

TABLE OF CONTENTS

SECTION 1: BACKGROUND	2
1 Appropriate assessment (“AA”) conclusion.....	2
2 Introduction.....	2
3 Background to including assessment of new SPA.....	2
4 Details of proposed operation.....	3
5 Consultation.....	4
6 Main points raised during consultation.....	4
SECTION 2: INFORMATION ON NATURA SITES	5
7 Background information and qualifying interests for the relevant Natura sites.....	5
SECTION 3: ASSESSMENT IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994	6
8 Requirement for appropriate assessment.....	6
9 Appropriate assessment of the implications for the site in view of the site’s conservation objectives.....	7
10 In-combination assessment.....	7
SECTION 4: CONDITIONS	13
11 No conditions are relied upon in reaching a conclusion of no adverse effect on site integrity.....	13

LIST OF FIGURES AND TABLES

Table 1 Name of Natura site affected and current status.....	5
Table 2 European qualifying interests.....	5
Table 3 Conservation objectives.....	6

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, NEART NA GAOITHE OFFSHORE WIND
FARM DEVELOPMENT AREA, 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 Neart na Gaoithe Offshore Windfarm Limited's ("NnGOWL") proposal, either in isolation or in combination with other plans or projects.

2 Introduction

- 2.1 This is a record of the AA of NnGOWL's proposal to conduct sediment sampling within the Neart na Gaoithe Offshore Wind Farm Development Area. 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

combination with other plans or projects before authorisations can be given for the proposal.

- 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 undertaking boreholes and cone penetration tests (“CPT”) within the Neart na Gaoithe Offshore Wind Farm Development Area as follows:
- Up to 34 - 59 boreholes undertaken within the within the windfarm area using a jack-up vessel; and up to 25 CPTs within the windfarm area; and

- Up to 18 boreholes undertaken within the Development Area using other vessels.
- 4.2 The proposed works are anticipated to last approximately from 26 October 2018 to 23 November 2018.
- 4.3 The proposed works will be undertaken using up to three survey vessels, including a single jack-up vessel.
- 4.4 Each borehole will be carried out to a maximum depth of 50m below the seafloor, with a maximum diameter of 100 mm, equating to a extraction volume of approx. 0.39m³ per borehole.
- 4.5 Approximately half of the proposed boreholes may be located within the pSPA boundary. Of the boreholes located within the pSPA, up to 10 may require the use of a jack-up vessel.
- 4.6 A total seabed area of 500.84m² will be impacted at each borehole location by the use of the jack-up vessel. Up to 10 boreholes will be drilled using the jack-up vessel within the pSPA, therefore, an estimated 5.048.4m² of the seabed will be impacted within the pSPA.
- 4.7 Up to half of the CPTs will be located within the pSPA boundary, however, a jack-up vessel will not be utilised for the CPTs.
- 4.8 The sampling is being undertaken to obtain data on seabed ground conditions in areas where wind turbines and offshore substations are planned to be installed as part of the proposed Neart na Gaoithe Offshore Windfarm.

5 Consultation

- 5.1 SNH were consulted on 18 September 2018 and provided a response on 21 September 2018, which identified the need for an AA.
- 5.2 SNH were subsequently consulted on 5 October 2018 in respect of the marine licence application for sediment sampling. SNH responded on 8 October 2018 confirming that their previous advice of 18 September 2018 remained valid.

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 as a result of disturbance to the seabed arising from the use of the jack-up vessel during the proposed works and subsequent impacts on the qualifying interests of the Outer Firth of Forth and St Andrews Bay Complex pSPA.

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 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 Andrew's Bay Complex pSPA

http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=10478

Table 2 European qualifying interests

Outer Firth of Forth and St Andrews Bay Complex pSPA

- Red-throated diver (*Gavia stellata*), non-breeding;
- Little gull (*Hydrocoloeus minutus*), non-breeding;
- Common tern (*Sterna hirundo*), breeding;
- Gannet (*Morus bassanus*), breeding;
- Arctic tern (*Sterna paradisaea*), breeding;
- Guillemot (*Uria aalge*), breeding and non-breeding;
- Slavonian grebe (*Podiceps auritus*), non-breeding;
- Eider (*Somateria mollissima*), non-breeding;
- Long-tailed duck (*Clangula hyemalis*), non-breeding;
- Common scoter (*Melanitta nigra*), non-breeding;
- Velvet scoter (*Melanitta fusca*), non-breeding;
- Goldeneye (*Bucephala clangula*), non-breeding;
- Red-breasted merganser (*Mergus serrator*), non-breeding;
- Manx shearwater (*Puffinus puffinus*), breeding;
- Razorbill (*Alca torda*), non-breeding;
- Puffin (*Fratercula arctica*), breeding;

- Black-headed gull (*Chroicocephalus ridibundus*), non-breeding;
- Common gull (*Larus canus*), non-breeding;
- Herring gull (*Larus argentatus*), breeding and non-breeding;
- Kittiwake (*Rissa tridactyla*), breeding and non-breeding;
- Shag (*Phalacrocorax aristotelis*), breeding and non-breeding;
- Waterfowl assemblage, non-breeding;
- 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 finalised.

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?*

Appropriate Assessment for Neart na Gaoithe Offshore Wind Limited, Sediment Sampling. October 2018.

8.2.1 In their response, dated 21 September 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 21 September 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 small number of proposed boreholes within the pSPA boundary;
- the short duration of time required for each borehole; and the end completion date of the proposed works;

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 NnGOWL 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 NnGOWL 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 has carried out an in-combination assessment to ascertain whether the NnGOWL 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 or consent, under section 36 of the Electricity Act 1989 (as amended) and associated AA which identified a likely significant effect on the Outer Firth of Forth and St Andrews Bay Complex pSPA. The in-combination effects of these plans and proposals are considered below.
- 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 NnGOWL 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. The works include 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. Blasting operations are expected to commence in June 2018 for a maximum of 7 consecutive months.
- 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 provided that the conditions set out in the AA were complied with and

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 project consists of the construction, operation and maintenance 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.

10.5.2 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. 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 NnGOWL 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 adverse impacts on the site integrity of 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. The licence is valid for a period of 6 months, until the end of March 2019, however, it is anticipated that the works will take place within a maximum 8 week window within this timeframe.

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 due to the short duration of the works, location of the works at an existing pier, the availability of extensive areas of supporting habitat and the ability of marine birds to move away from the repair works.

10.6.3 Given the short duration of the HES works, MS-LOT concludes that there will be no cumulative impact with the NnGOWL proposal on the Outer Firth of Forth and St Andrews Bay Complex pSPA.

10.7 *Inch Cape Offshore Limited ("ICOL") – Sediment sampling, Inch Cape Offshore Windfarm*

10.7.1 The works are to remove approximately 0.5m³ of material from the seabed through the taking of up to 110 boreholes and approximately 0.4m³ of material through vibrocores and cone penetration tests in the windfarm site; and approximately 0.4m³ of material through vibrocores and cone penetration tests within the offshore export cable corridor. It is estimated that no more than 20 days of work will be carried out within the Outer Firth of Forth and St Andrews Bay Complex pSPA.

10.7.2 The AA for this project concluded 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 proposal, either in isolation or in combination with other plans or projects, due to the short duration of the proposed works, the minimal impact of the proposal to the seabed and the availability of large scale alternative areas of habitat.

10.7.3 Given the short term duration of the ICOL works and the NnGOWL proposal, the availability of large-scale alternative areas of habitat and scale of predicted impacts on the seabed, MS-LOT conclude that there will be no significant adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA in-combination with the NnGOWL proposal.

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

10.8.1 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 take three weeks and conclude by the end of October 2018.

- 10.8.2 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 provided the conditions set out in the AA were implemented and complied with. Provided the conditions set out in the ORE Catapult AA are complied with, and given the short term duration of the proposal, MS-LOT concludes that there will be no adverse impact on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA.

10.9 *Dysart Sailing Club – Dysart Harbour*

- 10.9.1 Maintenance dredge and sea disposal on the foreshore below Mean High Water Springs (“MHWS”) in area to the west of the harbour. Dredging will take place annually over 3-5 days for a period of 3 years and a quantity of 1,200 wet tonnes of material will be removed each year. Dredging and disposal operations will be limited to winter and spring months and limited to the navigable channel between the harbour entrance and inner basin.

- 10.9.2 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. MS-LOT concludes that due, to the small scale and localised nature of both proposals, there will be no cumulative impact on the Outer Firth of Forth and St Andrews Bay Complex pSPA in-combination with the NnGOWL proposal.

10.10 *Forth Ports Limited – Rosyth and Leith Docks*

- 10.10.1 Maintenance dredge and sea disposal at the Leith and Rosyth docks and approaches. The Leith works comprise of maintenance dredging of the docks and approach channel consisting of 100,000 m³ of spoil per year and disposal at Narrow Deep B spoil ground for a period of 3 years. The Rosyth works comprise of maintenance dredging of the docks and approach channel consisting of 400,000 m³ of spoil per year and disposal at the Oxcars spoil ground for a period of 3 years.

A combined AA was undertaken for these activities due to the close proximity, complete overlap of active licence period and potentially affected Natura sites. The AA concluded that there would be no adverse effect on the site integrity of the Firth of Forth SPA. Due to the distance between the dredging and disposal operations and the NnGOWL proposal, MS-LOT does not consider that there will be a cumulative adverse effect in combination with the ORE Catapult proposal on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA.

10.11 *Forth Ports Limited - Newhaven Harbour*

10.11.1 Maintenance dredge and sea disposal activities at Newhaven Harbour, Firth of Forth. The licence is valid for a period of 3 years, until June 2019, and will consist of up to 27,000 tonnes of dredged material being deposited annually.

10.11.2 An AA was conducted for a previous proposal to conduct capital dredging and sea disposal activities. This AA concluded that there would be no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA due to the small scale of the works. SNH subsequently advised in May 2015 that the conclusions of the capital dredging AA could be carried forward to the maintenance dredge works as the maintenance dredging and disposal raised no other significant natural heritage issues. MS-LOT concludes that, due to the small scale nature and the availability of large alternative areas of habitat within the pSPA, there will be no adverse effect in combination with the NnGOWL proposal on the Outer Firth of Forth and St Andrews Bay Complex pSPA.

10.12 *Fife Council – Pittenweem Harbour*

10.12.1 Maintenance dredging of Pittenweem Harbour and sea disposal of the dredge material at the Anstruther disposal site. The licence is active for a period of 1 year, until June 2019, however, it is anticipated that operations will only take place during a 6 week window between June to July 2018. A total of 14,000 wet tonnes will be dredged from three areas and disposed of at the Anstruther disposal site.

10.12.2 The AA for this project concluded that there would be no adverse effect on the site integrity of the Outer Firth and St Andrews Bay Complex pSPA. MS-LOT concludes that, due to the small scale nature and short dredge window for the Fife Council proposal and the lack of temporal overlap with the NnGOWL proposal, there will not be an adverse effect in-combination with the NnGOWL proposal on the site integrity Outer Firth of Forth and St Andrews Bay Complex pSPA.

10.13 MS-LOT Conclusion

MS-LOT conclude that the NnGOWL 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 are relied upon in reaching a conclusion of no adverse effect on site integrity.