
MARINE SCOTLAND LICENSING OPERATIONS TEAM’S (“MS-LOT”) ASSESSMENT OF THE PROJECT’S IMPLICATIONS FOR PROPOSED SPECIAL PROTECTION AREAS (“pSPA”) IN VIEW OF THE SITES’ CONSERVATION OBJECTIVES.

APPLICATION FOR A MARINE LICENCE UNDER THE MARINE (SCOTLAND) ACT 2010 FOR SEDIMENT SAMPLING, INCH CAPE OFFSHORE WIND FARM DEVELOPMENT AREA AND OFFSHORE EXPORT CABLE CORRIDOR, FIRTH OF FORTH.

SITE DETAILS: INCH CAPE OFFSHORE WIND FARM DEVELOPMENT AREA AND OFFSHORE EXPORT CABLE CORRIDOR, FIRTH OF FORTH.

<table>
<thead>
<tr>
<th>Name</th>
<th>Assessor or Approver</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophie Humphries</td>
<td>Assessor</td>
<td>22/06/2018</td>
</tr>
<tr>
<td>Kerry Bell</td>
<td>Approver</td>
<td>22/06/2018</td>
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</tbody>
</table>
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APPLICATION FOR A MARINE LICENCE UNDER THE MARINE (SCOTLAND) ACT 2010 FOR SEDIMENT SAMPLING, INCH CAPE OFFSHORE WIND FARM DEVELOPMENT AREA AND OFFSHORE EXPORT CABLE CORRIDOR, FIRTH OF FORTH

SECTION 1: BACKGROUND

1 Appropriate assessment (“AA”) conclusion

1.1 This AA concludes that there will be no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA from Inch Cape Offshore Limited’s (“ICOL”) proposal, either in isolation or in combination with other plans or projects.

2 Introduction

2.1 This is a record of the AA of ICOL’s proposal to conduct sediment sampling within the Inch Cape Offshore Wind Farm Development Area and Offshore Export Cable Corridor. The assessment has been undertaken by MS-LOT. This assessment is required under Regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994 (“the Regulations”). This AA is in accordance with Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (“the Habitats Directive”) and Council Directive 2009/147/EC on the conservation of wild birds (“the Birds Directive”). MS-LOT, as the ‘competent authority’ under the Regulations, has to be satisfied that the project will not adversely affect the integrity of any European site (special areas of conservation (“SAC”) and special protection areas (“SPA”)) before it can grant consent for the project.

2.2 A detailed AA has been undertaken and Scottish Natural Heritage (“SNH”) has been consulted.

3 Background to including assessment of new SPA

3.1 The Scottish Ministers, as a ‘competent authority’ under the Regulations, must be satisfied that the proposal will not adversely affect the integrity of any European site (SAC and SPA, known as Natura sites) either alone or in

3.2 In Scotland, the Scottish Ministers are currently in the process of identifying a suite of new marine SPA. In 2014 advice was received from the statutory nature conservation bodies on the sites most suitable for designation and at this stage they became draft SPA ("dSPA"). Once the Scottish Ministers have agreed the case for a dSPA to be the subject of a public consultation, the proposal is given the status of proposed SPA ("pSPA") and receives policy protection, which effectively puts such sites in the same position as designated sites, from that point forward until a decision on classification of the site is made. This policy protection for pSPA is provided by Scottish Planning Policy (paragraph 210), the UK Marine Policy Statement (paragraph 3.1.3) and Scotland’s National Marine Plan (paragraph 4.45).

3.3 It is not a legal requirement under the Habitats Directive or relevant domestic regulations for this assessment to assess the implications of the proposal on the pSPA. The assessment includes an assessment of implications upon those sites in accordance with domestic policy. The Scottish Ministers are also required to consider article 4(4) of the Birds Directive in respect of the pSPA. The considerations under article 4(4) of the Birds Directive are separate and distinct to the considerations which must be assessed under this Habitats Directive assessment but they are, nevertheless, set out within this assessment (see paragraphs 9.4 and 9.5).

3.4 In accordance with regulation 50 of the Regulations the Scottish Ministers will, as soon as reasonably practicable following the formal designation of the pSPA, review their decisions if the proposal is authorised. This will include a supplementary AA being undertaken concerning the implications of the proposal on the sites as designated (as they are currently pSPA their conservation objectives are currently in draft form, their conservation objectives are finalised at the point the sites are designated).

4 Details of proposed operation

4.1 The proposal consists of drilling boreholes (including both the recovery of samples (including rock) and Piezo Cone Penetration Tests ("CPTU"), taking vibrocores and carrying out shallow Cone Penetration Tests ("CPT") within the Inch Cape Offshore Wind Farm Development Area and Offshore Export Cable Corridor as follows:
• Up to 110 boreholes (composite, sampling only and CPTU) undertaken within the Development Area;
• Up to 110 co-located vibrocores and CPT undertaken within the Development Area; and
• Up to 100 co-located vibrocores and CPT, undertaken within along the nominal centreline of the Offshore Export Cable Corridor.

4.2 The proposed works are to be conducted during a 14 month window (between 1 July 2018 and 30 August 2019) and are anticipated to last approximately 220 days although this could increase to 275 days.

4.3 Of the works identified above it is estimated that no more than 20 days of work will be carried out in the Development Area and Offshore Export Cable Corridor located within Outer Firth of Forth and St Andrew’s Bay Complex pSPA.

4.4 A maximum of two survey vessels will be operating at any one time in the Development Area and Offshore Export Cable Corridor within Outer Firth of Forth and St Andrew’s Bay Complex pSPA.

4.5 The sampling is being undertaken to inform the Wind Turbine Generator and Offshore Substation Platform foundation designs and the selection of appropriate trenching equipment/cable design for the new proposed Inch Cape Offshore Windfarm.

5 Consultation

5.1 SNH were consulted on 01 June 2018 and provided a response on 14 June 2018, which identified the need for an AA. SNH however requested further detail regarding the timing and duration of the works, as well as the number of vessels to be used within the Outer Firth of Forth and St Andrew’s Bay Complex pSPA.

5.2 SNH were further consulted on 15 June 2018 in respect of the additional detail submitted by ICOL. SNH provided their response on 19 June 2018.

6 Main points raised during consultation

6.1 SNH advised that the proposal is likely to have a significant effect on the qualifying interests of the Outer Firth of Forth and St Andrew’s Bay Complex pSPA due to the likelihood of breeding and non-breeding birds being present in and around the proposed activities.
SECTION 2: INFORMATION ON NATURA SITES

7 Background information and qualifying interests for the relevant Natura sites

7.1 This section provides links to the Scottish Natural Heritage Interactive ("SNHi") website where the background information on the site being considered in this assessment is available. The qualifying interests for the site are listed as are the conservation objectives.

Table 1 Name of Natura site affected and current status

| Outer Firth of Forth and St Andrews Bay Complex pSPA | http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=10478 |

Table 2 European qualifying interests

<table>
<thead>
<tr>
<th>Outer Firth of Forth and St Andrews Bay Complex pSPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Red-throated diver (Gavia stellata), non-breeding;</td>
</tr>
<tr>
<td>• Little gull (Hydrocoloeus minutus), non-breeding;</td>
</tr>
<tr>
<td>• Common tern (Sterna hirundo), breeding;</td>
</tr>
<tr>
<td>• Gannet (Morus bassanus), breeding;</td>
</tr>
<tr>
<td>• Arctic tern (Sterna paradisaea), breeding;</td>
</tr>
<tr>
<td>• Guillemot (Uria aalge), breeding and non-breeding;</td>
</tr>
<tr>
<td>• Slavonian grebe (Podiceps auritus), non-breeding;</td>
</tr>
<tr>
<td>• Eider (Somateria mollissima), non-breeding;</td>
</tr>
<tr>
<td>• Long-tailed duck (Clangula hyemalis), non-breeding;</td>
</tr>
<tr>
<td>• Common scoter (Melanitta nigra), non-breeding;</td>
</tr>
<tr>
<td>• Velvet scoter (Melanitta fusca), non-breeding;</td>
</tr>
<tr>
<td>• Goldeneye (Bucephala clangula), non-breeding;</td>
</tr>
<tr>
<td>• Red-breasted merganser (Mergus serrator), non-breeding;</td>
</tr>
<tr>
<td>• Manx shearwater (Puffinus puffinus), breeding;</td>
</tr>
<tr>
<td>• Razorbill (Alca torda), non-breeding;</td>
</tr>
<tr>
<td>• Puffin (Fratercula arctica), breeding;</td>
</tr>
<tr>
<td>• Black-headed gull (Chroicocephalus ridibundus), non-breeding;</td>
</tr>
<tr>
<td>• Common gull (Larus canus), non-breeding;</td>
</tr>
<tr>
<td>• Herring gull (Larus argentatus), breeding and non-breeding;</td>
</tr>
<tr>
<td>• Kittiwake (Rissa tridactyla), breeding and non-breeding;</td>
</tr>
<tr>
<td>• Shag (Phalacrocorax aristotelis), breeding and non-breeding;</td>
</tr>
<tr>
<td>• Waterfowl assemblage, non-breeding;</td>
</tr>
</tbody>
</table>

- Seabird assemblage, breeding and non-breeding.

Table 3 Conservation objectives

Outer Firth of Forth and St Andrews Bay Complex pSPA (Draft Conservation Objectives)

The following conservation objectives are still in draft form and have not yet been agreed.

To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, subject to natural change, thus ensuring that the integrity of the site is maintained in the long-term and it continues to make an appropriate contribution to achieving the aims of the Birds Directive for each of the qualifying species.

This contribution will be achieved through delivering the following objectives for each of the site’s qualifying features:

a. Avoid significant mortality, injury and disturbance of the qualifying features, so that the distribution of the species and ability to use the site are maintained in the long-term;

b. To maintain the habitats and food resources of the qualifying features in favourable condition.

SECTION 3: ASSESSMENT IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994

8 Requirement for appropriate assessment

8.1 Is the operation directly connected with or necessary to conservation management of the site?

8.1.1 The operation is not directly connected with or necessary to the conservation management of the site.

8.2 Is the operation likely to have a significant effect on the qualifying interest?

8.2.1 In their response, dated 14 June 2018, SNH advised that the proposal would have a likely significant effect on the qualifying interests listed above of the Outer Firth of Forth and St Andrews Bay Complex pSPA.

8.2.2 MS-LOT agreed with the advice and have undertaken an AA for the qualifying interests of the Outer Firth of Forth and St Andrews Bay Complex pSPA.
9  **Appropriate assessment of the implications for the site in view of the site’s conservation objectives.**

9.1 MS-LOT have considered the advice provided by SNH on 14 June 2018 and 19 June 2018 to support this assessment.

9.2 SNH concluded that the proposal will not adversely affect the integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA for the following reasons;

- the short duration of the proposed works within the pSPA;
- the minimal impact of the proposal to the seabed and supporting processes for the pSPA species; and
- the availability of large scale alternative areas within the pSPA to support the qualifying interests of the site.

9.3 MS-LOT concurs with the conclusions of SNH, that there will be no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA from the ICOL proposal in isolation.

9.4 As detailed in paragraph 3.3, as the Outer Firth of Forth and St Andrews Bay Complex pSPA has not yet been designated, it also falls within the regime governed by the first sentence of Article 4(4) of the Birds Directive as follows;

“In respect of the protection areas referred to in paragraphs 1 and 2, Member States shall take appropriate steps to avoid pollution or deterioration of habitats or any disturbances affecting the birds, in so far as these would be significant having regard to the objectives of this Article. Outside these protection areas, Member States shall also strive to avoid pollution or deterioration of habitats.”

9.5 MS-LOT has considered the information contained within the ICOL proposal and the advice provided by SNH and conclude that the works will not cause pollution or deterioration of habitats and any disturbance will be negligible.

10  **In-combination assessment**

10.1 MS-LOT have carried out an in-combination assessment to ascertain whether the ICOL proposal will have a cumulative effect with other plans or
projects which in combination would have the potential to affect the qualifying interests of the Outer Firth of Forth and St Andrews Bay Complex pSPA.

10.2 The following projects currently have an active marine licence and associated AA which identified a likely significant effect on the Outer Firth of Forth and St Andrews Bay Complex pSPA. Each project has been considered as to whether the works will have an in-combination effect with the ICOL proposal.

10.3 *Dundee City Council – Rock Armour Revetment Replacement at the Esplanade, Broughty Ferry*

10.3.1 The works comprise placement of two stretches of rock armour (200m and 352m long) along the esplanade, Broughty Ferry, Dundee. The construction consists of rock armour grading from 5kg to 1.5 tonnes.

10.3.2 The AA for this project concluded that there would be no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA. Given the localised nature of the Dundee City Council works, MS-LOT conclude that there will be no cumulative impact with the ICOL proposal on the Outer Firth of Forth and St Andrews Bay Complex pSPA.

10.4 *Aberdeen Harbour Expansion Project (Construction, Capital Dredging and Sea Disposal)*

10.4.1 Aberdeen Harbour Board proposes to develop a new harbour facility at Nigg Bay, Aberdeen, approximately 0.8km south of the existing harbour in Aberdeen City centre. Their proposal includes construction of two breakwaters, quaysides and associated infrastructure as well as a large-scale capital dredge and sea disposal operation. Works commenced in late 2016 and are scheduled to take place over a 3-year period. Dredging operations are expected to last until September 2019, which is when their dredging licence expires. Blasting operations are expected to commence in June 2018 for a maximum of 7 consecutive months. They are no longer undertaking any impact piling and will be using rotary piling, which is thought to produce less noise.

10.4.2 Full details of the project can be found in the documentation [here](#).

10.4.3 The AA for this project concluded that there would be no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA. Given the distance between the two projects, MS-LOT conclude there
will be no cumulative impact on the Outer Firth of Forth and St Andrews Bay Complex pSPA.

10.5 *Forthwind Offshore Development* – *Methil*

10.5.1 The Development consists of two, two-bladed lattice structure wind turbine generators (“WTGs”), associated infrastructure and electricity export cables approximately 1.5 km off the northern shore of the Firth of Forth at Methil, Fife. The WTGs will be located in waters 10 to 20m deep, have a hub height of 109 to 121m, a maximum tip height of 198.5m and a generating capacity per turbine of up to 9 megawatts (“MW”). The maximum rotor diameter of the turbines is 155m. Each turbine will have a substructure of steel jackets with pin piles. The turbines will have three main elements i.e. rotor, nacelle and tower. The project footprint for each turbine (includes turbine foundations, trenching for export cables and jack up barge/vessel footprint) will be 37,400m². There will be an export cable for each turbine that will connect to the sub-station and control building at Fife Energy Park. Construction has not yet commenced but is anticipated to take place over a 3 to 6 month period (with installation of the turbines and export cable expected to take 8 weeks) followed by testing and commissioning before becoming operational.

10.5.2 A full project description can be found [here](#). At present, the timescales for commencement of constructions activities are unclear.

10.5.3 The AA for this project concluded that there would be no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA. Given the short duration of the ICOL works located within the Outer Firth of Forth and St Andrews Bay Complex pSPA it is likely that there will be limited overlap (if any) with the timings of the works for these two proposals. MS-LOT therefore conclude there will be no cumulative impact with the ICOL proposal on the Outer Firth of Forth and St Andrews Bay Complex pSPA.

10.6 *Historic Environment Scotland – Pier Repair Works at Inchcolm Island*

10.6.1 Inchcolm Island is a small island in the Firth of Forth. The pier provides a berthing location for the ferry which is the only means of access to the island. New concrete will be overlaid on the existing lower pier and cracking on the high pier will be locally stitched and repointed. The horizontal quay slab will also be replaced to provide a safe surface for passengers to disembark. All quay furniture will be removed and replaced or renewed on a like for like basis.
10.6.2 The AA for this project concluded that there would be no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA. Given the short duration of the ICOL works which will be located near this project and within the Outer Firth of Forth and St Andrews Bay Complex pSPA, any overlap in timings of the two proposals will be limited. MS-LOT therefore conclude that there will be no cumulative impact with the ICOL proposal on the Outer Firth of Forth and St Andrews Bay Complex pSPA.

10.7 **ORE Catapult - Emergency Seawall Repairs, Levenmouth Turbine, Methil, Fife**

10.7.1 The works comprise emergency repairs to the steel wall which supports the walkway to the demonstration turbine at Methil, Fife, to repair erosion damage and prevent the risk of collapse of the walkway. The walkway will be disconnected from the ramp connecting to the concrete slab and lifting the landward end of the walkway on to temporary steel beams to support the walkway whilst repairs are conducted. Horizontal piles which form the retaining wall will be pulled back into position and secured to the existing vertical piles. 1500 tonnes of stone will be imported to backfill the void up to the retaining wall and the concrete slab removed and replaced. The works are scheduled to commence April 2018 and conclude by the end of August 2018.

10.7.2 The AA for the project concluded that there would be no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA. Given the limited duration of the ORE Catapult works and the limited duration of the ICOL works located within the pSPA there is unlikely to much overlap (if any) between these two projects. MS-LOT therefore conclude that there will be no cumulative impact with the ICOL proposal on the Outer Firth of Forth and St Andrews Bay Complex pSPA.

10.8 **Dredging Operations**

10.8.1 There are four dredging operations identified as having a likely significant effect on the qualifying features of the Outer Firth of Forth and St Andrews Bay Complex pSPA. The table below summarises these projects.

<table>
<thead>
<tr>
<th>Location of Dredge &amp; Type of Dredge</th>
<th>Reason for No Adverse Effect on Site Integrity</th>
</tr>
</thead>
</table>

Table 4 Dredging operations identified as having a likely significant effect on the qualifying features of Outer Firth of Forth and St Andrews Bay Complex pSPA.

<table>
<thead>
<tr>
<th><strong>Applicant</strong></th>
<th><strong>Activity</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dysart Sailing Club - Dysart</td>
<td>Maintenance dredge and sea disposal – Dysart Harbour</td>
<td>This small scale dredging operation is limited to spring and winter months and has a localised deposit site. The spoil is to be deposited below MWHS adjacent to harbour. In addition, the distance between this project and the ICOL proposal means it is unlikely that there will be an in-combination effect.</td>
</tr>
<tr>
<td>Forth Ports - Rosyth</td>
<td>Maintenance dredge and sea disposal – Port of Rosyth and Approach Channel</td>
<td>The AA for this Rosyth proposal concluded that the potential effects on the Outer Firth of Forth and St Andrews Bay Complex pSPA were negligible. This included consideration of the ability of marine birds to move away from disposal operations, the long history of dredge spoil disposal at this location and the availability of alternate areas of supporting habitat for the qualifying species. Unlikely to have an in-combination effect.</td>
</tr>
<tr>
<td>Forth Ports - Leith</td>
<td>Maintenance dredge and sea disposal - Port of Leith and Approach Channel</td>
<td>The AA for this Rosyth proposal concluded that the potential effects on the Outer Firth of Forth and St Andrews Bay Complex pSPA were negligible. This included consideration of the ability of marine birds to move away from disposal operations, the long history of dredge spoil disposal at this location and the availability of alternate areas of supporting habitat for the qualifying species. Unlikely to have an in-combination effect.</td>
</tr>
<tr>
<td>Fife Council</td>
<td>Maintenance dredge</td>
<td>This dredging operation is</td>
</tr>
</tbody>
</table>
Pittenweem and sea disposal – Pittenweem Harbour and Entrance Channel | relatively small and there is a long history of the works being carried out. Unlikely to be much overlap between this proposal and the ICOL works based within the Outer Firth of Forth and St Andrews Bay Complex pSPA. In addition, the distance between this project and the ICOL proposal means it is unlikely that there will be an in-combination effect.

10.8.2 All the projects above have been considered and although they have each been identified as having a likely significant effect on the Outer Firth of Forth and St Andrews Bay Complex pSPA for the reasons above MS-LOT have concluded that there will be no in-combination effect with the ICOL proposal.

10.9 **MS-LOT Conclusion**

MS-LOT conclude that the ICOL proposal will not adversely affect the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA, either in isolation or in combination with the other plans or projects detailed above.

**SECTION 4: CONDITIONS**

11 No conditions required.