Licensing Authority for their written approval. Such approval may only be granted following consultation by the Licensing Authority with SNH, the JNCC, SEPA, MCA, NLB, East Lothian Council, and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. The OMP must set out the procedures and good working practices for the operations and maintenance of the OSPs, substructures, and cable network of the Works. Environmental sensitivities which may affect the timing of the operation and maintenance activities must be considered in the OMP.

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

5.2.3.3 Transportation audit sheet

The Licensee must create, complete and submit to the Licensing Authority on the first working day of the month, a detailed transportation audit sheet for each month during the period when construction of the Works is undertaken, for all aspects of the construction of the Works. The transportation audit sheet must include information on the loading facility, vessels, equipment, shipment routes, schedules and all materials to be deposited (as described in Part 2 of this licence) in that month. Where, following the submission of a transportation audit sheet to the Licensing Authority, any alteration is made to the component parts of the transportation audit sheet, the Licensee must notify the Licensing Authority of the alteration in the following month's transportation audit sheet.

If the Licensee becomes aware of any substances or objects on the transportation audit sheet that are missing, or an accidental deposit occurs, the Licensee must contact the Licensing Authority as soon as practicable after becoming aware, for advice on the appropriate remedial action. Should the Licencing Authority deem it necessary, the Licensee must undertake a side scan sonar survey in grid lines (within operational and safety constraints) across the area of the Works, to include cable routes and vessel access routes from local service port(s) to the Site to locate the substances or objects. If the Licensing Authority is of the view that any accidental deposits associated with the construction of the Works are present, then the deposits must be removed by the Licensee as soon as is practicable and at the Licensee's expense.

5.2.3.4 Nature and quantity of deposited substances and objects

The Licensee must, in addition to the transportation audit sheets required to be submitted to the Licensing Authority under condition 5.2.3.3, following the Commencement of the Works, submit audit reports, in writing, to the Licensing Authority, stating the nature and quantity of all substances and objects deposited below MHWS under the authority of this licence. Such audit reports must be submitted in writing, to the Licensing Authority, by the Licensee at 6 monthly intervals, with the first such report being required to be submitted on a date no later than 6 months following the Commencement of the Works. Where appropriate, nil returns must be provided.

5.2.3.5 Navigational safety

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

The Licensee must notify, from Aberdeen to Eyemouth, local mariners, fishermen's organisations and HM Coastguard, in this case Maritime Rescue Coordination Centre Aberdeen, of the progress of construction of the Works through local Notice to Mariners or any other appropriate means.

The Licensee must ensure that the progress of construction of the Works is promulgated in the Kingfisher Fortnightly Bulletin to inform the Sea Fish Industry of the vessel routes, the timings and the location of the Works and of the relevant operations.

The Licensee must, notify the Licensing Authority, in writing, as soon as reasonably practicable, of any case of damage to or destruction or decay of the Works. The Licensing Authority will advise, in writing, of any remedial action to be taken and any requirement to display aids to navigation, following consultation with the Maritime Coastguard Agency ("MCA") the NLB or any such advisers as required.

The Licensee must ensure that any Emergency Response and Rescue Vehicle ("ERRV") and/or cable-laying vessel permitted to engage in the Works is equipped with an automatic identification system ("AIS") and automatic radar plotting aids ("ARPA").

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

The Licensee must ensure that navigational safety is not compromised by the Works. The navigable depth must not be reduced by more than 5% of stated chart datum unless otherwise agreed, in writing, with the Licensing Authority in consultation with the MCA and NLB.

5.2.3.6 Markings, lighting and signals of the Works

The Licensee must ensure that the Works are marked and lit in accordance with the requirements of the NLB, the CAA and the MoD at all times and such marking and/or lighting must be continued unless and until such time as the Licensing Authority, by notice, relevantly varies this licence under section 30 of the 2010 Act.

The Licensee must ensure that no marks or lights, other than those required by virtue of this licence, are displayed unless they have been approved, in writing, by the Licensing Authority following consultation with the NLB and the CAA.

In the event that the OSPs are constructed prior to the construction of wind turbine generators forming part of the Neart na Gaoithe Offshore Wind Farm, the Licensee must ensure that the marking and lighting of any OSP is such that it can be amended to suit the layout of wind turbine generators located within the Site as specified in the LMP

The Licensee must ensure that during the construction phase, where Works are to take place within the Site boundary, that the Site boundary is marked by seven Cardinal Mark buoys as follows:

- 1 x North Cardinal Buoy;
- 2 x West Cardinal Buoys;

- 2 x South Cardinal Buoys; and
- 2 x East Cardinal Buoys one of which to be fitted with an X/S band radar beacon (Racon)).

The Cardinal Mark buoys shall be a minimum of 3 metres in diameter at the waterline, have a focal plane of at least 3 metres above the waterline, be fitted with a radar reflector and be of suitable construction for the sea conditions commonly experienced in the North Sea. The light range on these buoys shall be 5 nautical miles. All required buoyage shall remain in place until completion of this phase, or otherwise notified by the Licensing Authority.

5.2.3.7 Markings, lighting and signals of jack up vessels

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

5.2.3.8 Horizontal Directional Drilling ("HDD")

The Licensee must ensure the seaward exit point of the HDD will be located as far offshore as practicable towards the depth of closure; the landward exit point of the HDD will be located onshore of the high-water mark; and the cables will be suitably buried or otherwise protected between the seaward exit of the HDD and the depth of closure (the depth of water beyond which annually significant wave events will cease to contribute to beach sediment supply and morphological processes).

5.2.3.9 Noise registry

The Licensee must, in the event that pile foundations are to be used, and piling is to be carried out for more than 10 consecutive days, submit at quarterly intervals, the appropriate completed noise registry form to the Licensing Authority and the JNCC, stating the date(s), location(s) and nature of such activities under authority of this licence.

5.2.3.10 Forth and Tay Regional Advisory Group ("FTRAG")

The Licensee must participate in any FTRAG established by the Licensing Authority for the purpose of advising the Licensing Authority on research, monitoring and mitigation programmes for, but not limited to, diadromous fish, marine mammals and commercial fish. Should a SSMEG be established (refer to conditions 5.2.2.19 and 5.2.3.11), the responsibilities and obligations being delivered by the FTRAG will be subsumed by the SSMEG at a timescale to be determined by the Licensing Authority.

5.2.3.11 Scottish Strategic Marine Environment Group ("SSMEG")

The Licensee must participate in any SSMEG established by the Licensing Authority for the purpose of advising the Licensing Authority on research, monitoring and mitigation programmes for, but not limited to, diadromous fish, marine mammals and commercial fish.

5.2.4 Conditions upon Completion of the Works

5.2.4.1 Date of Completion of the Works

The Licensee must, no more than 1 month following the Completion of the Works, notify the Licensing Authority, in writing, of the date of Completion of the Works.

5.2.4.2 Nature and quantity of deposited substances and objects

The Licensee must, no later than 1 month following Completion of the Works, submit a final audit report, in writing, to the Licensing Authority stating the nature and quantity of all substances and objects deposited below MHWS within the Scottish marine area under the authority of this licence. Where appropriate, nil returns must be provided.

5.2.4.3 Final Commissioning of the Works

The Licensee must, no more than 1 month following the Final Commissioning of the Works, notify the Licensing Authority, in writing, of the date of the Final Commissioning of the Works.

5.2.4.4 Compliance with and amendments to approved plans

The Licensee must, at all times, operate the Works in accordance with the approved VMP, OMP, NSP, CaP, TTP and LMP (as updated and amended from time to time by the Licensee).

The license must, at all times, maintain the Works in accordance with the approved OMP (as updated and amended from time to time by the Licensee).

Any updates or amendments made to the VMP, OMP, NSP, CaP, TTP, and LMP by the Licensee, must be submitted, in writing, by the Licensee to the Licensing Authority for their written approval.

5.2.4.5 Navigational safety

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

The Licensee must, within 1 month of Completion of the Works, provide the "as-built" positions and maximum heights of all OSPs, along with any sub-sea infrastructure, cable landing points and changes to navigable depths, to the UKHO for aviation and nautical charting purposes.

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

The Licensee must ensure that the Completion of the Works is promulgated in the Kingfisher Fortnightly Bulletin to inform the Sea Fish Industry.

The Licensee must notify the Licensing Authority in writing, as soon as reasonably practicable, of any case of damage to or destruction or decay of the Works. The Licensing Authority will advise, in writing, of any remedial action to be taken and any requirement to display aids to navigation, following consultation with the MCA, the NLB or any such advisers as required.

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

5.2.4.6 Markings, lighting and signals of the Works

The Licensee must ensure that the Works are marked and lit in accordance with the requirements of the NLB, the CAA and MoD at all times and such marking and/or lighting must be continued unless and until such time as the Licensing Authority, by notice, relevantly varies this licence under section 30 of the 2010 Act.

The Licensee must ensure that the required IALA availability target for Category 1 Aids to Navigation ("AtoN") is achieved through redundancy, monitoring and repair, must be in place and arrangements made to warn the mariner promptly of any AtoN fault and its subsequent return to fully operational service.

The Licensee must ensure that lit Cable Marker Boards ("CMBs") are positioned as near as possible to the shoreline so as to mark the points at which the cables come ashore. The CMBs shall be diamond shaped, with dimensions 2.5 metres long and 1.5 metres wide, background painted yellow with the inscription 'Cables' painted horizontally in black. The structures shall be mounted at least 4 metres above ground level, with a navigation light flashing yellow once every five seconds ("FI Y 5s") mounted on the upward apex of the board. The nominal range of these lights should be 3 nautical miles, and they should have an availability of not less than 97% (IALA Category 3) over a rolling three year period. It will be acceptable to screen the navigation light to landward.

The Licensee must ensure that the marking and lighting of any OSP is amended in accordance with the LMP to suit the final layout of wind turbine generators forming part of the Neart na Gaoithe Offshore Wind Farm located within the Site.

5.2.4.7 Noise registry

The Licensee must, in the event that pile foundations were used, submit the appropriate completed noise registry form to the Licensing Authority and the JNCC, within 12 weeks of Completion of the Works, stating the actual date(s), location(s) and nature of piling activities carried out under authority of this licence.

5.2.4.8 Environmental protection

The Licensee shall ensure the beach and foreshore is returned to the original profile, or as close as reasonably practicable, following Completion of the Works.

5.2.4.9 Operation and Maintenance of the Works

The Licensee must operate and maintain the Works in accordance with the approved OMP. Notification must be provided at least 3 months in advance of any maintenance to the Works where any additional deposits are required. In the event that these works are not assessed in the Application and are considered by the Licencing Authority as being material they will require further Marine Licences.

5.2.4.10 Decommissioning

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

6. Regulatory Evaluation

6.1 Conclusions

In considering the application, in particular the ES and SEIS and the relevant provisions of the Marine (Scotland) Act 2010, a full and detailed assessment has been made of the potential direct and indirect effects of the proposal on human beings, fauna and flora, soils, water, air climate, the landscape, material assets, the cultural heritage and the interaction between any two or more of these factors.

Marine Scotland, as the Appropriate Authority, consider that, having taken account of the information provided by the Company, the responses of the consultative bodies and members of the public, there are no outstanding concerns with regards to the effects on the environment which would require a marine licence to be withheld.

6.2 Recommendations

Having carried out assessments of the potential environmental impacts of the proposed project, the reviewer acting on behalf of Marine Scotland, makes the recommendations below:

Marine Scotland are satisfied that the ES adequately addresses all environmental issues in relation to the Neart na Gaoithe Offshore Wind Farm, subject to the conditions referred to above being included in the relevant marine licence subsequently issued by Marine Scotland.

The reviewer acting on behalf of Marine Scotland recommends that a favourable EIA consent decision is given in respect of the project, subject to the inclusion of the above conditions being attached to any relevant marine licence.

Environmental Impact Consent Decision

Having considered the analysis and recommendations of the environmental impact assessment process above, an environmental impact assessment consent decision is given **in favour of** the Neart na Gaoithe Offshore Wind Farm in accordance with Regulation 22 of the MWR.

Reviewed by:	Adrian Tait
Date:	10 th September 2014
Approved by:	Gayle Holland
Date:	2 nd October 2014
The Licensing Authority:	Marine Scotland