

APPROPRIATE ASSESSMENT

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 AND APPLICATION FOR MARINE LICENCE UNDER THE MARINE (SCOTLAND) ACT 2010 FOR THE CONSTRUCTION AND OPERATION OF THE WEST ISLAY TIDAL ENERGY PARK, SOUTH WEST ISLAY.

MARINE SCOTLAND'S CONSIDERATION OF A PROPOSAL AFFECTING DESIGNATED SPECIAL AREAS OF CONSERVATION ("SACs"), SPECIAL PROTECTION AREAS ("SPAs"), CANDIDATE SPECIAL AREAS OF CONSERVATION ("cSACs") AND PROPOSED SPECIAL PROTECTION AREAS ("pSPAs")

SITE DETAILS: DP Marine Energy Limited ("DPME") – West Islay Tidal Energy Park, South West of Islay.

FILE REF: 011/TIDE/DPSW1 - 2

APPROPRIATE ASSESSMENT ("AA") CONCLUSION:

1. Marine Scotland's Licensing Operations Team ("MS-LOT") concludes that, based on the content of the following assessment, the proposed West Islay Tidal Energy Park ("the Development") will not, on its own or in-combination with other projects currently holding a marine licence, adversely affect the integrity of the Ailsa Craig SPA, the Canna and Sanday SPA, Mingulay and Berneray SPA, the North Colonsay and Western Cliffs SPA and the Rum SPA.

INTRODUCTION

2. This is a record of the Appropriate Assessment ("AA") for the West Islay Tidal Energy Park development and associated offshore transmission works. The assessment has been undertaken by MS-LOT and Marine Scotland Science ("MSS") on behalf of the Scottish Ministers. This assessment is required to be undertaken under Council Directive 92/43/EEC on the conservation of natural habitats of wild fauna and flora ("the Habitats Directive") under Regulation 61 of the Conservation of Habitats and Species Regulations 2010 in respect of applications for section 36 consents under the Electricity Act 1989 and Regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994 for marine licence applications under the Marine (Scotland) Act 2010 for projects within 12 nautical miles ("nm") of the mainland before the Scottish Ministers may decide to give consent to the Development. As the Development requires both a section 36 consent and marine licence, both sets of regulations ("the Habitats Regulations") apply to this assessment.

3. 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 (special areas of conservation ("SACs") and special protection areas ("SPAs")) either alone or in combination with other plans or projects before authorisations can be given for the proposal. The precautionary principle requires to be applied when complying with obligations under the Habitats Regulations and in preparing an AA. In accordance with the ECJ case of Waddenzee¹ MS-LOT may only authorise a development if they are certain that it will not adversely affect the integrity of European protected sites; and "that is the case where no reasonable scientific doubt remains as to the absence of such effects".

4. Scottish Ministers are currently in the process of identifying a suite of new marine SPAs in Scotland and in the Scottish offshore region. In 2014 advice was received from the statutory nature conservation bodies ("SNCBs") on the sites most suitable for designation and at this stage they became draft SPAs ("dSPAs"). Once 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 pSPAs is provided by Scottish Planning Policy (paragraph 210), the UK Marine Policy Statement (paragraph 3.1.3) and the National Marine Plan for Scotland (paragraph 4.45). In addition, the Inner Hebrides and Minches candidate Special Area of Conservation (cSAC) and the North Channel (Northern Ireland) cSAC for harbour porpoise have been submitted to the European Commission, and are also considered under domestic policy as if fully designated.

5. 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 pSPAs and pSACs. The assessment includes an assessment of implications upon those sites in accordance with domestic policy. Scottish Ministers are also required to consider article 4(4) of Council Directive 2009/147/EC on the conservation of wild birds ("the Birds Directive") in respect of the pSPAs. 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 (paragraph 27).

6. In accordance with regulation 50 of the Conservation (Natural Habitats, &c.) Regulations 1994 and regulation 63 of the Conservation of Habitats and Species Regulations 2010 the Scottish Ministers will, as soon as reasonably practicable following the formal designation of the pSPAs, review their decisions authorising the proposal. This will include a supplementary AA being undertaken concerning the implications of the proposal on the sites as designated (as they are currently pSPAs and pSACs their conservation objectives are currently in draft form, their conservation objectives are finalised at the point the sites are designated).

¹ ECJ Case no – C-127/02 – judgement issued on 07.09.2004

Details of proposed operation

7. The applications submitted on 16th September 2013 are for the construction and operation of a tidal generating station, consisting of between 15 and 30 tidal energy convertors (“TECs”) and associated cabling located on the seabed within the array boundary making landfall at Kintra on Islay. The generating capacity of each TEC is between 1 and 2 MW. The foundation for each TEC will be (pin) piled to the sea bed.

Consultation

8. MS-LOT accepted DPME’s application and associated documents on 16 September 2013. The Environmental Statement (“ES”), which included Habitats Regulations Appraisal (“HRA”) reports for marine mammals and seabirds, was sent out for consultation then. MS-LOT received advice regarding the application from Scottish Natural Heritage (“SNH”) on 12 December 2013. SNH advised MS-LOT to carry out an AA. SNH provided further advice to inform the AA as follows:

- 5 February 2016 in relation to corkscrew injuries on seals
- 8 April 2016 in relation to the Inner Hebrides and the Minches pSAC. Following on from the public consultation this site is now a candidate Special Area of Conservation (“cSAC”), which means it has been submitted to the European Commission, but not yet formally adopted.
- 8 August 2016 in relation to pSPAs – a consultation on proposals for 10 SPAs in Scottish waters began on 4th July 2016 and SNH provided further advice in relation to these sites on 8 August 2016.

9. The Department of the Environment Northern Ireland (“DOENI”, now the Department of Agriculture, Environment and Rural Affairs (“DAERA”), for consistency DAERA will be used throughout the document) provided comment on 21 March 2013 on SPA and SAC features within Northern Ireland that may be affected by the Development. Further comment from the DAERA was provided in relation to a pSAC (The North Channel, now a cSAC as of January 2017) on 06 July 2016 and two new pSPAs in Northern Irish (East Coast SPA and a marine extension to Carlingford Lough SPA) waters on 22 July 2016.

10. A detailed AA has been undertaken and SNH have been consulted, as is required, under the Habitats Regulations. As it was considered that the Development may have a likely significant effect on European protected sites in Northern Ireland, it was also thought appropriate to consult the DAERA.

11. The Royal Society for the Protection of Birds Scotland (“RSPB Scotland”) in their response dated 18 December 2013 did not object to the Development, and although raising some concerns regarding impacts on bird species from the potential for collision with the turbines and disturbance, suggested that a comprehensive programme of monitoring be put in place.

12. Whale and Dolphin Conservation (“WDC”) in their response dated 4 December 2013 raised some concerns regarding the potential for seals and harbour porpoise to collide with turbines, as well as corkscrew injuries to seals from vessels associated

with the installation. SNH provided updated advice on 5 February 2016 regarding corkscrew injuries to seals following evidence that these injuries are likely to be the result of grey seal predation. WDC concluded no likely significant effect for harbour porpoise from Skerries and Causeway SAC due to the low numbers of the species recorded.

13. The Habitats Regulations allow for the competent authority to consult the general public on the AA if they consider it appropriate. This has not been done as the general public have already had the opportunity to respond to the application through the Environmental Impact Assessment process where information regarding the potential impacts on European protected sites was available in the ES. The ES contained HRA reports which were also made publically available and consulted on. No representations were received from members of the public raising concerns about Natura issues.

14. Table 1a. provides links to the Scottish Natural Heritage Interactive (“SNHi”) website/ DAERA website where the background information on the sites being considered in this assessment are available.

15. Table 1b. details the qualifying features of the SACs, cSACs, SPAs and pSPAs in this assessment. The conservation objectives being considered are detailed in section 1c. For the qualifying interests where likely significant effect (“LSE”) has been identified (section 2b) the appropriate assessment assesses whether or not the relevant conservation objectives will be achieved.

Figure 1 below shows the location of the Development and the SACs, cSACs, SPAs and pSPAs discussed in this document.

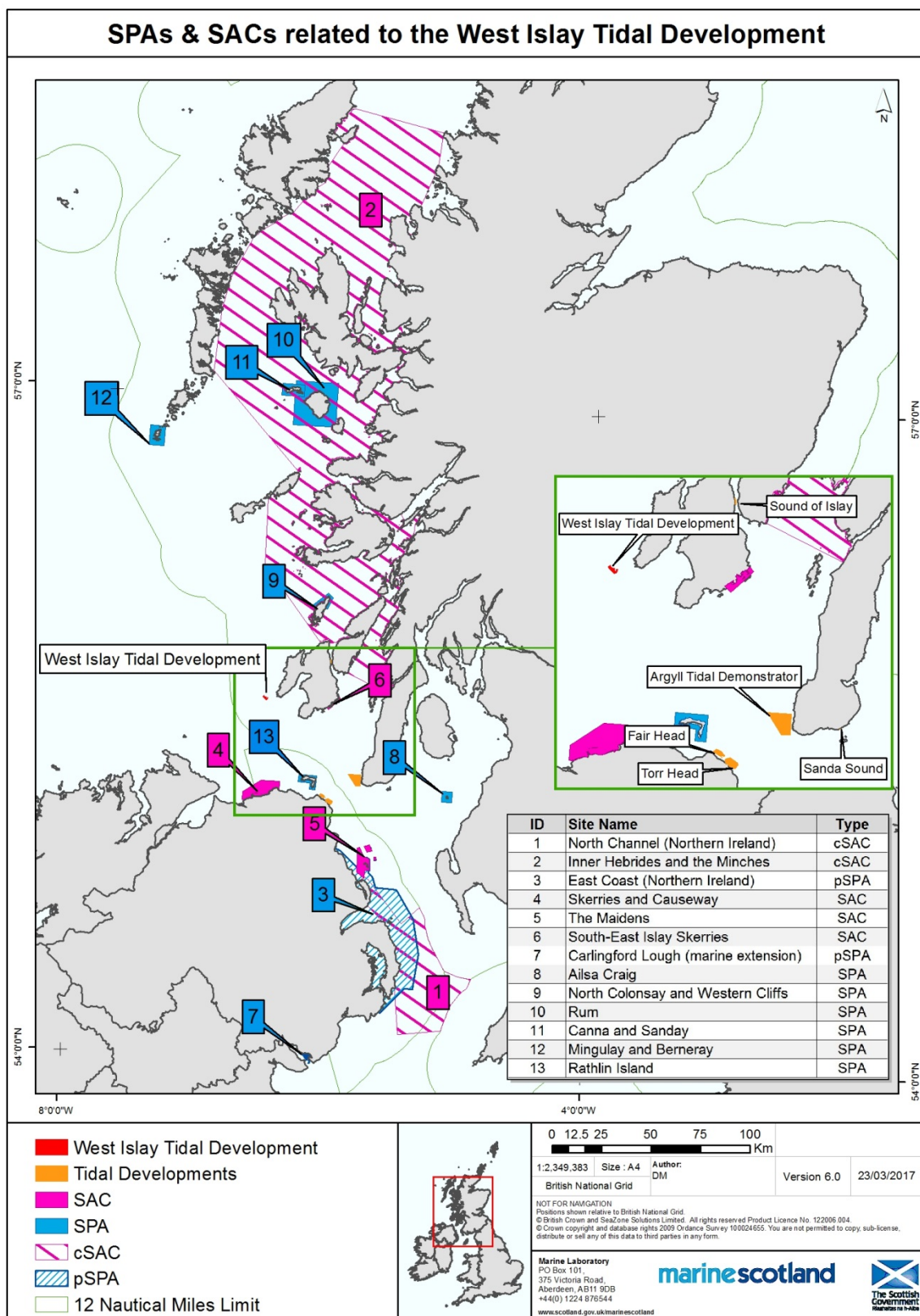


Figure 1. Location of West Islay Tidal Development site and relevant SPAs, pSPAs, SACs and cSAC

1a. Name of Natura site affected & current status available from:

Ailsa Craig SPA

http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=8463

Canna and Sanday SPA

http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=8480

Carlingford Lough Marine pSPA*

<https://www.daera-ni.gov.uk/consultations/carlingford-lough-spa-renotification>

East Coast (Northern Ireland) Marine pSPA*

<https://www.daera-ni.gov.uk/consultations/east-coast-northern-ireland-marine-special-protection-area-consultation>

Mingulay and Berneray SPA

http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=8545

North Colonsay and Western Cliffs SPA

http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=8555

Rathlin Island SPA

<https://www.daera-ni.gov.uk/publications/rathlin-special-protection-area>

Rum SPA

http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=8574

Inner Hebrides and the Minches cSAC**

http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=10508

South-East Islay Skerries SAC

http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=8381

Skerries and Causeway SAC***

<http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0030383>

The Maidens SAC***

<http://jncc.defra.gov.uk/ProtectedSites/SACselection/sac.asp?EUCode=UK0030384>

The North Channel cSAC**

<http://jncc.defra.gov.uk/pdf/NorthChannelSelectionAssessmentDocument.pdf>

*pSACs refer to possible SACs and are sites that are undergoing the process of consultation prior to being submitted to the European Commission for adoption.

**cSACs refer to candidate SACs and are sites that have been submitted to the European Commission, but not yet formally adopted.

***The status of both these SACs is Site of Community Importance which are sites that have been adopted by the European Commission but not yet formally adopted by the Northern Irish government. For the purposes of this document they are considered in the same way as SACs and referred to as such.

1b. European qualifying interests & whether priority/non-priority:

Ailsa Craig SPA Gannet (<i>Morus bassanus</i>), breeding Guillemot (<i>Uria aalge</i>), breeding Herring gull (<i>Larus argentatus</i>), breeding Kittiwake (<i>Rissa tridactyla</i>), breeding Lesser black-backed gull (<i>Larus fuscus</i>), breeding Seabird assemblage, breeding	Rum SPA Golden eagle (<i>Aquila chrysaetos</i>), breeding Guillemot (<i>Uria aalge</i>), breeding Kittiwake (<i>Rissa tridactyla</i>), breeding Manx shearwater (<i>Puffinus puffinus</i>), breeding Red-throated diver (<i>Gavia stellata</i>), breeding Seabird assemblage, breeding
Canna and Sanday SPA Guillemot (<i>Uria aalge</i>), breeding Herring gull (<i>Larus argentatus</i>), breeding Kittiwake (<i>Rissa tridactyla</i>), breeding Puffin (<i>Fratercula arctica</i>), breeding Seabird assemblage, breeding Shag (<i>Phalacrocorax aristotelis</i>), breeding	Inner Hebrides and the Minches cSAC Harbour porpoise (<i>Phocoena phocoena</i>)
East Coast (Northern Ireland) pSPA Great crested grebe (<i>Podiceps cristatus</i>) Red-throated diver (<i>Gavia stellata</i>) Sandwich tern (<i>Thalasseus sandvicensis</i>) Common tern (<i>Sterna hirundo</i>) Arctic tern (<i>Sterna paradisaea</i>) Manx shearwater (<i>Puffinus puffinus</i>) Eider duck (<i>Somateria mollissima</i>)	South-East Islay Skerries SAC Harbour seal (<i>Phoca vitulina</i>)
Carlingford Lough Marine pSPA (extension) Sandwich tern (<i>Thalasseus sandvicensis</i>) Common tern (<i>Sterna hirundo</i>) Light bellied goose (<i>Branta bernicla hrota</i>)	Skerries and Causeway SAC Harbour porpoise (<i>Phocoena phocoena</i>)
Mingulay and Berneray SPA Fulmar (<i>Fulmarus glacialis</i>), breeding Guillemot (<i>Uria aalge</i>), breeding Kittiwake (<i>Rissa tridactyla</i>), breeding Puffin (<i>Fratercula arctica</i>), breeding Razorbill (<i>Alca torda</i>), breeding Seabird assemblage, breeding Shag (<i>Phalacrocorax aristotelis</i>), breeding	The Maidens SAC Grey seal (<i>Halichoerus grypus</i>)
North Colonsay and Western Cliffs SPA Chough (<i>Pyrrhocorax pyrrhocorax</i>),	The North Channel cSAC Harbour porpoise (<i>Phocoena phocoena</i>)

breeding Chough (<i>Pyrhacorax pyrrhacorax</i>), non-breeding Guillemot (<i>Uria aalge</i>), breeding Kittiwake (<i>Rissa tridactyla</i>), breeding Seabird assemblage, breeding	
Rathlin Island SPA Peregrine falcon (<i>Falco peregrinus</i>), breeding Guillemot (<i>Uria aalge</i>), breeding Razorbill (<i>Alca torda</i>), breeding Kittiwake (<i>Rissa tridactyla</i>), breeding Fulmar (<i>Fulmarus glacialis</i>), breeding Common gull (<i>Larus canus</i>), breeding Lesser black-backed gull (<i>Larus fuscus</i>), breeding Herring gull (<i>Larus argentatus</i>), breeding Puffin (<i>Fratercula arctica</i>), breeding Seabird assemblage, breeding	

1c. Conservation objectives for qualifying interests:

SPA -

16. To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

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

- (i) Population of the species as a viable component of the site
- (ii) Distribution of the species within site
- (iii) Distribution and extent of habitats supporting the species
- (iv) Structure, function and supporting processes of habitats supporting the species
- (v) No significant disturbance of the species*

SAC –

17. To avoid deterioration of the habitats of the qualifying species 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

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

- (i) Population of the species as a viable component of the site
- (ii) Distribution of the species within site

- (iii) Distribution and extent of habitats supporting the species
- (iv) Structure, function and supporting processes of habitats supporting the species
- (v) No significant disturbance of the species*

*As the potential effects of the proposed Development, as identified, occur outside the SPA itself, any disturbance to the qualifying interests is only considered to be significant in terms of the relevant conservation objective if it could undermine the conservation objectives relating to population viability.

ASSESSMENT IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 AND REGULATION 61 OF THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2010

2a. Is the operation directly connected with or necessary to conservation management of the site?

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

2b. Is the operation likely to have a significant effect on the qualifying interest?

20. This assessment is directly based on advice received from SNH and the DAERA. The timeline of when the advice was received is given below.

- Final list of SPAs and SACs to be included in the assessment was provided by SNH in their advice dated 12 December 2013
- On 8 April 2016 SNH provided further advice on the Inner Hebrides and the Minches Harbour Porpoise cSAC and, in addition, provided updated advice (dated February 2015) on the risk of seal corkscrew injuries
- A consultation on proposals for 10 SPAs in Scottish waters began on 4th July 2016 and SNH provided further advice in relation to these sites on 8 August 2016
- A draft of the AA was sent to SNH for comment and they replied on 7 December 2016 to say they were content with the commentary and conclusion reached
- The DAERA provided advice on the relevant marine features in Northern Ireland on 21 March 2013 and provided updated advice on the East Coast Marine pSPA and the Carlingford Lough Marine pSPA (extension) on 22 July 2016
- The DAERA also sent comment on 5 August 2016 that the Marine and Fisheries Division had no further comment in respect of the DP Marine Energy West Islay Tidal Energy Park proposal in relation to marine mammals

SPAs

21. SNH noted that the applicant had considered the following points when providing their advice on the likelihood of significant effects:

- Whether the project area overlaps with the species foraging range during the breeding season
- Whether the project lies within an identified migratory path
- Whether a species was observed in the project area during the site characterisation surveys
- Whether a species is sensitive to any of the potential impacts identified, and
- Whether or not there is potential for any of the conservation objectives to be undermined

22. Taking into account these points and having reviewed the ES, including the technical appendices and the HRA report, SNH provided the following appraisal:

23. There is a likely significant effect on the following owing to the project area being within foraging range, the species being recorded during the site surveys and being sensitive to potential impacts:

Common guillemot

Ailsa Craig SPA

Canna and Sanday SPA

Mingulay and Berneray SPA

North Colonsay and Western Cliffs SPA

Rum SPA

Atlantic puffin

Canna and Sanday SPA

Mingulay and Berneray SPA

24. It was not considered there would be a likely significant effect on the remaining qualifying interests (as listed above in 1b) owing to the very low numbers recorded and the project area not being considered important for these species.

25. Scottish pSPAs

SNH advised on 8 August 2016 that due the distance of the Development from the pSPAs (the nearest being Sound of Gigha pSPA, approximately 60 km east of the proposed tidal farm and approximately 45 km east of cable landfall at Kintra, Islay), there are no impact pathways that could affect any pSPA bird interests either directly or indirectly. As such, there would be no likely significant effect on any pSPA bird interests should this application go ahead as proposed.

26. Irish SPAs and pSPAs

The DAERA agreed with the conclusion in the ES that there is no LSE for the selected features of NI SPAs (letter dated 21 March 2013) and also stated that there would be no LSE for the two pSPAs i.e. the East Coast SPA and a marine extension to Carlingford Lough SPA (e-mail dated 22 July 2016).

27. However, as detailed at paragraph 5, as the pSPA sites are not yet designated, they also fall 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.”

28. MS-LOT consider that all the pSPAs listed above are sufficiently far from the area of proposed works that there will be no risk of pollution, deterioration of habitats or disturbance of the qualifying interests from the Development.

29. MSS and MS-LOT agree with the identification of LSE on common guillemot from Ailsa Craig SPA, Canna and Sanday SPA, Mingulay and Berneray SPA, North Colonsay and Western Cliffs SPA and Rum SPA and on Atlantic puffin at Canna and Sanday SPA and Mingulay and Berneray SPA and have completed an AA below (section 2c).

SACs

30. SNH noted that the applicant had considered the following points when carrying out their assessment:

- Whether the project area overlaps with the harbour seal foraging range during the breeding season
- Whether harbour seals were observed in the project area during the site characterisation surveys
- Whether Sea Mammal Research Unit (SMRU) aerial surveys and seal telemetry data indicate use of the project area by harbour seals
- Whether harbour seals are sensitive to any of the potential impacts identified, and
- Whether or not there is potential for any of the conservation objectives to be undermined

31. Taking into account these points, the information provided in the ES, their knowledge of harbour seal ecology and SACs together with available data from SMRU aerial surveys and telemetry data, SNH concluded the proposal would have no likely significant effect on the harbour seal qualifying feature interest for the South-East Islay Skerries SAC provided that it is made subject to conditions. These conditions are outlined below and are in respect of the export cable:

- Submission and agreement of details of the final design and export cable route
- Submission and agreement of Construction Methods Statements ("CMS") for the export cable route for agreement with MS and SNH
- Submission and agreement of Vessel Management Plan(s) ("VMP") for construction and operation/maintenance

32. When assessing whether the proposal is likely to have a significant effect on the qualifying interest of the Inner Hebrides and the Minches cSAC and the Skerries and Causeway SAC, SNH have taken into account:

- The wide ranging behaviour of harbour porpoise. Individuals may range across the project site and the cSAC, hence there is potential connectivity between the project site and the cSAC
- Whether harbour porpoise were observed and in what numbers in the project area during the site characterisation surveys
- Whether harbour porpoise are sensitive to any of the potential impacts identified

33. Using the information provided in the ES, their knowledge of harbour porpoise ecology and cSACs data, SNH advised that in their view the proposal will have no likely significant effect on the harbour porpoise qualifying interest for Inner Hebrides

and the Minches cSAC and their consideration for the Skerries and Causeway SAC reached the same conclusion.

34. The DAERA concluded that they were content with the information provided by the developer to inform a Habitats Regulations Appraisal. This information stated there was no LSE for the qualifying features of the Treshnish Isles SAC, Skerries and Causeway SAC or The Maidens SAC. A potential LSE was identified for South-East Islay Skerries SAC owing to possible interaction between seals and vessels during installation of the cable route. As noted above this issue was raised by SNH and their opinion is that there will be no LSE provided that this work is made subject to conditions (see above).

35. The DAERA noted that The North Channel site had been identified as a pSAC for harbour porpoise and should be taken into account (as of January 2017 this site is a cSAC). Marine Scotland consider that the North Channel site is far enough away from the Development for there to be no LSE. In reaching this conclusion MS-LOT have taken account of advice provided by SNH that states there is no LSE on the Inner Hebrides and the Minches cSAC (designated for harbour porpoise), which is far closer to the Development site. For this reason, it is unlikely there would be a LSE on a site further away.

36. MSS and MS-LOT agree that there is no LSE for the SACs, cSAC and pSAC noted above, subject to the following conditions with regard to the export cable being included in the marine licence. These sites are not considered further in this assessment.

- Submission and agreement of details of the final design and export cable route
- Submission and agreement of Construction Methods Statements ("CMS") for the export cable route for agreement with MS and SNH
- Submission and agreement of Vessel Management Plan(s) ("VMP") for construction and operation/maintenance

2c. APPROPRIATE ASSESSMENT of the implications for the site in view of the site's conservation objectives.

37. This AA is directly based on SNH advice and from the information contained within the ES and SNH's knowledge of the ecology of guillemots and Atlantic puffin, such as their foraging range and sensitivity to impacts, SNH advised that the proposal is:

Likely to have a significant effect on guillemots and Atlantic puffin as qualifying interests of the SPAs listed below.

1. Ailsa Craig SPA, Canna and Sanday SPA, Mingulay and Berneray SPA, North Colonsay and Western Cliffs SPA and Rum SPA

Guillemot (*Uria aalge*) (breeding)

2. Canna and Sanday SPA, Mingulay and Berneray SPA

Atlantic puffin (*Fratercula arctica*) (breeding)

38. For both qualifying interests SNH conclude that the proposal would not adversely affect the integrity of the sites. This conclusion is based on:

- The generally low densities reported from 2 years of boat-based surveys of the species of interest during the breeding season. SNH advise that there does not appear to be any likely significant effect on and, therefore, no mechanism for impact on site integrity for any of the identified qualifying interests.
- SNH agree with the conclusions of the ES and HRA which state that any potential disturbance during installation, maintenance or decommissioning from increased vessel activity or installation works is unlikely to be significant. Any potential disturbance would be temporary and over a limited area. Furthermore, any potential disturbance would not affect the population viability of the species for any of the SPAs considered.
- While assessing likely impact, the populations of breeding species using the Development site have been expressed as percentage of each SPA in turn. This would attribute maximum impact to any one SPA, and the Development area populations in each are only a fraction of a percent.
- Generally, there are low numbers of birds present in the Development area, in comparison to their reference populations and taking into consideration displacement and barrier effects, it is still clear that the risk to any populations of seabirds of national or international importance is low.
- The footprint of the site is relatively small so no significant loss of habitat is expected. Above sea structure and lighting design are not confirmed, but it was considered unlikely that even with the most obtrusive designs there will be significant impacts from barrier or displacement effects and collision impacts.

39. The HRA report only considers impacts to breeding populations. Birds present within the proposed Development area in winter are likely to be different birds from the SPA breeding populations. SNH and other statutory nature conservation bodies are currently considering how to undertake assessments of non-breeding sea bird populations. As the majority of seabird species are wide-ranging during the winter it is considered unlikely that the proposal would have a significant effect on any breeding seabird SPA populations during the non-breeding season.

40. Given the relatively small footprint of the site there is no significant loss of habitat expected. Although the tidal energy convertors to be installed at the site are still to be confirmed and, mindful that one of the proposed tidal turbine types is surface piercing, it is considered that, even with the most obtrusive design, should it be implemented at the site, would be unlikely to give rise to barrier or displacement effects and collision impacts.

Cumulative and in-combination assessment

41. MS-LOT have carried out an in combination assessment for other projects which currently have a marine licence and where LSE was identified on the qualifying interests for the SPAs discussed above. Other projects in the area where

no LSE has been identified are noted for information. For the SPAs SNH agreed with the conclusion in the ES that no in-combination effects are likely.

42. Sound of Islay Demonstration Tidal Array

The current licence expires in 2020 and is for up to 10 tidal turbine generators and associated cabling located in the Sound of Islay. The AA completed for this project did not identify LSE on any bird qualifying interest. To date (March 2017) no turbines have been installed.

43. Sanda Sound – Oceanflow Development

This project currently has a licence until February 2019 to deploy one tidal turbine at Sanda Sound, Kintyre. The turbine was taken out of the water in 2015. DPME noted impacts from this Development are anticipated to be of a very low level and would not contribute to an in-combination effect.

44. Argyll Tidal Demonstrator Project

The current licence expires in 2021 and is for a single tidal turbine at a site in the North Channel approximately 1 km off the South-West tip of the Mull of Kintyre. The AA completed for this project did not identify LSE on any bird qualifying interest.

45. Torr Head (DAERA)

This project was issued a licence in December 2016. The tidal energy project area lies approximately 1 Km offshore Torr Head, 12 km east of Ballycastle and 11 km south east of Rathlin Island. The maximum size of the tidal array will be 100MW and there will be between 50 and 100 tidal turbines depending on the final turbine technology selection. Information to inform a HRA was submitted and concluded that there was a likely significant effect at the Rathlin Island SPA for razorbill (breeding) and guillemot (breeding) and at Ailsa Craig for guillemot (breeding). In the information provided by the developer to inform the AA the conclusion was there would be no adverse effects on the integrity of either SPA from the project alone or in combination with other projects (including the adjacent Fair Head Tidal Energy Array). This information was reviewed by the licensing authority and the SNCB prior to acceptance of the conclusions.

46. Fair Head (DAERA)

DP Fair Head Tidal submitted an application to DAERA in February 2017. The proposed tidal energy project will generate 100MW and is located approximately 2km to the east of Fair Head off the north Antrim coast. The plan is to build an initial array of up to 10MW before a second phase building out a larger array up to 100MW.

47. Having considered the advice from SNH and the DAERA and taking account of cumulative and in combination effects, MS-LOT concludes the proposal will not adversely affect the site integrity of the Ailsa Craig SPA, the Canna and Sanday SPA Mingulay and Berneray SPA, the North Colonsay and Western Cliffs SPA and the Rum SPA.

2d. Conditions proposed.

Condition:	Reason:
<p>1). The Company must, no later than 6 months prior to the Commencement of the Development, or at such a time as agreed with the Scottish Ministers, submit a Design Statement ("DS"), in writing, to the Scottish Ministers. The DS, which must be signed off by at least one qualified landscape architect as instructed by the Company prior to submission to the Scottish Ministers, must include representative visualisations, if surface piercing or laying TEC are to be utilised, from key viewpoints agreed with the Scottish Ministers, based upon the final DSLP as approved by the Scottish Ministers, as updated or amended. The Company must provide the DS, for information only, to ABC, ICC, MCA, MoD, NLB, RSPB Scotland, SNH and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers.</p> <p>2). The Company must, no later than 6 months prior to the Commencement of the Development, or at such a time as agreed with the Scottish Ministers, submit a Construction Method Statement ("CMS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with ABC, MCA, MoD, NLB, SEPA, SNH, WDC and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers.</p> <p>The CMS must include, but not be limited to:</p> <ul style="list-style-type: none"> a. the construction procedures and good working practices for installing the Development; b. commencement dates, duration and phasing for key elements of construction; c. 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 Development; 	<p>To ensure a final turbine design choice and layout, including cable routes, is submitted to protect the environment and other users of the sea.</p> <p>To ensure the appropriate construction management of the Development, taking into account mitigation measures to protect the environment and other users of the marine area.</p>

<p>d. details of how the construction related mitigation steps proposed in the ES are to be delivered;</p> <p>e. a waste management plan for the construction phase of Development; and</p> <p>f. hydrodynamic monitoring which will be used to inform the final locations of the tidal turbines.</p> <p>The CMS must adhere to the construction methods assessed in the Application and the ES. The CMS also must, so far as is reasonably practicable, be consistent with the the Cable Plan ("CaP"), Environmental Management Plan ("EMP"), the Navigational Safety Plan ("NSP"), the Piling Strategy ("PS") and the Vessel Management Plan ("VMP").</p> <p>3). The Company must, no later than 6 months prior to the Commencement of the Development, or at such a time as agreed with the Scottish Ministers, submit a Vessel Management Plan ("VMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, SNH and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers.</p> <p>The VMP must include, but not be limited to, the following details:</p> <p>a. the number, types and specification of vessels which are required;</p> <p>b. how vessel management will be co-ordinated, particularly during construction but also during operation;</p> <p>c. 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 during construction and operation of the Development; and</p> <p>d. name and role of each vessel used for laying the export cable, along with details on timing, duration and methods for cable laying.</p>	<p>To minimise disturbance to marine mammals</p>
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<p><i>The confirmed individual vessel details must be notified to the Scottish Ministers in writing no later than 14 days prior to the Commencement of the Development or at such a time as agreed with the Scottish Ministers, and, thereafter, any changes to the details supplied must be notified to the Scottish Ministers, as soon as practicable, prior to any such change being implemented in the construction or operation of the Development.</i></p> <p><i>The VMP must, so far as is reasonably practicable, be consistent with the CMS, EMP, NSP and PEMP.</i></p>	
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Name of assessor	Tracy McCollin
Date	30 th November 2016
Name of approver	Gayle Holland
Date	1 st December 2016