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MARINE SCOTLAND LICENSING OPERATIONS TEAM'S ("MS-LOT")
ASSESSMENT OF THE PROJECT'S IMPLICATIONS FOR
DESIGNATED SPECIAL AREAS OF CONSERVATION ("SAC"),
CONSERVATION OBJECTIVES.

APPLICATION FOR A EUROPEAN PROTECTED SPECIES LICENCE UNDER THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 (AS AMENDED) FOR GEOPHYSICAL SURVEYS

SITE DETAILS: MORAY OFFSHORE WINDFARM (WEST) LTD, MORAY FIRTH

Name	Assessor o	r Approver Date	
[Redacted]	Assessor	09/10/2018	
[Redacted]	Approver	Approver 09/10/2018	

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APPLICATION FOR A EUROPEAN PROTECTED SPECIES LICENCE UNDER THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 (AS AMENDED) FOR GEOPHYSICAL SURVEYS 2010 FOR MORAY OFFSHORE WINDFARM (WEST) LTD

SECTION 1: BACKGROUND

1 Appropriate assessment ("AA") conclusion

1.1 This AA concludes that there will be that there will be no adverse effect on the site integrity of the Moray Firth SAC from the Moray Offshore Windfarm (West) Limited ("Moray West") proposal, either in isolation or in combination with other projects, provided the conditions described in Section 4 are applied.

2 Introduction

- 2.1 This is a record of the AA of the Moray West proposal to perform a Geophysical survey. The assessment has been undertaken by MS-LOT. As the proposal is to undertake surveys both within and out-with 12 nautical miles, the following regulations apply:
 - Regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994 ("the Regulations").
 - Regulation 28 of the Conservation of Offshore Marine Habitats and Species Regulations 2017
- 2.2 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") 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") before it can grant consent for the project
- 2.3 A detailed AA has been undertaken and Scottish Natural Heritage ("SNH") has been consulted.

3 Details of proposed operation

3.1 Moray West propose to undertake geophysical surveys at the site of the Moray West Offshore Windfarm, located located on the Smith Bank in the Outer Moray Firth, approximately 22.5 km from the Caithness coastline. The windfarm will comprise up to 85 Wind Turbine Generators, Offshore Substation Platforms ("OSP"), inter-array cables, OSP interconnector cables and offshore export cables, which will come ashore at a point within the Landfall Area.

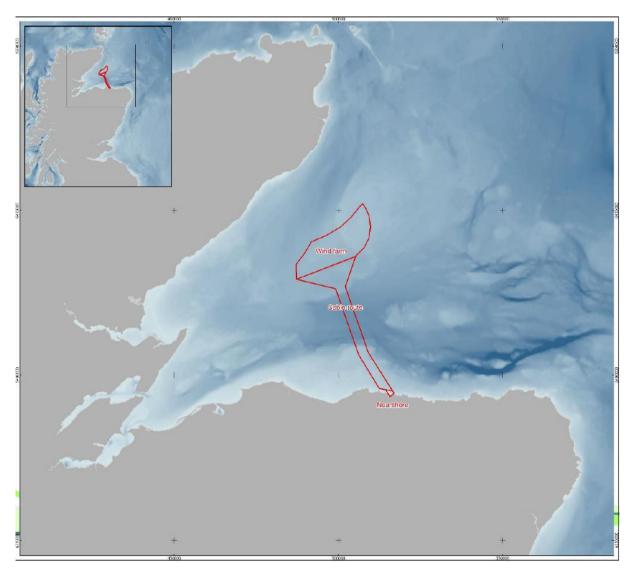


Figure 1 Moray West Offshore Windfarm, Cable Corridor and Nearshore Cable Area

3.2 Moray West has identified a need for offshore site investigations and marine surveys to begin in October 2018 in three areas of the proposed windfarm development as detailed in Figure 1. and as follows:

- 1. Wind farm array area;
- 2. Offshore export cable corridor; and
- 3. Nearshore export cable corridor.

Offshore Wind Farm Site

- Geophysical survey (including UXO survey)

Offshore Export Cable Corridor and Nearshore Cable Corridor

- Geophysical survey (including drop down camera for benthic ecology survey)

The surveys are planned to commence on 09 October 2018 and will be completed by 31 December 2018.

3.3 The proposed geophysical surveys are considered preliminary investigations to determine ground conditions for use in preliminary geotechnical design and ground modelling of the Moray West windfarm and export cable corridor.

4 Consultation

- 4.1 SNH were consulted on 15 August 2018 and replied on 28 August 2018. Further clarification was sought from SNH on 12 September 2018 and SNH replied on the same day.
- 4.2 Marine Scotland Science ("MSS") were consulted on 15 August 2018 and provided advice on 10 September 2018

5 Main points raised during consultation

- 5.1 SNH noted that the proposal is likely to have a significant effect on bottlenose dolphin (*Tursiops truncatus*) in relation to the Moray Firth SAC They recommended that the proposed EPS protection strategy (as outlined at section 4.2 of the EPS Risk Assessment as submitted by Moray West on 9 August 2018 document titled 'licensing technical report') is fully implemented.
- 5.2 MSS recommended that the mitigation presented in the EPS protection strategy (section 4.2 of the EPS Risk Assessment) is fully implemented to mitigate the risk of injury to these species.

SECTION 2: INFORMATION ON NATURA SITES

6 Background information and qualifying interests for the relevant Natura sites

6.1 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

Moray Firth SAC

https://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=8327

Table 2 European qualifying interests

Moray Firth SAC

- Bottlenose Dolphin (*Tursiops Truncatus*)
- Subtidal Sandbanks

No likely significant effect (direct or indirect) was identified in relation to subtidal sandbanks, therefore this qualifying feature is not considered further.

Table 3 Conservation objectives for bottlenose dolphin

Moray Firth SAC

To avoid deterioration of the habitats of the qualifying species (listed above) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site,
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species

No significant disturbance of the species

SECTION 3: ASSESSMENT IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 AND REGULATION 25 OF THE OFFSHORE MARINE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 2007

7 Requirement for appropriate assessment

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

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

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

In their response dated 28 August 2018, SNH advised that the proposal would have a likely significant effect on the bottlenose dolphin qualifying interest of the Moray Firth SAC due to disturbance associated with underwater noise generated by the use of geophysical survey equipment within the proposed wind farm area and the export cable route.

SNH noted that the export cable proposed route crosses the favoured transit route along the Moray Coast for bottlenose dolphins when they move from within the SAC around the East Coast and back.

MS-LOT agree with this advice and have undertaken an AA for the geophysical survey for the Moray Firth SAC in relation to bottlenose dolphin.

- 8 Appropriate assessment of the implications for the site in view of the site's conservation objectives.
 - 8.1 MS-LOT have considered the advice provided by SNH dated 28 August and 12 September 2018 and have used it to support this assessment.
 - 8.2 SNH have based their advice on the information contained within the EPS Risk Assessment.

- 8.3 SNH advised that, although bottlenose dolphins may be disturbed as a result of the geophysical surveys, there will be no adverse effect on site integrity as the duration of the surveys is limited between September and December. The applicant proposed mitigation measures in the document 'Moray Offshore Windfarm (West) Limited; European Protected Species (EPS) Risk Assessment'(9 august 2018). SNH recommend that the proposed EPS protection strategy (section 4.2 EPS Risk Assessment) is fully implemented and, in particular, highlighted the importance of;
 - The deployment of a Marine Mammal Observer ("MMO") to monitor for the presence of cetaceans prior to the commencement of, and during, marine geophysical and geotechnical operations;
 - For activities that take place in hours of darkness and/or in periods of poor visibility and/or during periods when the sea state is greater than Code 3, deployment of a Passive Acoustic Monitoring ("PAM") system prior to soft starts to detect for the presence of cetaceans that cannot be detected by the MMO;
 - Pre-soft start search;
 - 500 m mitigation zone for cetaceans;
 - · Deployment of soft-start techniques; and
 - Reporting.
- 8.4 SNH further recommend that survey works for the inshore area of the export cable commence close to the shore and then proceed offshore to reduce the risk of stranding.

9 In-combination assessment

9.1

MS-LOT has carried out an in-combination assessment to ascertain whether the Moray West 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 Moray Firth SAC. The following plans or projects currently have an active marine licence and/or consent under section 36 of the Electricity Act 1989 (as amended) and were predicted to have a likely significant effect on the bottlenose dolphin qualifying interest of the Moray Firth SAC. The in-combination effects of the following plans and projects are considered below;

- European Offshore Wind Deployment Centre
- Aberdeen Harbour Board, replacement of berth debris screen

- Aberdeen Harbour Expansion Project, construction, capital dredging and sea disposal
- Beatrice Offshore Wind Farm
- Moray East Modified Offshore Transmission Infrastructure
- Scottish and Southern Energy ("SSE") Geophysical Surveys
- Port of Cromarty Phase 4 Development Invergordon Service Base construction and dredging
- Moray East Offshore Windfarm
- Scottish Water, extension to outfall at Ardersier
- Montrose Port Authority construction of a new quay wall.
- Forth and Tay windfarm developments
- Hywind Scotland Pilot Park
- Kincardine Offshore Windfarm
- Dundee V&A Museum
- Avoch Harbour Trust Construction of a groyne, pontoon and slipway

9.2 European Offshore Wind Deployment Centre ("EOWDC")

- 9.2.1 Installation and operation of the EOWDC, consisting of 11 turbines, interarray and export cables located 2 to 4.5km east of Blackdog, Aberdeenshire. Construction commenced in November 2017, beginning with foundations and cabling. All construction works have been completed for this project, which is now in the operational stage.
- 9.2.2 The AA for this project concluded that there would be no adverse effect on the site integrity of the Moray Firth SAC provided that the conditions set out in the AA were complied with. Given the relatively short time scale of the Moray West proposal and provided, both projects adhere to their mitigation measures, MS-LOT conclude that there will be no adverse effect on the site integrity of the Moray Firth SAC in-combination with the EOWDC.

9.3 Aberdeen Harbour Board ("AHB"), replacement of berth debris screen

- 9.3.1 Removal and replacement of a damaged berth screen within Aberdeen Harbour.It is anticipated that works will be completed within a six week timeframe between August 2018 and mid-October 2018.
- 9.3.2 The existing damaged sheet piles will be removed using a vibro-hammer or cut off below bed level by divers if they cannot be removed. The vibro-hammer will be used intermittently for up to 20 to 30 minutes at a time to remove the damaged piles.

- 9.3.3 Four new tubular piles will be installed, initially with a vibro-hammer and if required an impact hammer to achieve the required set or where adverse ground conditions dictate. If an impact hammer is required, the final driving of each pile is anticipated to be between approximately 1 to 4 hours. The installation of four tubular piles is expected to take 1 to 2 days with 4 periods of impact driving of up to 4 hours.
- 9.3.4 Eight new interlocking sheet piles will be installed with a vibro-hammer. An impact hammer is unlikely to be required. The driving of each pile is anticipated to be between approximately 1 to 2 hours. The installation of eight sheet piles is expected to take 1 to 2 days with 4 to 8 period of vibro piling of up to 2 hours.
- 9.3.5 For all impact piling there shall be a soft-start period of not less than 20 minutes. If there is a pause in impact piling operations for a period of greater than 10 minutes, then the soft-start procedure shall be followed before recommencement.
- 9.3.6 The AA for this project concluded that there would be no adverse effect on the site integrity of the Moray Firth SAC provided that the conditions set out in the AA are complied with. Given the distance between the two projects and the relatively small timescale of the of the Moray West proposal, MS-LOT conclude there will be no in-combination effect on the site integrity of the Moray Firth SAC from the Moray West proposal

9.4 Aberdeen Harbour Expansion Project ("AHEP"), construction, capital dredging and sea disposal

9.4.1 AHB 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. Test blasting was undertaken in August 2018 and discussions are currently underway regarding future blasting operations. Therefore, timelines relating to blasting are yet to be confirmed. AHB are no longer undertaking any impact piling as they will be using rotary piling, which it is thought to produce less noise. All marine elements of the works are scheduled to be complete by February 2020.

9.4.2 The AA for this project concluded that there would be no adverse effect on the site integrity of the Moray Firth SAC provided that the conditions set out in the AA are complied with. Given the short-time scale of the Moray West proposal and provided that the conditions set out in the AHEP AA and this AA are implemented and complied with, MS-LOT conclude there will be no cumulative adverse impacts on the site integrity of the Moray Firth SAC.

9.5 **Beatrice Offshore Wind Farm**

- 9.5.1 Installation and operation of the Beatrice Offshore Windfarm, located 13.5km from the Caithness coast in the outer Moray Firth. The total area of the development is 131.5 km² The eastern edge of the development site is adjacent to the Moray East Offshore Windfarm. The operational lifespan of the wind farm is expected to be 25 years. The construction programme is expected to cover a period of three to five years. BOWL construction started in April 2017 and will continue until approximately the end of 2019. All piling activities and cable laying activities associated with the Beatrice Offshore Wind Farm have concluded.
- 9.5.2 The AA for this project concluded that there would be no adverse effect on the site integrity of the Moray Firth SAC provided that the conditions set out in the AA are complied with. Given the short-term nature of the Moray West proposal and provided that the conditions set out in both AA are complied with and implemented, MS-LOT conclude that there will be no significant adverse effects on the site integrity of the Moray Firth SAC in-combination with the Moray West proposal.

9.6 Moray East – Modified Offshore Transmission Infrastructure

- 9.6.1 The construction and operation of offshore transmission infrastructure in the Outer Moray Firth, to support the Moray Offshore Eastern Development, consisting of:-
 - Up to 2 OSPs with associated substructures and foundations;
 - Inter-platform cabling within the three consented Telford, Stevenson and MacColl wind farms; and
 - Up to 4 triplecore submarine export cables between the OSPs and the shore.
- 9.6.2 Recent project updates advised construction is likely to commence in March 2019. Given that there is unlikely to be any temporal overlap

between the project and the Moray West proposal, MS-LOT concludes that there will no in-combination effects on the Moray Firth SAC.

9.7 SSE, Geophysical survey and cable laying activities

9.7.1 SSE applied for a European Protected Species licence for geophysical survey works, use of positioning equipment, and cable laying activities along the route of the Caithness to Moray high-voltage, direct current cable. The survey works consist of use of geophysical equipment which emits sound and noise generate from cable laying activities. The cable laying works were initially licensed until 31 March 2018 but SSE have since applied for two variations to extend the validity of the licence. The current licence expires on 31 August 2019.

The AA for this project concluded that there would be no adverse effect on the site integrity of the Moray Firth SAC provided that the conditions set out in the AA are complied with . Given the short term nature of the Moray West proposal and provided that the conditions set out in both AAs are complied with and implemented, MS-LOT conclude that there will be no significant adverse effects on the site integrity of the Moray Firth SAC in-combination with the Moray West proposal.

9.8 Port of Cromarty ("PoCF") – Phase 4 Development – Invergordon Service Base, construction works and dredging operations

- 9.8.1 These works involve land reclamation to provide an additional 4.5Ha of laydown space to the west of the previously completed phase 3 development, including the construction of 215m of quay wall to create a new berth adjacent to the existing berth 5, providing a 369m long combined quay face. Fendering will then be installed along berth 5 and the new berth 6.
- 9.8.2 A rock armour revetment will be constructed along the north and west sides of the new laydown area with a tubular and sheet piled wall forming the new quay. The existing rock armour will be removed from the western edge of the phase 3 development and re-used on phase 4. The area will then be lined with a geotextile membrane and infilled, before appropriate drainage, bollards and services are installed prior to surfacing.
- 9.8.3 Dredging will be required along the toe of the new revetment structure and a second campaign will be required to create a finished depth of 12

metres along the new berth. The total dredge volume is estimated to be 110,000m³. It is anticipated that up to 60,000m³ of dredge material will be suitable for re-use within the land reclamation and that the remainder will be deposited at the Sutors dredge spoil deposit area.

9.8.4 The works are scheduled to take place between 01 November 2018 and 31 March 2020, as such there may be a limited temporal overlap with the Moray West proposal. The AA for the PoCF proposal concluded that there would be no adverse effect on the site integrity of the Moray Firth SAC provided the conditions set out within the AA were complied with. MS-LOT therefore conclude that, provided the conditions set out within this AA and the PoCF AA are implemented and complied with, there are unlikely to be any significant adverse effects on the Moray Firth SAC incombination with the Moray West proposal.

9.9 Moray East Offshore Windfarm

- 9.9.1 The Moray Offshore Eastern Development consists of three proposed wind farm sites: the Telford, Stevenson and MacColl wind farms all situated within the development area. The original design envelope was for up to 339 WTGs with a maximum generating capacity of up to 1,500 MW. This has since been reduced to a design with a maximum generating capacity of up to 1,116 MW and for a maximum of 186 WTGs. The proposals are located on the Smith Bank in the outer Moray Firth (approximately 22 km from the Caithness coastline, in water depths of 38 57 m). The operational lifespan of the wind farms is expected to be 25 years.
- 9.9.2 Substructure and foundation design for the WTGs will consist of either a mixture of, or one design option of:
 - concrete gravity base foundation with ballast and a gravel/grout bed, or
 - steel lattice jackets with pin piles.
- 9.9.3 A full project description for the Moray Offshore Eastern Development can be found <u>here</u>.
- 9.9.4 Construction is anticipated to commence in April 2019, with piling activities due to commence in July 2019.
- 9.9.5 Given that there is unlikely to be any temporal overlap between the project and the Moray West proposal, MS-LOT concludes that there will no in-combination effects on the Moray Firth SAC.

9.9.6 Montrose Port Authority, construction of new quay

The proposed works include the construction of a new quay wall and hard standing area. The new quay wall will be a piled structure installed using a combination of vibro and impact piling. If necessary, the existing quay wall will then be removed before the area is infilled to form the final surface. The main piling works are scheduled to commence in September 2018. Works are scheduled to continue until June 2019.

The AA for this project concluded that would be no adverse effect on the site integrity of the Moray Firth SAC. Given the distance between the project locations and the relatively short duration of the Moray West proposal, and provided the conditions set out within both AAs are complied with, MS-LOT conclude that there is unlikely to be any adverse effect on the site integrity of the Moray Firth SAC in-combination with the Moray West proposal.

9.9.7 Forth and Tay Windfarm Developments

When considered collectively, the following developments are referred to as the "Forth and Tay Windfarm Developments";

- Neart na Gaoithe Offshore Windfarm Limited development ("NNGOWL"), approximately 15.5km to the east of Fife Ness in the outer Firth of Forth.
- Inch Cape Offshore Limited development ("ICOL"), approximately
 15km to the east off the Angus coastline.
- Seagreen Alpha Wind Energy Limited development ("SAWEL"), approximately 27km off the Angus coastline.
- Seagreen Bravo Wind Energy Limited development ("SBWEL"), approximately 38km off the Angus coastline.

A full project description for each development can be found here: NNGOWL, ICOL, SAWEL, SBWEL. These projects all received marine licences and consent under section 36 of the Electricity Act 1989 (as amended) in October 2014. These projects have not been progressed due to delays associated with a judicial review and all three projects are due to submit, or have recently submitted, applications for new consents and licences during 2018. In any event, construction activities are not anticipated to commence in the near future.

Given that there is unlikely to be any temporal overlap between the project and the Moray West proposal, MS-LOT concludes that there will no incombination effects on the Moray Firth SAC.

9.9.8 Hywind Scotland Pilot Park

The Hywind Pilot Park is located approximately 25km off the coast at Peterhead, North East Scotland just outside the 12nm territorial water limit. The project includes construction, installation, operation and maintenance activities. Five 6MW wind turbine generators ("WTGs") have been installed and are expected to produce up to 135GWh per year of electricity. The turbines are positioned between 800 to 1,600m apart and attached to the seabed by a three-point mooring spread and anchoring system. Three anchors are required per turbine and the radius of the mooring system extends between 600 to 1,200m out from each turbine. All construction and installation works are complete and the project is now in the operational phase.

A full project description can be found here.

The AA for this project concluded that there would be no adverse effect on the site integrity of the Moray Firth SAC. The AA for this project concluded that there would be no adverse effect on the site integrity of the Moray Firth SAC. Given the distance between the project locations and the relatively short duration of the Moray West proposal, and provided the conditions set out within both AAs are complied with, MS-LOT conclude that there is unlikely to be any adverse effect on the site integrity of the Moray Firth SAC in-combination with the Moray West proposal.

9.9.9 Kincardine Offshore Windfarm

The works consist of the construction and operation of a demonstrator floating offshore windfarm development, located to the south east of Aberdeen, approximately eight miles from the Scottish coastline. The development is considered a commercial demonstrator site, which will utilise floating semi-submersible technology to install six or eight wind turbine generators (WTG), with a combined maximum generating capacity of 50 MW, in approximately 60 to 80 m of water. The proposal also includes interarray cabling to the connection point at the onshore Redmoss substation, Altens, Aberdeen. Phase one of the construction has been completed and phase two begins in April 2019. A full project description can be found <a href="https://example.com/here-new-market-new-mark

The AA for this project concluded that there would be no adverse effect on the site integrity of the Moray Firth SAC. Given that there is unlikely to be any temporal overlap between the project and the Moray West proposal, MS-LOT concludes that there will no in-combination effects on the Moray Firth SAC.

9.9.10 Dundee V & A Museum

Construction of the V&A on the north bank of the Tay between Discovery point and the north landfall of the Tay Road Bridge. The site is primarily onshore with a small element projecting at ground level by 15-20m beyond the original river wall. This part of the building is supported around its perimeter on a continuous row of piles which have formed a new river wall. A cofferdam of approximately 140m length was installed to provide structural integrity and enclosed an area of around 1450m² which created a dry environment for the construction of the V&A. The licence has since been varied to allow the removal of the cofferdam during the summer months of 2018. The licence expires on 31 December 2018.

The AA for this project concluded that there would be no adverse effect on the site integrity of the Moray Firth SAC. Given the small scale nature of the Moray West proposal and the distance between these two projects, and provided the conditions set out within both AAs are complied with, MS-LOT conclude that there is unlikely to be any adverse effect on the site integrity of the Moray Firth SAC in-combination with the Moray West proposal.

9.10 Avoch Harbour Trust – Construction of a Groyne, Pontoon and Slipway

- 9.10.1 The groyne was constructed using armoured rock and completed in March 2017. Installation of the pontoons will begin in March 2019. Rolled steel joints will be bolted to the inner harbour walls and attached to the walkways. The outer ends of the pontoon fingers will be anchored to the seabed with chains and concrete blocks. These works should be completed by October 2019.
- 9.10.2 The concrete work at the slipway will be carried out at low tide in March 2021/2022 using portable shuttering and ready mixed concrete. As the timescales of the Avoch Harbour Trust works and Moray West proposal do not overlap, MS-LOT conclude that there will be no in-combination impacts on the Moray Firth SAC.

9.11 Scottish Water, extension to outfall pipe at Ardersier

- 9.11.1 Extension of an existing outfall pipe to the lowest astronomical tide through the installation a new 310 metre long pipe (in order to meet the Scottish Environment Protection Agency's dilution requirements). The works will involve clearance of rock armour on the foreshore to enable the removal of existing manhole chambers. A short section of sheet pile cut will be installed using vibro-piling to just seaward of Mean High Water Springs. A pipeline trench will then be excavated using a jack up barge. The trench will be graded due to the gravelly substrate so may be up to 27 metres wide at the surface to allow a 1 metre width at the base. A pair of small diameter tubes will be installed using vibro-piling at 50 metre intervals along either side of the trench to keep the pipeline centralised within the trench during pipe pulling operations. The new pipe will be filled with air to make it buoyant while it is pulled into position. It will then be gradually flooded to allow it to sink into the trench. It will be weighted down with pre-cast concrete collars. A diffuser will be installed at the end of the pipe before the trench is backfilled using excavated material.
- 9.12 The works are scheduled to commence in January 2019 and be completed by March 2019, however, there is the potential for delay caused by weather conditions, making it unsafe to carry out crew transfer on and off the jack-up barge. This may mean that the works cannot be completed until the end of May 2019.
- 9.12.1 The AA for this project concluded that there would be no adverse effect on the site integrity of the Moray Firth SAC. As the time scales of the Scottish Water works and Moray West proposal do not coincide MS-LOT conclude there will be no cumulative impacts on the site integrity of the Moray Firth SAC in-combination with the Moray West proposal.

9.13 **Dredging Operations**

9.13.1 There are a number of dredging operations which were identified as having a likely significant effect on a designated site or the pSPA which could also be affected by the Scottish Water proposal. The table below summarises these projects.

Table 4 Dredging operations identified as having a likely significant effect on the Moray Firth SAC

Location of Dredge	Amount of Dredge Material	Dredge Spoil Deposit Area	Date of licence
Nigg Energy Park	6000m³	Sutors	27 March 2017 - 26 March
raik			2020
Macduff	48,000 m ³	Macduff	22 February
Harbour			2016 – 21
			February 2019
Portnockie	1000m³	Buckie	06 October
			2016 – 05
			October 2019
Findochty	2900m³	Buckie	06 October
			2016 – 05
			October 2019
Cullen	1000m³	Buckie	06 October
			2016 – 05
			October 2019
Hopeman	500m³	Burghead	06 October
			2016 – 05
	11000		October 2019
Cromarty	110,00m ³	Sutors	01 November
			2018 – 31
0	00003	0.1	March 2020
Cromarty	2000m³	Sutors	01 October – 31
Harbour Trust	4.000	A a ala	October 2019
Avoch Harbour	1,000	Avoch	02 January
	tonnes	Harbour	2018 – 01
			January 2019

- 9.13.2 All of the projects listed in Table 4 above were identified as having a likely significant effect on the bottlenose dolphin qualifying feature of the Moray Firth SAC.
- 9.13.3 The AAs for these projects concluded that there would be no adverse effect on the site integrity of the Moray Firth SAC. Given the short-term duration of the Moray West proposal, the proposed dredge windows for some of the projects listed above and provided that the conditions set out within the AAs

for the respective projects are implemented and complied with, MS-LOT conclude that it is unlikely that there will be a significant adverse effect on the Moray Firth SAC as a result of the dredging activities listed above incombination with the Moray West proposal.

9.14 MS-LOT Conclusion

9.14.1 MS-LOT conclude that, providing the conditions set out in Section 4 below are implemented and complied with, the Moray West proposal will not adversely affect the site integrity of the Moray Firth SAC, either in isolation or in combination with the projects or projects detailed above.

SECTION 4: CONDITIONS

10 Requirement for conditions.

- 10.1 The licensee must ensure that all licensed activities are carried out in strict accordance with the mitigation and working methods proposed in the application for this licence to disturb European protected species, together with supporting information and all works must be carried out within the timescale's given within the application and any subsequent written correspondence between the Scottish Ministers and the licensee, but subject to the following modifications or amendments made within this licence.
- The licensee must ensure that all licensed activities are carried out in strict accordance Moray Offshore Windfarm (West) Limited EPS Risk Assessment (9 August 2018) but subject to the following modifications or amendments made within this licence.
- 10.3 In the event of the licensee becoming aware that any of the information on which the issue of this licence was based has changed, the Scottish Ministers must be notified as soon as reasonably practicable.
- 10.4 The licensee must ensure that the Joint Nature Conservation Committee ("JNCC") guidelines for minimising the risk of injury to marine mammals from geophysical surveys dated August 2017 ("JNCC Guidance") is followed at all times in connection with the undertaking of such surveys as far as it is practical to do so. These are available from the JNCC website.

http://jncc.defra.gov.uk/pdf/jncc_guidelines_seismicsurvey_aug2017.pdf

- 10.5 The licensee must ensure that, if any aspects of the licensed activities differ from the detail submitted in the online Marine Noise Registry, a new Proposed Activity Form is completed and submitted no later than one week prior to commencement of the licensed activities.
- 10.6 The licensee must ensure that a mitigation zone with a radius of 500 metres is employed by the Marine Mammal Observer ("MMO").
- The licensee must ensure that all MMOs utilised during nearshore survey works are experienced and qualified and are dedicated solely to the task of observing marine mammals. The licensee must ensure that sufficient MMO coverage is available for all watches during daylight hours.
- 10.8 The licensee must ensure that MMOs utilised during the offshore survey are suitably experienced and JNCC trained. This role can be undertaken by a member of the crew who may have other duties but must be dedicated to MMO duties at the appropriate time. The licensee must ensure that sufficient MMO coverage is available for all watches during daylight hours.
- 10.9 The licensee must ensure that during the hours of darkness or when visual observation is not possible due to weather conditions or when sea state is greater than Code 3, a proven PAM system and experienced operator dedicated to that role is employed.
- 10.10 The licensee must ensure that if the surveys are being carried out in transects which run parallel to the shore, during nearshore survey works, survey transects must start at the coast and move seawards to reduce the likelihood that marine mammals are trapped towards the shore.
- 10.11 The licensee must ensure that where survey equipment has the capability to undergo a soft start procedure, this is implemented on every occasion survey equipment is switched on.
- 10.12 Except where it is not relevant to the provisions of this licence, the licensee must ensure that The Scottish Marine Wildlife Watching Code is adhered to at all times.
- 10.13 The licensee must ensure that copies of the licence are available for inspection by any person authorised by the Scottish Ministers at the

- office of the licensee and at all sites where licensed activities are taking place.
- 10.14 Any person authorised by the Scottish Ministers must be permitted to inspect the operations relating to the licence at any reasonable time. The licensee must allow appropriate assistance to facilitate inspection.
- 10.15 The licensee must, no later than one month after the expiry date of this licence, submit to the Scottish Ministers, a written report detailing all actions taken in accordance with the specified terms and conditions of the licence. This report must detail the procedures, visual observations and include the original Marine Mammal Recording Form(s). Any difficulties encountered, or recommendations should also be noted.
- 10.16 The licensee must, no later than 12 weeks after completion of the noisy activity, complete and submit a Close-out Report in the online Marine Noise Registry.