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

Environmental Impact Assessment Consent Decision

Project Title: Inch Cape Offshore Windfarm

Applicant: Inch Cape Offshore Limited ("ICOL")

Location: Approximately 15-22km East of the Angus coastline, in the Forth and Tay.

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 Inch Cape Offshore Limited ("ICOL") 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 Inch Cape Offshore Limited to deposit any substance or object and to construct, alter or improve any works in relation to the Inch Cape Offshore Wind Farm; and
- (ii) A marine licence to be considered under the 2010 Act by Inch Cape Offshore Limited 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.

The works described in this application 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 of the Inch Cape Offshore Windfarm.

The application made to Marine Scotland was supported by an Environmental Statement ("ES") as required by regulation 12 of the MWR.







2. Project Description

An offshore wind turbine generating station ("the Development") located 15-22km east of the Angus coastline, with a gross electrical output capacity of up to 784 MW comprising:

- not more than 110 three-bladed horizontal axis wind turbines each with a maximum blade tip height of up to 215 metres (measured from Lowest Astronomical Tide ("LAT"))
- a minimum blade clearance of 22 metres above Highest Astronomical Tide ("HAT");
- a maximum rotor diameter of 172 metres;
- minimum spacing (averaging crosswind and downwind) of 1000 metres. Each WTG always being subject to micro-siting of +/- 50m;
- all associated foundations, substructures, fixtures, fittings;
- for each WTG a transition piece (including access ladders /fences and landing platforms), turbine tower, rotors and nacelle;
- inter array cabling to the connection point on the offshore sub-station platforms including protections and cable crossings;
- up to 5 Offshore substation platforms; and
- up to 3 meteorological masts

ICOL is to be located offshore approximately 15-22 km from the East of the Angus coastline in the Forth and Tay. The total area of the wind turbine layout is approximately 150 km².

3. The Environmental Statement

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

- Designated Nature Conservation Sites
- Metocean and Coastal Processes
- Underwater Noise
- Benthic Ecology
- Natural Fish and Shellfish
- Marine Mammals
- Ornithology
- Seascape, Landscape and Visual
- Cultural Heritage and Marine Archaeology
- Commercial Fisheries
- Shipping and Navigation
- Military and Civil Aviation
- Other Human Considerations
- Socioeconomics and Tourism

3.1 Environmental sensitivities

Scottish Natural Heritage ("SNH") and the Joint Nature Conservation Committee ("JNCC") advised that the Development has the potential to impact upon protected sites. On reviewing the original ES, SNH and the JNCC advised that the Development would impact on 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. In addition, SNH and the JNCC undertook their own appraisal of the Development following a series of meetings with the Company, SNH, JNCC, MSS, Seagreen Wind Energy Limited ("SWEL") and Neart na Gaoithe ("NNGOWL") to resolve issues to support a more robust cumulative impact assessment and comparison between the development proposals in the Forth and Tay. Figure 1 below shows the protected sites which were subject to an AA.

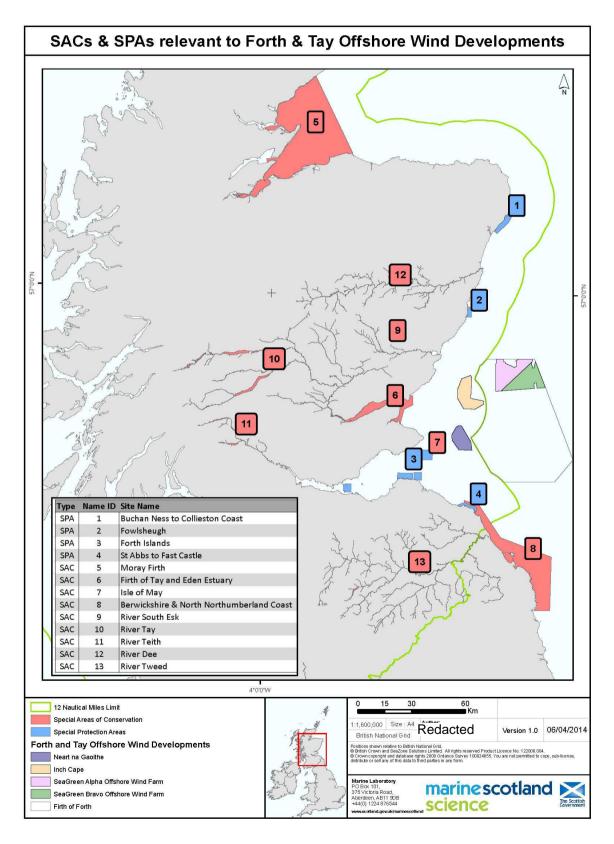






Figure 1. Location of the ICOL, NNGOWL, SWEL windfarms developments in the Forth and Tay and the revelvant SPAs and SACs.

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 SPAs. 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, NNGOWL 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 ICOL development alone or in-combination with NNGOWL 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 2013 (application and ES).

4.1 Public consultation

In accordance with Regulation 16(1)(b) of the MWR Marine Scotland instructed ICOL 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 by specified dates

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

| • | The Scotsman | 26 th July 2013, 2 nd August 2013, 12 th |
|---|--|---|
| | | October 2013 and 18 th October 2013 |
| • | Angus and Mearns Courier & Advertiser | 26 th July 2013 & 2 nd August 2013 |
| • | The Edinburgh Gazette | 26 th July 2013, 2 nd August 2013, 12 th |
| | | October 2013 and 18 th October 2013 |
| • | Dundee Courier & Advertiser | 26 th July 2013 & 2 nd August 2013 |
| • | East Lothian Courier | 26 th July 2013, 2 nd August 2013, 12 th |
| | | October 2013 and 18 th October 2013 |
| • | Fife Courier & Advertiser | 26 th July 2013 |
| • | Arbroath Herald & Angus County Advertise | r 12 th October 2013 and 18 th October 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 the additional notices which were placed in October.

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

- Angus Council, Planning & Transportation Division, County Buildings, Market Street Forfar DD8 3LG
- Dundee Council, Planning and Building Control, Floor 6, Dundee House, 50 North Lindsay Street, Dundee, DD1 1LS
- Fife Council, Enterprise, Planning and Protective Services, Kingdom House, Kingdom Avenue, Glenrothes, KY7 5LY
- East Lothian Council, John Muir house, Brewery Park, Haddington, East LothianEH41 3HA.
- Dunbar Library, Bleachingfield Centre, Dunbar, EH42 1DX
- Dundee Central Library, Wellgate, Dundee, Angus, DD1 1DB
- Montrose Library, High street, Montrose, DD10 8PH
- Port Seton Library, Community Centre, South Seton Park, Port Seton, EH32 0BG
- St Andrews Library, Church Square, St Andrews, KY16 9NN.

Marine Scotland received 0 public representations in support of the application and 1 public representation objecting to the application. The representation lodged objecting to the scheme cited concerns including, but not limited to effects on fish from noise, birds and bats suffering from collision and associated injuries/death and impacts on tourism from visual impacts. Other concerns raised included issues such as wind being an unreliable and expensive form of energy; and failure to meet the Aarhus convention.

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 24th July 2013 and closed on the 5th September 2013 with Local Authorities permitted additional time in accordance with The Electricity (Applications For Consent) Regulations 1990 (as amended). Extensions to provide comments were permitted to consultees if required.

4.2.1 Consultee List

The application, and ES were sent to:

| Consultee | Consultee |
|--|---------------------------------------|
| Aberdeen International Airport (BAA Ltd) | Marine Scotland Compliance |
| Angus Council | Maritime and Coastguard Agency |
| Arbroath and Montrose Static Gear | Ministry of Defence |
| Association (AMSGA) | |
| Arbroath Sailing and Boating Club | Montrose Port Authority |
| Arbroath Harbour | National Air Traffic Services |
| Association of Salmon Fishery Boards | Northern Lighthouse Board |
| Bond Offshore Helicopters | Royal Society for the Protection of |
| | Birds Scotland |
| Bristow Helicopters Limited | Royal Yachting Association |
| British Telecom (BT) | Scallop Association (SA) |
| Carnoustie Golf Links | Scottish Borders Council |
| Chamber of Shipping | Scottish Environment Protection |
| | Agency |
| Civil Aviation Authority | Scottish Fisherman's Federation |
| | |
| Dundee Sub Aqua Club | Sport Scotland |
| Dundee City Council | Scottish Power Generation Limited |
| | (SPGL) |
| East Lothian Council | Scottish White Fish Producers |
| East Fortune Airfield (East of Scotland | Scottish Wild Salmon Company (Usan) |
| Microlights) | 0 41 1 1471 117 |
| Eyemouth Harbour Trust | Scottish Wildlife Trust |
| Fife Council | Scottish Natural Heritage |
| Fife Fishermens Mutal Association | The Crown Estate |
| (Pittenweem) Limited | 0 (|
| Forth Estuary Forum | Surfers Against Sewage |
| Historic Scotland | The Joint Nature Conservation |
| In a harma Fish a sine Consum (IFO) | Committee |
| Inshore Fisheries Group (IFG) | Transport Scotland (Including Ports & |
| John Music Trust | Harbours Branch) |
| John Muir Trust | Visit Scotland |
| Joint Radio Company | Wemyss and March Estate |
| Marine Scotland Science | Whale & Dolphin Conservation Society |

4.2.2 Consultee Responses

Angus Council ("AC") confirmed that it did not object to the Development however, in their application consultation response, a number of concerns were raised on the SLVIA and cultural heritage aspects.

With regards to seascape impacts, AC consider that there are a number of shortcomings within the methods applied to the assessment of seascape effects which arise from the ES







attempting to assess the sensitivities of Regional Seascape Character Areas ("SA") to offshore wind farms without fully characterising the seascape. AC particularly highlight Bell Rock lighthouse which they do not find referenced to any of the SAs, and feel that this may have resulted in an underestimation of sensitivity within the ES.

Regarding visual impacts, AC have concerns surrounding the impacts arising from aviation lighting on night seascape impacts, although they do note there may be a technical solution to resolve this.

With regards to cultural heritage, AC raised concerns in relation to Bell Rock lighthouse and Ladyloan Signal Tower. Whilst AC note that Historic Scotland are content that there will be no significant indirect or cumulative impact on either, they feel that Bell Rock lighthouse has not been adequately defined and therefore the sensitivity and overall impacts may be under assessed. It is suggested by AC that similar limitations within the ES apply to Ladyloan Signal Tower.

Whilst AC have raised concerns regarding SLVIA, it should be noted that the Company's methodology for characterising the seascape was developed by the Forth and Tay Offshore Wind Developers Group ("FTOWDG") (comprising TCE, NNGOWL, SWEL, ICOL, and their respective consultants) and agreed through extensive consultation in 2011 and 2012 with Marine Scotland, SNH, AC, ELC, SBC and FC. A series of criteria were developed, based on those used in 'An assessment of the sensitivity and capacity of the Scotlish seascape in relation to offshore wind farms', to define sensitivity to offshore wind farm development. These were modified to include aspects of seascape covered in 'Guidance on Landscape/Seascape Capacity for Aquaculture' as directed by SNH. Therefore, it is considered that the assessment methodology and guidance on which it is based were agreed between developers, their consultants, and consultees, and is appropriate for its intended purpose. The methodology was discussed in detail through consultation between FTOWDG, SNH, Marine Scotland, TCE and planning authorities' representatives during 2011 and 2012.

AC also raised concerns regarding commercial fisheries and recreational activities, particularly during construction when disruption to these activities may increase. A condition relating to setting up of the Forth and Tay Offshore Wind Developers Group - Commercial Fisheries Working Group ("FTOWDG-CFWG")will be included in any consent granted by Scottish Ministers under Section 36 of The Electricity Act (1989) and/ or any marine licence granted.

Dundee City Council ("DCC") had no comments to make on the Development.

East Lothian Council ("ELC") stated that visual impacts are likely in the backdrop of the Forth Islands from north eastern East Lothian coast including North Berwick and the North Berwick Law and noted that there was no viewpoint submitted from Tantallon Castle which would have been useful.

ELC recognise that there will be some disruption to vessel transits and fisheries and that there could be significant impacts on scallop fisheries. ELC also recognised that there will be localised disruption to recreational sailors and other users mainly during construction.

ELC wish for a condition to be added that ensures lighting and sound warning systems have a maximum as well as a minimum distance specified.



Fife Council ("FC") generally supports the Development but raised a number of concerns including archaeology, ecology and local fisheries. With regard to ornithology, ecology, water resources and coastal hydrology the need to consult with SNH, SEPA and RSPB was expressed by FC. SNH, SEPA and RSPB were all consulted on the Development.

Scottish Borders Council ("SBC") do not have any major concerns with visual impacts from the Development but cumulatively with the other Forth and Tay developments there is a slightly greater level of concern, however, it is considered that the distance and location of the wind farm combine to limit any significant impact. SBC consider cumulative visual and landscape impacts would be at worst moderate and would be minor or negligible from many receptors.

Scottish Natural Heritage ("SNH") and the Joint Nature Conservation Committee ("JNCC"), provided advice on the 7th March 2014 which addresses the cumulative impacts of the Development together with SWEL and NNGOWL. 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 (also relevant for these Applications);
- 10th June 2014 advice on increased turbine spacing and displacement assessment for the SWEL development;
- 17th June 2014 advice on increased turbine spacing and displacement assessment for the Development;
- 2nd July 2014 collision risk modelling undertaken to include the commitment by SWEL 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 detailing appropriate post-consent monitoring (should the Minister grant consent);
- 16th July 2014 updated advice on appropriate displacement rates for guillemot, razorbill and kittiwake.

On the 7th March 2014 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. SNH and the JNCC 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 with the Company, SNH, JNCC, MSS, SWEL and NNGOWL to resolve issues to support a more robust cumulative impact assessment and comparison between the development proposals. The approach which is known as the "common currency" ensures that assessments are completed using the most appropriate methods and parameters across the different developments.

SNH and the JNCC concluded that the 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 NNGOWL and SWEL proposals. Impacts on birds including collision risk and displacement will occur over the operational lifespan of the wind farm. The JNCC and SNH 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 were used.

In their advice on 7th March 2014, SNH and the JNCC advised that the Development in combination with SWEL and NNGOWL:

- 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 SWEL and NNGOWL 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 6th 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.

Further comments were received from SNH and the JNCC on the 10th June, 4th July and 16th July 2014 advising that it would be appropriate to use reduced displacement rates in the assessment of displacement effects at the ICOL, SAWEL and SBWEL sites due to the lower density of WTGs at these sites.

SNH and the JNCC also highlighted that effects on species not covered under HRA require consideration (i.e. individuals breeding out with SPAs and non-breeding individuals). For some species e.g. kittiwake a considerable number of smaller colonies exist outside of the SPA boundaries and additional potential mortality from the Forth and Tay wind farm developments could contribute a significant proportion of United Kingdom ("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, MSS is 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 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.

In order to mitigate potential impacts on birds the Company has committed to reducing the number of turbines from 213 to a maximum of 110 Which will mitigate both collision and displacement effects.

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 the JNCC and SNH on SPAs are at variance from those reached by MSS. 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 advisors 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 and the JNCC, and by MSS.

SNH stated that the level of precaution which is appropriate is not a matter that can be determined precisely, and that judgments 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 judgments 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. This was:

- 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.

With regards 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 of those SACs. 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 in recent 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"). 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 when the final windfarm layout, design and foundation options have been confirmed. Conditions requiring a Vessel Management Plan ("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. The VMP will consider measures to mitigate potential corkscrew injuries to seals, and SNH and the JNCC will be consulted on this plan.

Impacts on other cetacean species including harbour porpoise, minke whale and white beaked dolphin were also considered by the Company. The JNCC and SNH advised that the temporary disturbance/displacement caused by the proposed Forth and Tay wind farms has the potential to affect the animals' energy budgets. However, these species are wideranging, and the spatial scale and temporary nature of the disturbance from wind farm piling and other construction activity is very small when compared to the range and movements of these species. The JNCC and SNH advised that disturbance to these species will not be detrimental to the maintenance of these populations at a favourable conservation status in their natural range. The JNCC and SNH 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 when the final wind farm layout, design and foundation options have been confirmed.

With regard to river SACs, the JNCC and SNH advise likely significant effect on River South Esk (designated for Atlantic salmon and fresh water pearl mussel ("FWPM")), River Tay (designated for Atlantic salmon, lamprey species and otter) and River Teith (designated for Atlantic salmon and lamprey species). Impacts could arise from disturbance to the species from construction noise, or possible effects of electro-magnetic fields ("EMF") arising from installed cables. Atlantic salmon are integral to the life cycle of FWPM, therefore any impacts to Atlantic salmon that prevent them from returning to their natural rivers may have a resulting effect on FWPM. The JNCC and SNH concluded that the proposed Forth and Tay wind farms would not adversely affect the integrity of these SACs as effects can be avoided through agreement on working practices and mitigation via conditions.

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 sandeel, cod and herring. It is recommended that during pile driving events, a soft start piling approach and piling schedules and construction programmes could mitigate noise impacts for these species. SNH and the JNCC also recommended pre and post construction monitoring of sandeels be carried out.

Regarding Priority Marine Features ("PMF"), SNH state that *Arctica islandica* (ocean quahog), has been recorded by the Company within their development site. SNH and the JNCC advise that this species is sensitive to smothering, and therefore would welcome potential mitigation measures for this species.

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.

With regard to Visuals, SNH and the JNCC advised that the proposed Forth & Tay wind farms 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. The scale and extent of development, if consented, is unprecedented within Scotland (onshore or offshore) in recent times. The most significant effects will be from the Development and NNGOWL with SWEL contributing least to the cumulative effects due to being furthest offshore.

SNH and the JNCC described the main cumulative impacts as follows:

In South Aberdeenshire/Angus, the Development would form a visually prominent feature across the sea-horizon and cause a significant change to the open sea views experienced from the coastal settlements of Montrose, Arbroath and Carnoustie and as seen from the A92, the East Coast railway, NCN Route 1 and the Angus Coastal Path. The Development would have major effects on coastal character including the highly scenic Montrose Bay and Lunan Bay and on the rugged and dramatic coast between Lang Craig and Deil's Heid north of Arbroath. In the north and south of this area, SWEL and NNGOWL in combination with the Development would result in significant cumulative effects on views and coastal character.

In East Fife, the Development and NNGOWL would form visually prominent features across the sea-horizon and result in significant changes to open sea views affecting the experience of remoteness and the natural aspect of the Tentsmuir coast, the coast between St Andrews and Fife Ness and the Isle of May. Both wind farms are likely to affect the landscape setting of St Andrews and appreciation of its historic skyline. They will also significantly affect views from beaches, golf courses and from the Fife Coastal Path between Crail and Tentsmuir. NNGOWL, being closest to this stretch of coast, would have a particularly severe effect and would also be seen from the Inner Firth of Forth.

In East Lothian, NNGOWL would form a visually prominent feature across the sea horizon and intrude on the spectacular seascape panorama which includes the distinctive Bass Rock and North Berwick Law.

Additionally, these offshore wind farms – particularly the Development and NNGOWL– 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 and the JNCC highlighted that because final designs cannot be assessed at this stage, of wind farm design (post-consent) will be important in mitigating landscape and visual impacts. As such, SNH and the JNCC recommend 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. 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. Conditions requiring the submission of a Development Specification and Layout Plan, Design Statement and a Lighting and Marking Plan will be included in any consent granted by Scottish Ministers under Section 36 of The Electricity Act (1989) and/or any marine licence granted.

The **Scottish Environment Protection Agency ("SEPA")**, a statutory consultee, stated that it did not object to the Development but did provide the following.

SEPA stated that since development will take place within some of the Firth and Forth coastal water bodies the river basin management planning ("RBMP") process should be considered and that marine licensing should assist in the delivery of RBMP objectives. The Company recognises the requirements of the Water Framework Directive and the Water







Environment and Water Services (Scotland) Act 2003 and intend to ensure the principles and requirements therein are incorporated into the construction and operation of the Project as applicable. It is expected that specific considerations will be detailed in a Construction Management Plan ("CMP") and method statements as required.

SEPA advised that the landfall location is close to the Designated Bathing Water at Seton Sands large scale sediment disturbance can result in elevated faecal coliform concentrations which can potentially lead to bathing water failure. SEPA stated that ideally works should take place out with the bathing water season.

The Company has considered the impacts on coastal marine recreational activities in the ES. These include scuba diving, surfing and other recreational activities which occur within the Offshore Export Cable Corridor including the landfall approaches. The ES also discusses the effects of the construction processes in detail, within the context of environmental impacts. The assessment concludes that disturbance (higher volumes of suspended sediment) due to cable burial is unlikely to occur for extended periods of time and will be highly localised leading to limited disruption. There may be very short periods of time during cabling works at the landfall coastline where impacts are higher, as construction activity may require partial closure of beach areas to recreation and access whilst cables are installed. Mitigation measures set out in the ES will be implemented to ensure that users of the area are made aware of construction activities. Therefore overall, the impact of construction of the Offshore Export Cable on diving, surfing and other coastal/beach and inshore recreational activity is assessed as low to negligible in terms of magnitude.

Landfall location, installation technique and detailed construction programme are yet to be finalised, and the Company will seek to maintain a dialogue with SEPA regarding any concerns once specific locations and installation techniques are confirmed.

SEPA advise that the accidental introduction of Non Indigenous Species ("NIS") or Marine Non-Native Species ("MNNS") has been highlighted as a risk for water body degradation under the Water Framework Directive ("WFD"). SEPA recommends that controls should be included in development planning and marine licensing for MNNS in line with WFD and Marine Strategy Framework Directive objectives, and EU Biodiversity Strategy targets. The Company outlines that the risk of invasive species introduction will be managed through prevention methods by following best practice.

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 ("CAR"). The Company is committed to consulting with SEPA and ELC regarding licensing requirements for crossing the Thornton Burn.

These requests will be captured under wider conditions for environmental monitoring and mitigation and will be included in any consent granted by Scottish Ministers under Section 36 of The Electricity Act (1989) and/or any marine licence granted.

Non-Statutory Consultees

Aberdeen International Airport (BAA Ltd) had no comments to make on the Development at this stage and will base their recommendations from National Air Traffic Services ("NATS") who had no comments to make on the application.







The Arbroath and Montrose Static Gear Association ("AMSGA") initially objected to the Development but withdrew the objection on the basis that certain conditions were included in any consent.

The AMSGA objections to the Development related to the potential effect of the Development on future stocks, area of sea lost to the fishing fleet, destruction of the sea bed during construction, increased marine traffic during construction and maintenance, and the potential impact to fishing heritage.

The AMSGA accept there is no scientific evidence to suggest that the construction and operation of the turbines will have any effect on the lobster, crab and fish stocks however in their original response did not want the Development to go ahead unless such evidence becomes available. With regard to loss of fishing grounds, the AMSGA is concerned that there will be a reduction in fishing grounds to both the inshore and offshore fleets. The Company has included their proposed mitigation in the ES and feel they are appropriate to reduce impacts on inshore and offshore fishing fleets which could arise from the project. In a meeting with MS-LOT, it was highlighted to the AMSGA that there would be no exclusion zone in and around the Site other than during construction.

The general disturbance and destruction to the seabed from concrete and noise pollution is causing concern to the AMSGA. Underwater noise modelling has been undertaken by the Company to estimate the level of noise likely to be produced during construction (details are provided in the ES). The outputs of this modelling have been used to undertake an impact assessment of likely effects on key species of fish in the region with respect to injury and behavioural criteria. The results of this impact assessment are presented in the ES.

With regard to increased marine traffic during construction and maintenance the Company agrees that marine traffic will increase within the area during both construction, operational and decommissioning phases however planning and mitigations are already being considered that will limit, monitor and control the activities of vessels associated with the Development ensuring that any risk to transiting and/or local traffic is minimised. Mitigations will include extensive lighting and marking, provision of information and the use of construction safety zones. A complete summary of proposed mitigation measures can be found in the ES.

With regard to heritage concerns the Company has assessed all potential impacts and proposed mitigation where appropriate within the ES. Each technical assessment reported in the ES has been undertaken based on a worst case scenario to ensure that the assessment has not underestimated any of the potential environmental impacts of the Development. Mitigation measures embedded in the design of the Development are referred to as "embedded mitigation" by the company in the ES. The embedded mitigation measures taken into account in the assessments are listed in each technical chapter. Additional mitigation measures have been identified in each chapter which will act to reduce the impacts of the Development further and on this basis the Company believe that any impacts will not be unacceptably adverse.

Conditions requiring that the Company continue to remain a member of the Forth and Tay Offshore Wind Developers Group - Commercial Fisheries Working Group ("FTOWDG-CFWG") and to develop a Commercial Fisheries Mitigation Strategy ("CFMS") which will include mitigation measures, including a lobster stock enhancement, if deemed necessary; andthe appointment 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.







Arbroath Harbour had no comments to make on the Development.

The **Arbroath Sailing and Boating Club** had no objection but raised concerns over hazards to mariners and the need for clearly marking the development with lights etc. The Company's ES outlines the proposed mitigation for the scheme in terms of visibility to other marine users. 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.

The **Association of Salmon Fishery Boards ("ASFB")** have objected to the Development citing concerns, particularly with regard to the uncertainty surrounding the potential negative effects on Atlantic Salmon and sea trout and the integrity of a number of Special Areas of Conservation for Atlantic salmon.

SNH and the JNCC have concluded that the Development would not adversely affect the site integrity of any freshwater SACs considered to have connectivity with the Development. SNH and the JNCC state in their advice that they considered other SACs, but only gave their assessment on those SACs where there may be connectivity with the Development. MS-LOT also concludes, after carrying out an AA, that the Development would not adversely affect the site integrity of any freshwater SAC designated for Atlantic salmon, Freshwater Pearl Mussel and Lamprey considered to have connectivity with the Development.

MS-LOT recognises that current scientific knowledge could be improved to better understand the migratory movements and behaviour of salmonids at sea and any interaction they have with renewable energy devices. In anticipation of this, MSS prepared a report "The Scope of Research Requirements for Atlantic Salmon, Sea Trout and European Eel in the Context of Offshore Renewables" (Malcolm *et al*, 2013). From this scoping report MSS has identified the need for and commenced the preparation of a national strategy plan to address the research and monitoring requirements for diadromous fish in the context of possible interaction with the emerging marine renewable energy industry. In taking this process forward, two meetings were arranged with relevant stakeholder groups to identify their perspectives on research priorities. Proposals included: the development and analysis of Scotland's national fish counter datasets and network, collation of datasets on salmon smolt populations in Scotland (to assess migration run times) and particle tracking model development, to name a few. Some of the above proposals such as the expansion of the fish counter network are already progressing as funding has been secured for the scoping stage.

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", environmental monitoring plan will be included in any consent granted by Scottish Ministers under Section 36 of The Electricity Act (1989) and/or any marine licence granted.

Bond Offshore Helicopters had no comments to make.

Bristows Helicopters Limited had no comments to make.

British Telecom ("BT") did not object as it concluded the Development should not cause interference to its current and presently planned radio networks.

Carnoustie Golf Links had no comments to make on the Development.







The Chamber of Shipping ("CoS") raised a number of concerns. CoS were concerned over the potential cumulative impacts on navigation resulting from the construction of all the Forth and Tay proposals with the increase in vessel traffic risking shipping routes. The CoS recommend that the Forth and Tay projects' construction timetables are made available as soon as possible.

The CoS stated that the Company's ES did not take into account the future increases in shipping density from the potential development of three to four biomass plants in the region. The Company state that within the ES the future case (with and without the Development) assessment made a conservative (10%) assumption on shipping traffic growth over the life of the Development and it is anticipated that this 10% increase considered is a generous amount for all future traffic in the Firth of Forth, including the development of three to four biomass plants.

The CoS wish for the export cables to be buried using techniques approved by the Maritime and Coastguard Agency ("MCA"). The Company noted the CoS comments regarding the burying of cables and stated that the export cables will, where suitable, be buried or will be protected by other means when burial is not practicable. The MCA comment that navigable water depth shall not be reduced by more than 5% of chart datum where protection is required is noted. Any relevant reduction in draft will be discussed with appropriate stakeholders once further export cable burial and/or protection information is available. The Company anticipate that implementation of appropriate burial or protection of cables will be agreed as part of a CMP which will require approval of the consenting authority prior to construction and shall be in accordance with guidance or requirements current at that time.

For vessels travelling east of the Development, the CoS feel that mitigation measures should be applied to ensure that a safely navigable corridor is maintained between the Development and the Firth of Forth Round 3 projects. Developers should refer to the current MGN 371 template which recommends a minimum distance of 3.5NM between offshore wind sites.

The CoS raised concerns regarding the "L" shape of the Development boundary and the risk posed to vessels heading south to the east of the Development. The Company are to consult with the MCA along with NLB with regards to suitable mitigation measures including marking and lighting.

The CoS were concerned about the preferred adverse weather routes no longer being available due to the offshore wind developments and stated that a corridor between sites may help mitigate the impacts.

The CoS raised concerns over the potential compression of traffic between the Development and Bell Rock. While the Navigation Risk Assessment ("NRA") has deemed navigational safety risks to be tolerable, the CoS request that their concerns are noted.

With the reduction in available sea room leading to the increase in navigational safety risks in the area and negative commercial impacts the CoS have discussed the possibility of a regional study with Marine Scotland and the developers to help identify additional mitigation options.

The Company state that given the number of vessels transiting through the region as a whole and the commercial implications of having to deviate in order to avoid construction works in multiple developments including works associated with all the elements of the Project, the receptor is considered to be of moderate sensitivity. This effect is moderately







likely to occur given that the construction phases of each development could overlap but will only be present for a limited duration and localised to the part of each development or export cable route where construction/installation work is taking place, resulting in a low magnitude. However it is noted that it is unlikely that the construction phases for the three developments will overlap completely. Nevertheless, the Company acknowledge the CoS suggestion for additional assessment and mitigation measures to be considered as project construction timetables are confirmed. An illustrative construction programme is presented in the ES. A detailed construction programme will be developed as design and procurement activities progress. The final construction program for the Development will be made available as soon as possible in order to enable a proper assessment of any additional navigational safety risks or route deviations.

Conditions requiring a Burial Protection Index ("BPI") assessment, an alteration to navigatable depth not exceeding 5% chart datum, Navigation Safety Plan ("NSP"), CMP, final plans on layout (Development Specification and Layout Plan) and lighting (Lighting and Marking 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.

The Civil Aviation Authority ("CAA") did not object to the Development but stressed the need to inform the Defence Geographic Centre of the locations, heights and lighting status of the turbines and meteorological masts, the dates of construction and the maximum height of any construction equipment to be used prior to construction to allow the inclusion on Aviation Charts. A condition capturing this requirement will be included in any consent granted by Scottish Ministers under Section 36 of The Electricity Act (1989) and/or any marine licence granted.

Dundee Sub Aqua Club had no comments on the Development.

East Fortune Airfield (East of Scotland Microlights) have no comments on the Development.

Eyemouth Harbour Trust did not object to the Development and support the potential for jobs and economic growth.

Fife Fishermens Mutual Association (Pittenweem) Limited ("FMA")did not object but 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.

Conditions relating to a Construction Method Statement ("CMS"), Cable Plan ("CP"), 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.

Forth Estuary Forum had no comments on the Development.



Historic Scotland ("HS") did not object to the Development and considered that there will be no adverse impacts on marine or terrestrial assets within their statutory remit of a significance to warrant an objection.

The **Inshore Fisheries Group ("IFG")** had no comments on the Development.

John Muir Trust had no comments on the Development.

The Joint Radio Company Limited ("JRCL") did not object to the Development.

Marine Scotland Science ("MSS") did not object to the Development, however requested further clarification of assessments carried out in the ES for certain receptors in order to allow a sufficient assessment of the potential impacts that may arise from the Development on each receptor. Discussion between ICOL and MSS allowed advice to be given as detailed:

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. Details are provided in the appropriate assessment.

Marine Mammals

MSS contributed towards the marine mammals section of the AA. Conditions detailing required mitigation and monitoring for marine mammals will be included in any consent granted by Scottish Ministers under Section 36 of The Electricity Act (1989) and/or any marine licence granted.

Commercial Fish

MSS recommend that any cables are buried to at least 1 metre where possible and that suitable protection is utilised where this burial depth is not achievable. There should also be a stipulation that the burial/protection of the cable is monitored and maintained for the lifecycle of the project.

MSS note the developers commitment to work with the industry through the FTOWDG-CFWG and see the value that this group will potentially play in helping minimise impacts where possible and provide the most appropriate forum for issues to be raised and worked through.

A condition for ICOL to continue its involvement in the FTOWDG-CFWG, a 1 metre minimum cable burial depth, cable protection and over trawl surveys post installation will be included in any consent granted by Scottish Ministers under Section 36 of The Electricity Act (1989) and/or any marine licence granted.

Marine Fish

MSS agree with the assessments made for most of these receptors identified by the Company. However, MSS are concerned that following the proposed mitigation options set out in the ES, there may still be a moderate impact on herring stocks in the area from impacts from construction noise. MSS would seek that following further refinement of the construction plan that there is consideration given where appropriate for additional mitigation during the peak spawning period for this species.



Although suitable habitat for sandeels has been identified through the habitat survey work, MSS has conducted surveys on similar sediment and depth and in the Firth of Forth area and these surveys would indicate that these areas would most likely be of low density compared to areas further east. MSS would therefore agree with the assessments made for this species.

MSS would also recommend that some post construction survey work be undertaken to validate the assessments made in the ES where appropriate, this could be determined once more information is available following a more detailed construction plan post-consent.

The survey and construction plan requirements will be included in any consent granted by Scottish Ministers under Section 36 of The Electricity Act (1989) and/or any marine licence granted.

Diadromous Fish

MSS have identified the key receptors and the main potential sources of impact (underwater noise and suspended sediment during construction work; underwater noise and EMF from cables during operation).

MSS agree with the mitigations put forward by the Company, including that:

- Piling operations will incorporate a soft start procedure as detailed in the ES which will reduce the potential for noise related fatality
- Cables will be suitably buried or will be protected by other means when burial is not practicable as considered in the ES which will reduce the potential for impacts relating to EMF; and
- Cables will be specified to reduce EMF emissions as per industry standards and best practice such as the relevant IEC (International Electrotechnical Commission) specifications.

MSS state that if a license is granted, licence conditions should ensure that mitigation will be adaptive and as far as possible will be able to take on board any improved information on good practice or additional impacts gained from this or other developments or from other work.

Regarding cable burying and protection, MSS state that it is particularly important close to landfall that the cables should be well-buried, protected or horizontally drilled.

MSS note that the capacity of young / small fish to move quickly away from high suspended sediments or loud noise, for example, will be limited.

The rivers for HRA consideration included all salmon SACs from the River Dee to the River Tweed and there was some consideration of cumulative and in-combination effects. It was concluded based on information the Company was able to access that the site integrity for any of these sites would not be adversely affected. Although there are information gaps and uncertainties, based on the information MSS have to hand, MSS would not challenge this. Although the "Tweed District Salmon Fishery Board" (should actually be "The River Tweed Commission") at the southern limit of the rivers being considered in the HRA material, was consulted, there was no consultation with the Dee DSFB at the northern limit. Although this would have been desirable, MSS are not going to request it.

A main priority at this stage is to develop approved monitoring plans, or put structures in place in the licence conditions to ensure that this takes place, including:







- to check modelled values, for example as appropriate, underwater noise levels during construction and operation, suspended sediment levels during construction, fields during operation.
- to ensure that construction and operational standards are maintained and that buried or protected cables, for example, remain so.
- to monitor the diadromous fish themselves, including if possible their presence and movements in the vicinity of the development, during and prior to construction and operation, as appropriate.

As already noted, there will also be a need to ensure that mitigation is as far as possible adaptive to take on board any improved information on good practice or additional impacts gained from this or other developments or from other work. There will be a need to keep this under review as development progresses. The Draft Environmental Management Plan ("EMP") gives a commitment for continued liaison with commercial marine fishing interests and there will be a need for similar arrangements in other areas.

MSS recommends that the main priority at this stage regarding diadromous fish is to develop plans for monitoring diadromous fish in the vicinity of the Development and to ensure that suitable mitigation measures can be applied proportionately to any impacts detected during monitoring. The evolution of the National Research and Monitoring Strategy for Diadromous Fish ("NRMSD") is currently on going with the aim of trying to address the many unknowns surrounding the life patterns of diadromous fish. A 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 for the Company to commit to participation in the monitoring strategy at a local level.

Within **Marine Scotland Compliance ("MSC")** based in Aberdeen, Anstruther and Eyemouth, Aberdeen responded and confirmed they had no comments to make on the Development.

The Maritime & Coastguard Agency ("MCA") raised no objection to the Development subject to conditions being attached on any consent. Cable burial and protection needs to be addressed, particularly close to shore where impacts on navigable water depth may become significant. The MCA requested the submission of the bathymetry data to support the Navigational Risk Assessment. This was provided by the Company. Conditions requiring the Company to submit final plans on layout (Development Specification and Layout Plan), lighting (Lighting and Marking Plan), emergency response 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.

The Ministry of Defence ("MOD") initially objected to the Development citing concerns with the Air Traffic Control ("ATC") radar at RAF Leuchars and the Air Defence ("AD") radar at Remote Radar Head ("RRH") Buchan. The applicant has been in discussion with the MOD and will submit a technical proposal to mitigate the effects of the development on the ATC radar at RAF Leuchars. With regard to the MOD concerns with the AD radar at RRH Buchan, a condition has been agreed where no turbine with a blade tip height greater than 186m above Mean Sea Level shall be erected in any part of the Development Area which is in line of sight coverage to the AD radar at RRH Buchan unless and until a technical mitigation proposal to address MOD concerns has been submitted by the Company and accepted by the MOD. These 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.







Montrose Port Authority did not object to the Development and supports the potential jobs created.

National Air Traffic Services ("NATS") had no comments to make on the Development.

Northern Lighthouse Board ("NLB") provided the recommendations that they would expect to be implemented on the conclusion of decisions regarding design, size and position of the turbines within the site area. The recommendations are based on the ES extracts accompanying the correspondence, including the Navigational Risk Assessments for both the Development Site and the Export Cables Corridor area.

The NLB require that Notice(s) to Mariners, Radio Navigation Warning and publication in appropriate bulletins will be required stating the nature and timescale of any works carried out in the marine environment relating to this project.

The NLB would propose that marking and lighting of the site will be required for the three phases of the Development life, namely the construction, operational and de-commissioning phases, to give the best possible indication to the mariner of the nature of the works being carried out.

During the construction phase the NLB would require that the site boundary shall be marked by up to 6 lit Cardinal Marker buoys. The Cardinal 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 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. The final location and identifying characteristics of these Cardinal Marks will be advised by NLB once turbine layout and construction plan are known.

If the final site design occupies the majority of the development area, it may be necessary to add a further intermediary lit Special Mark buoys on the development boundary lines to ensure that mariners are adequately warned of the construction site. All required buoyage shall remain in place until completion of the construction phase.

The NLB require that any vessel engaged in these works during the construction phase shall be marked in accordance with the International Rules for the Prevention of Collisions at Sea, and if any jack-up craft are used, in accordance with the Standard Marking Schedule for Offshore structures if secured to the seabed.

The NLB advise that they are unable to specify final marking and lighting requirements of the operational site until a decision has been reached on the size, number and layout of turbines, the final number and location of offshore sub-stations, and the cumulative impacts with regard to the NNGOWL and SWEL developments which the NLB will require to be consulted on.

In general terms, during the Operational Phase the windfarm site shall be marked and lit as per IALA Recommendation O-139.

With regards to lighting and marking the turbines for aviation, the NLB draw the developers attention to CAA trials with synchronised flashing medium intensity red morse 'W' (Whisky) lights replacing the fixed red lights that may have the potential to be interpreted as Marine Navigation lights when viewed from a distance. NLB would encourage the developer to seek approval from the CAA to use the synchronised red morse 'W' character.







The NLB note that the Export Cables Corridor is discussed and assessed as a separate project area to the main development site when considering the Navigational Risk Assessment and the conclusions drawn within the ES. The NLB require that the marking and lighting of any vessel engaged in the trenching, cable laying and protection operations will be marked in accordance with the International Rules for the Prevention of Collisions at Sea, and if jack-up craft are used in accordance with the Standard Marking Schedule for Offshore structures if secured to the seabed.

It may also be necessary to mark the landfall site of the export cable routes depending on the location chosen. The NLB would then require that Lit Cable Marker Boards should be positioned as near as possible to the shoreline so as to mark the points at which the cable comes ashore. The Cable Marker Boards 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.

Where cable protection is used, sufficient depth of water must be maintained for safe passage of existing marine traffic along the cables entire route. Any reduction in depth must be reported to the United Kingdom Hydrographic Office ("UKHO").

When the site eventually reaches the end of its designed life and there is a need to enter into dialogue with stakeholders on decommissioning options, the NLB would require that they are consulted on the requirement for marking and lighting during this phase.

All navigational marking and lighting of the site or its associated marine infrastructure will require the Statutory Sanction of the NLB prior to deployment.

The NLB require that the cable routes, offshore sub-stations and cable landing points should be communicated to the United Kingdom Hydrographic Office in order that all relevant charts and publications can be correctly updated.

A comprehensive contingency plan will be required, detailing the emergency response to all possible catastrophic failure and collision scenarios.

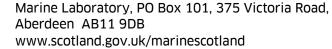
With respect to the application for a declaration under section 36A of the electricity act to extinguish navigation rights the NLB gueried whether it is necessary given the marine licence will permit placing structures on the seabed and that those structure will in themselves prevent navigation. The NLB feel if such a declaration is necessary this must be limited to the actual turbine, met mast, and sub-station locations only and in no way limits navigation between turbines. A consistent approach for all developments on this matter is advised by NLB.

Marine Scotland have since consented a section 36A for another wind farm proposal in the Moray Firth and consulted NLB on this also.

The NLB are content for a licence to be issued with the condition that NLB is consulted on final layout and development plans. The licence should ensure that the developer/operator provides marking to our requirements in all phases of construction, operation and decommissioning.







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.

The Royal Society for the Protection of Birds Scotland ("RSPB Scotland") initially objected to the Development and maintained their objection. Following their submission in 2013, the Company met with RSPB Scotland to present their proposals and approach to assessment of the ornithological elements of the project.

RSPB Scotland stated that they await finalisation and publication of further research as they are reliant on best available science to inform their position on the Development. RSPB Scotland wish to consider the potential cumulative environmental impacts of the Development with the NNGOWL and SWEL developments as it is apparent that a number of seabird species are likely to be significantly impacted by all three proposals. They also state that there is the potential for adverse impacts on the integrity of Special Protection Areas in the region.

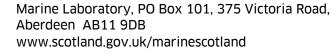
RSPB Scotland objected pending publication of the Marine Scotland commissioned CEH research on displacement effects and population modelling within the Forth and Tay region and, given the possible cumulative impacts, information including 'common currency' parameters to provide important contextual input from which they can reassess their position.

Further to the completion of the research projects, and the provision of SNH and the JNCC advice. RSPB Scotland provided a cumulative response to the Forth and Tay region on the 26th March 2014, but highlighted in correspondence with MS-LOT before doing so that they were reluctant to provide a full and final response until such a 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. The RSPB Scotland maintained their objection on the Forth and Tay developments for the following reasons:

- a lack of time between information becoming available and the consultation deadline to fully assess all environmental information which RSPB Scotland believes may be contrary to the requirements of the 2000 Regulations;
- it cannot be ascertained that the environmental impacts of the proposals alone and incombination, would not adversely affect the integrity of the Forth Islands. Fowlsheugh and St Abb's Head to Fast Castle SPA:
- RSPB Scotland believe that the environmental impacts, alone and in-combination, of the proposals would likely to result in unacceptable harm to seabird species, notably gannet, kittiwake and puffin. RSPB Scotland highlights that the national and regional population trends of some of these species are deteriorating, exacerbating its concerns:
- RSPB Scotland believes that high levels of uncertainty inherent in the methodologies applied to the assessment of environmental impacts and their subsequent interpretation mean 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 SPAs. RSPB Scotland does not consider that this precaution has been applied; and
- RSPB Scotland considers 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 Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended) or the MWR. Under the Habitats Regulations "a person applying for consent shall provide such information as the competent authority may reasonably 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 Development has shown that effects from the development alone and in combination with the other Forth and Tay developments are within acceptable limits and has concluded that the integrity of the SPAs of concern would not be adversely affected. MS-LOT consider that the assessment process has used the best available evidence. The assessment has also been highly precautionary as detailed in the Appropriate Assessment. MS-LOT do not consider that further assessment would add value to the decision making process.

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 ongoing 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, a condition relating to the local monitoring appropriate to the Development will be included in any consent granted by Scottish Ministers under Section 36 of The Electricity Act (1989) and/or any marine licence granted.

The Royal Yachting Association Scotland ("RYA Scotland") had no objections to the Development but did raise concern about navigation. Small vessels are not required to carry marine Very High Frequency ("VHF") radio, therefore, updating hydrographic charts and Sailing Directions, Pilots and Notice to Mariners is important. A condition requiring a navigational safety (Navigational Safety Plan) will be included in any consent granted by Scottish Ministers under Section 36 of The Electricity Act (1989) and/or any marine licence granted.

The Scallop Association ("SA") was consulted but no response was received directly from the organisation on the Development. However, the SA was included in the Scottish Fisherman's Federation response in the list of organisations it represents (see Scottish Fisherman's Federation below).

The Scottish Fishermen's Federation ("SFF") object to the application if fishing interests are not protected. The development area itself is in vicinity of scallop fishing grounds, whilst the cable route's primary interaction will be with *Nephrops* and creel fisheries. It is the view of the SFF that displacement due to loss of access will have a significant impact on the scallop fleet.



The SFF would like the FTOWDG-CFWG to be used to discuss and agree the layout for the development, both in terms of turbine siting and spacing, and cables, internal and exporting in order to minimise disruption to fishing activity. The SFF would also expect that group to agree to any programme of rolling closures associated with construction work to enable development, with the expectation that there would be no widespread barriers to fishing or navigation during construction. Similarly a clear protocol for the movements of construction traffic should be agreed in order to minimise the disruption to any fishing operations, particularly static gear.

The Company agrees that the FTOWDG-CFWG provides an opportunity to discuss certain issues such as protocols for vessel traffic and is committed to updating the fishing industry on their project layout and design outside of the FTOWDG-CFWG.

During construction, it is accepted that the soft start method will be used for piling, and there will be Marine Mammal Observers ("MMO's") utilised in this phase. The SFF would therefore expect that the MMO's would also be aware of the anecdotal evidence of piling noise shockwaves killing demersal species and note if that appears to be the case.

The SFF would also expect that the piling operation takes into account any aggregations of cod, herring or sprats in the vicinity which may be adversely affected by underwater noise.

On the subject of cables, the SFF notes that a target of 1 metre burial is given, which they would prefer to see as a minimum depth, both for cable protection and in order to assuage any concerns that fishers have over the effects of EMF on commercial species, but shellfish in particular.

The SFF would state a clear preference for the simultaneous laying and burial of cables, with rock dumping as the alternative where burial is not possible. The cable laying operation should be followed as soon as feasibly possible by overtrawling to try and return the area to a condition suitable and safe for fishing. Regarding the inter array cables it would appear to the SFF that the loop system described is more likely to prove an impediment to the possibility of fishing than the string system.

The Company noted the SFF's comments in respect of the potential impact of construction on fish stocks. The ES outlines that the area affected by noise levels that is likely to cause mortality, physical and auditory injury in the most hearing sensitive species (>130 dBht), is restricted to a maximum of 0.02 km2. It should also be noted that the implementation of soft-start procedures will result in many fish being displaced from the area of effect before noise levels reach the levels that injury and mortality are predicted. The magnitude of this effect is judged to be negligible as any death or injury of fish species has little potential to create impacts on the size and structure of the overall stock. The Company note the SFF's preference that no rings (loops) are proposed in cables, as confirmed in the ES this currently remains a design option and the concerns raised will be a consideration in the ICOL decision making process. Details of the cable laying operations will be developed through the engineering design process and included in the CMP. It is envisaged that this CMP will be discussed through the FTOWDG-CFWG or other appropriate stakeholder group, and will comply with any conditions of consent.

The SFF notes that the developers have adopted what they would recognise as best practice in ensuring that there exists a communications system utilising Fishery Liaison Officers and Fishing Industry Representatives and would encourage the full and proper use of this methodology. The SFF believes that developers should subscribe to a model whereby all information about their physical structures is disseminated correctly through such avenues







as Notices to Mariners and Kingfisher Fortnightly bulletin, in order to demonstrate a responsible approach to safety.

It would also be the contention of the SFF that developers should engage in a system whereby agreement could be reached to compensate fishermen for any damage or loss of earnings caused by unattributable debris on the seabed. A successful example of this mechanism already exists in the Oil and Gas industry.

The SFF would expect that the developers would provide an appropriate decommissioning plan prior to consent and that the said decommissioning plan would be a licence condition.

As most developers allude to employment opportunities for fishermen, and this particular application speaks about this in the Offshore Planning and Policy Statement, the SFF would expect that, prior to consent the developers would become much more specific, perhaps through the FTOWDG-CFWG, about exactly what opportunities are envisaged for training and employment.

The Company noted the SFF's comments regarding communications systems and remain committed to on-going engagement.

In relation to the contention that developers should engage in a system around compensation for debris on the sea bed, the Company remain committed to furthering such discussions as part of on-going communications with the fishing industry marine licence conditions will also be applied to mitigate this in due course.

The Company envisage that details regarding opportunities for employment will be a key feature of the on going discussions with the fishing industry and remain committed to furthering these discussions.

In addition, the Company have been engaging with the commercial fishing industry through collaborative consultation with the FTOWDG. The SFF are keen to continue to work with the fishing industry and seek guidance through the FTOWDG-CFWG.

The FTOWDG-CFWG is a very important part of the process, and the SFF would expect that MS-LOT would monitor the outputs of this group to ensure it serves its purpose and that the developers are co-operating with the fishing industry and complying with any conditions imposed on their licence.

As a pre-cursor to realistic debate on the mitigation needed for the development, the SFF would expect that the Rochdale envelope approach would be refined down to the "most likely" scale for the development as soon as feasible. The FTOWDG-CFWG Fisheries members can then begin to develop a better understanding of the real physical presence that is being proposed for introduction to their working environment.

The Company note the SFF's comments regarding the Rochdale/Design envelope. The design of the Development and OfTW continue to be progressed through the development process which will allow continued consultation on more detailed design. The final design will not be completed until after consent determination. This is primarily due to procurement and supply chain considerations, the requirement for further site investigation and continued design, and the timing of investment decisions. The Company will continue to engage with the commercial fishing industry at all stages through the development of the Project design to provide up to date information.



The SFF would seek the support of MS-LOT in ensuring that any and all licence conditions which are set on the first issue of the licence are then agreed, understood and acted on by all sub-contractors and subsequent owners of the Development.

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. 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.

Scottish Power Generation Limited ("SPGL") did not object to the Development but did raise concern over the onshore transmission works at Cockenzie. SPGL have secured consent to construct and operate a generating station at Cockenzie. The landfall options being considered by the Company could impact on SPGL's development interests. Therefore, SPGL recommended that further detailed information regarding the onshore transmission works to the grid connection are made available in order to enable a full assessment and consideration of the landfall options being proposed by the Company.

Discussions between the Company and SPGL have been ongoing since January 2012 regarding the interaction of the two parties interests in the area. In February 2014 a non-binding agreement in principle was reached between the two parties in relation to the potential acquisition of land for the Inch Cape onshore substation together with associated rights of access and rights to lay cables from the shore to the substation. The Company subsequently submitted a planning application for these works in June 2014 following consultation with stakeholders and with the required approval of Scottish Power. The Company and SPGL continue to liaise at a senior level and a due diligence process in relation to the potential land acquisition is ongoing.

Scottish White Fish Producers Association did not respond to the consultation although are represented by the SFF who did respond.

Scottish Wild Salmon Company (Usan) objects to the Development on the following grounds.

- The predicted impacts on the salmonid population and the potential economic impacts on their business if there is a change to the migratory behaviour of the species.
- Gaps in the knowledge base regarding salmon/sea trout populations, the impacts this will have on the population and on their business. As Usan own the private heritable titles to fish for salmon, which are considered commercial assets and critical to business, they cannot agree to any activity resulting in potential devaluation of these assets unless there financial mitigation measures provided.
- Knowledge gaps remain regarding developments of this type and scale and should not be taken forward until the effects are fully considered and mitigation planned for, both biologically and financially.
- As Usan are a mixed stock fishery, taking the proportion of fish from SAC rivers, they
 feel the Esk system and other areas will be affected to some degree. The Company's







assessment concludes that no barriers to migration, habitat loss, or significant disturbance are predicated to result through either construction or operation of the Project, either alone or with other projects.

MS-LOT have carried out an Appropriate Assessment on the effects of the Development on Atlantic salmon from the SACs rivers from the River Dee to the River Tweed and there was consideration of in-combination effects. It was concluded based on information the Company provided that the site integrity for any of these sites (Figure 1) would not be adversely affected. The Scottish Ministers are satisfied that the Development will not have an adverse effect on any SAC for salmon as shown in the AA. Should Usan feel their commercial interests are being affected by the Development, then it is a matter for Usan and the Company to come to a suitable agreement. 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", environmental monitoring plan will be included in any consent granted by Scottish Ministers under Section 36 of The Electricity Act (1989) and/or any marine licence granted.

Scottish Wildlife Trust ("SWT") had no comments on the Development.

Sport Scotland had no comments to make on the Development.

Surfers Against Sewage ("SAS") did not object to the Development however raised some concerns about the effects on wave resource. The ES concludes that the effects on the hydrodynamic regime and wave climate will be very small and localised and effects of the project were found to be very small compared, for example, to the natural variability in the metocean and sediment regimes on metocean processes.

The Crown Estate had no comments to make on the Development.

Transport Scotland, through JMP Consultants Limited, did not object to the Development stating that the Development would not have any significant environmental impact on the trunk road network but did recommend a condition to include a Construction Stage Traffic Management Plan to be submitted to East Lothian Council prior to commencement of works. A condition to reflect this will be included in any consent granted by Scottish Ministers under Section 36 of The Electricity Act (1989) and/or any marine licence granted.

Transport Scotland (Ports & Harbours) had no comments to make on the Development.

VisitScotland did not object to the Development but had some comments to make regarding Scottish tourism and the economy. Given the aforementioned importance of Scottish tourism to the economy, and of Scotland's landscape in attracting visitors to Scotland, VisitScotland would strongly recommend any potential detrimental impact of the proposed development on tourism - whether visually, environmentally and economically - be identified and considered in full. This includes when taking decisions over turbine height and number.

VisitScotland would also urge consideration of the specific concerns raised above relating to the impact any perceived proliferation of developments may have on the local tourism industry, and therefore the local economy.

Wemyss and March Estate had no comments to make on the Development.

Whale and Dolphin Conservation ("WDC")







WDC object to the proposal and have serious concerns about current levels of uncertainty and the possible negative impacts this Development, both individually and cumulatively, may have on cetaceans (whales, dolphins and porpoises) and seals in Scottish waters. WDC are concerned about the scientific uncertainty surrounding the impacts of pile driving during construction on all species, and in this region. As a result, their preference is that pile driving is not used at all during construction.

The predicted increase in disturbance and displacement of bottlenose dolphins, harbour porpoises, grey and harbour seals, from the construction of the Development, and incombination with other proposed developments, leads WDC to believe that whilst the ES has been well presented, it is not possible to rule out likely significant effects. WDC are also concerned about potential impacts to priority marine features, including minke whales and white-beaked dolphins.

WDC met with the Company and are aware that project specific mitigation and monitoring plans will be developed prior to construction and will reflect current guidance at the time of construction. The lack of a Marine Mammal Monitoring Programme ("MMMP") and a detailed Mitigation Plan to reduce the impacts of pile driving, increased vessel movements and in combination/cumulative impacts on marine mammals in the area makes it difficult for WDC to provide comments. For the MMMP, MMO's should be from a JNCC accredited source and there should be enough of them to work continuously without tiring. Passive acoustic monitoring ("PAM") should be conducted in parallel to visual observations at all times. For the Mitigation Plan, the WDC do not consider 'soft-start' to be an adequate mitigation measure to ensure there are no significant impacts as, soft start is not a proven mitigation technique and so cannot be relied upon to mitigate impacts, especially for developments in close proximity to SACs. WDC would prefer proven mitigation measures to be relied upon to maintain the conservation objectives and should consent be given, this should be a condition.

WDC would like the MMMP and Mitigation plan to be developed in consultation with scientists with expertise in the Natura species to ensure that monitoring of the bottlenose dolphin, and grey and harbour seal SAC populations contribute to existing monitoring studies, to understand how bottlenose dolphins and seals use the area and to assess any changes to site use or other significant impacts. The MMMP should be appropriate to the level of works. WDC requests involvement in the development of these plans.

WDC wish the Company to consider alternatives to pile driving. Use of noise-reducing techniques could considerably reduce the radius of impacts of this development and those in the region, would reduce cumulative impacts and could mean that there is less dependence on mitigation and less risk to developers. Should pile driving be conducted, further information on the pile driving method and mitigation techniques to reduce the impact of underwater noise generated during pile driving needs to be covered more significantly (as requested above). Considerable uncertainty remains about the efficacy of active acoustic devices, and the impacts resulting from their use and WDC do not consider their use to be a suitable or adequate mitigation.

WDC have concerns about the increase in vessel movements in the area during construction and, to a lesser extent, operation, especially considering the close proximity to the Firth of Tay and Eden Estuary harbour seal SAC. The port(s) to be used for the Development have yet to be decided, so WDC cannot make any specific comments at present.

WDC feel that the extent of corkscrew injuries is likely to be underestimated due to the low probability that carcasses that make it ashore and are found. Fife has been identified as one







of the UK's hotspots for corkscrew injuries as a cause of death for harbour seals, especially in summer months (Bexton et al., 2012). The use of ducted propellers should not be permitted unless they are guarded or potential impacts can be effectively mitigated in some other way, especially for harbour seals. If ducted propellers are to be used, a proposed Marine Mammal Corkscrew Injury Monitoring Scheme ("MMCIMS") should include MMO searches for seal carcasses to determine if injuries to seals are occurring. Beach searches should be conducted regularly enough to allow the carcasses to be 'fresh' enough for a cause of death, where possible, to be determined. There is growing evidence that harbour porpoises suffer from 'corkscrew injuries', in addition to seals (Deaville et al., 2013), including around Fife (Scottish Marine Animal Stranding Scheme ("SMASS"), unpublished data), Therefore any stranded marine mammals should be reported to the SMASS. Should any incident that results in mortality occur during construction, activities should be halted immediately until an investigation can be completed.

The percentage of the reference population of harbour seals predicted to be affected ranges from 7.4 to 12.2 per cent for PTS (low to medium magnitude of impact) to up to 53.3 per cent for some form of behavioural displacement (high magnitude of impact). Whilst WDC agree that these are classified as a 'high magnitude of impact' WDC have serious concerns about these values. Affecting such a high number of individuals from a SAC population is unacceptable, and could have devastating effects for an already declining population.

The ES states that 'the risk of corkscrew injury to harbour seal is deemed to be high. There are, however, such low numbers of harbour seals associated with the Firth of Tay and Eden Estuary SAC that the number of animals at risk of exposure to corkscrew injury is innately very low. Therefore, the impact of increased risk of injury to harbour seals from the use of ducted propellers during operation and maintenance activities is considered to be of minor magnitude'. WDC disagree with this statement.

Robust mitigation methods need to be put in place to ensure that there is no increase in adult (and juvenile) mortality due to permanent threshold shift ("PTS") or that behavioural displacement that affects breeding. WDC considers that a loss of even 1 individual from this decreasing harbour seal population is considered to be 'too high' (and significant at a population level), especially considering the significant decrease in the population which has occurred without the construction of marine renewable developments in the area.

The JNCC currently has a contract out to identify whether persistent areas for harbour porpoise are supported by available evidence, with a view to future SAC designations. Whilst WDC note that there are currently no SACs for harbour porpoises in Scotland, as an Annex II species and given the high density of porpoises in the proposed development and surrounding area, this area has the potential to be designated as an SAC to protect the harbour porpoise and for these reasons WDC feel that the harbour porpoise should be considered on the same level as harbour seals, grey seals and bottlenose dolphins.

There is still considerable uncertainty about the most appropriate management unit to use for harbour porpoise (Northridge, 2012). There is growing evidence of biologically distinct populations within the North Sea. The assessment of cumulative impacts needs to include all developments in the same range used for the population estimate.

The number of harbour porpoises predicted to be affected through temporary displacement is large and the duration of the effect is medium term. When cause of death ("CoD") can be determined from stranded harbour porpoises in Scotland, the main CoD is due to bottlenose dolphin attacks. Whilst the impact of PTS onset and behavioural displacement of harbour porpoises is expected to be minor, WDC have concerns about the high level of displacement







potentially moving porpoises into areas with high densities of bottlenose dolphins that they would normally avoid.

As mentioned above, WDC also have concerns about the use of ducted propellers causing fatal cork-screw injuries to harbour porpoises.

WDC agree that 'a moderate impact for the duration of the piling activities is predicted over the medium term'. However, WDC have concerns about the high level (15.3-19.4 %) of the population of bottlenose dolphins showing behavioural displacement during construction.

Aberdeen Harbour Development Environmental Impact Assessment Scoping Report has recently been submitted to Marine Scotland. Whilst WDC understand that to-date the Company did not need to account for Aberdeen Harbour extension in their cumulative impacts assessment, if construction of the two developments is likely to overlap, cumulatively there is likely to be a significant impact on the Moray Firth SAC bottlenose dolphin population. Furthermore, due to the known connectivity of the Moray Firth bottlenose dolphins, and the vast quantity of proposed and consented activity on the east coast of Scotland, WDC feel that the proposed Ardersier, Invergordon and Nigg developments should also be included in the cumulative impact assessment.

MS-LOT have included the Moray Fith offshore wind farms and the Moray Firth port developments in the AA for the Forth and Tay offshore wind farms. Sufficient detail was not available on the Aberdeen harbour development for inclusion in this in-combination assessment. However MS-LOT will be the licensing authority for the Aberdeen harbour development and will consider the in-combination effects with the Forth and Tay wind farms, Moray Firth wind farms and Moray Firth port developments prior to any consent being granted.

The area next to the development has been highlighted as an important habitat for white-beaked dolphins and minke whales by Marine Scotland in their Marine Protected Areas consultation. Therefore, WDC do not agree that potentially affecting up to 10% of the populations can be considered 'low impact' and 'minor'.

Other developments are considered to be of a sufficiently long distance from the Development Area and Offshore Export Cable Corridor, or there are no noisy or otherwise disturbing activities that may impact on marine mammals predicted to occur in relation to the Development, for there to be a cumulative effect on marine mammals. As stated above, all developments within the known reference population for each species should be assessed for cumulative impacts.

Whilst not a requirement for the HRA, WDC are grateful to note that the potential impact on other cetacean species e.g. minke whale, harbour porpoise and white-beaked dolphin, which are listed as Priority Marine Features and minke whale and white-beaked dolphin which are drivers in the Scottish Marine Protected Areas project, have been given adequate consideration in the HRA.

WDC welcomes the Company's collaboration with Marine Scotland, TCE and FTOWDG to conduct monitoring before, during and after construction to provide valuable data regarding the predicted to actual effects of the Development on marine mammal species to inform and further develop best practice measures. A licence to cause disturbance to EPS will be required for construction.



The Company's ES, including HRA, has been very well presented and the appropriate analysis (and more) has been conducted. However, WDC objects to this Development unless effective mitigation methods are developed and implemented during construction of the Development. WDC are of the opinion that the proposed Development is not compatible with the requirements on the Habitats Directive due to the potential effects on the integrity of the Firth of Tay and Eden Estuary harbour seal SAC. WDC considers that more needs to be done to ensure the survival of this population, rather than accepting that it is not going to be a biologically viable population in next few years.

Should consent be given to this proposed Development, WDC suggests the following consent conditions:

- Alternative methods to pile driving should be investigated.
- If pile driving is used, a noise-reducing barrier (such as a bubble curtain) should be maintained around the source to mitigate the impacts of radiated noise levels. The barrier should remain in place until piling has been completed. The use of noise-reducing techniques is the best way to reduce construction impacts to marine mammals.
- Visual and acoustic monitoring should be on going throughout construction.
- Activities should be halted when marine mammals approach within a specified distance of operations (mitigation zone).
- Ground-truthing of modelled noise assessment data should be undertaken.
- The Marine Mammal Protection Plan should be developed in consultation with scientists with expertise in the Natura species to ensure that monitoring of the bottlenose dolphin, and grey and harbour seal SAC populations contribute to existing monitoring studies, to understand how bottlenose dolphins and seals use the area and to assess any changes to site use and are appropriate to the level of works.
- The monitoring plan should include the recommendations from the Aberdeen scientific study 'Population consequences of disturbance'.
- The monitoring plan should be appropriate to all developments in the area (Forth and Tay, Aberdeen Bay and in the Moray Firth), scientifically robust, and all the developers should work together to achieve this.
- The use of ducted propellers should not be allowed.
- If the use of ducted propellers is permitted during construction and/or operation, there should be regular monitoring of beaches for stranded animals to determine if any injuries to marine mammals, e.g. corkscrew injuries, are occurring.
- Should any incident that results in mortality occur during construction, activities should be halted immediately until an investigation can be completed.

 Recommendation to Marine Scotland

An audit of Environmental Impact Assessments associated with marine spatial planning and the renewable energy industry should be undertaken, to identify strengths and weaknesses in assessments, with a view to ensuring best practice.

WDC further wrote to Marine Scotland, via Client Earth, on 30th April 2014 to provide comments on advice provided to the Scottish Ministers by SNH and the JNCC. Within this response, WDC 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 Moray Offshore Renewable Limited ("MORL") and Beatrice Offshore Windfarm Limited ("BOWL") in the Moray Firth, will not adversely affect 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 Appropriate assessment.

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. MS-LOT have informed WDC that they will be consulted on the MMMP, and the WDC have welcomed involvement in the MMMP.

The following did not respond to consultation:

CHC Helicopters Dunbar Fishermans Association Dunbar Harbour Trust Firth of Forth Lobster Hatchery Firth of Forth U10m Fishing Association Forth Ports **Neart na Gaoithe Offshore Wind Limited Marine Safety Forum National Trust For Scotland** North Sea Regional Advisory Council ("NSRAC") Planning Aid Scotland Scottish Canoe Association **Scottish Enterprise Scottish Federation of Sea Anglers** Salmon Fishing Net Association of Scotland **Scottish Seabird Centre** Scottish Surfing Federation Seagreen Wind Energy Ltd Scottish Fisherman's Organisation

The Company consulted with the following Community Councils (of which none responded to MS-LOT):

Cockenzie and Port Seton Community Council
Dunbar Community Council
Dunpender Community Council
East Lammermuir Community Council
Gullane Community Council
Longniddry Community Council
Macmerry and Gladsmuir Community Council
Musselburgh and Inveresk Community Council
North Berwick Community Council
Prestonpans Community Council
Tranent and Elphinstone Community Council
West Barns Community Council

5. Conditions

Following consideration of all relevant information, including the ES, 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 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 the 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 the carrying out of 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 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 the JNCC, SNH, 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) In the event that Seaton Sands forms the landfall location, details of how the Licensee will give consideration to the European Commission Designated Bathing Waters at Seton Sands, 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

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. Should it be deemed necessary by the FTOWDG-CFWG, the Licensee must undertake a feasibility study specifically to assess the use of alternate scallop gear within the Development area and must include how scallop gear may be redesigned to coexist with the Works infrastructure. If such a feasibility study is deemed necessary, this must form part of the CFMS. 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, the 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, the 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 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 coordinates 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 the 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, and the SFF 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) 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, 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 or the 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
- 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.

Navigational and Aviation Safety and Charting 5.2.2.14





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 Inch Cape 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.

5.2.2.16 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.

5.2.2.17 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.

5.2.2.18 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 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 must be equipped with an automatic identification system ("AIS") and automatic radar plotting aids ("ARPA").

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.

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").

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 and 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 Inch Cape 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 the Site boundaries are marked by Cardinal Mark buoys (number to be determined when final layout is known). 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 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 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 Inch Cape 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.

Section 36 Conditions

It should be noted that this EIA consent decision is required under the MWR. The conditions detailed above refer to those required for a marine licence for the transmission works if granted. Fewer conditions are required to be included in the marine licence for the wind farm if granted. This is because further conditions will also be included in any section 36 granted for this Development, therefore this EIA consent decision should be read alongside the section 36 if granted.

6. Regulatory Evaluation

6.1 Conclusions

In considering the application, in particular the ES 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 regulator, 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 Inch Cape Offshore Windfarm, 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 Inch Cape Offshore Windfarm in accordance with Regulation 22 of the MWR.

| Reviewed by: | Redacted |
|--------------------------|---------------------------------|
| Date: | 10 th September 2014 |
| Approved by: | Redacted |
| Date: | 15 th September 2014 |
| The Licensing Authority: | Marine Scotland |

