Scottish & Southern Electricity Networks

TRANSMISSION

Spittal to Loch Buidhe to Beauly 400 kV OHL Connection

Environmental Impact Assessment

Volume 5 | Technical Appendix

Appendix 8.7 | Report to Inform Habitat Regulations Appraisal (East Caithness Cliffs SPA)

July 2025

Scottish & Southern Electricity Networks

TRANSMISSION

Spittal – Loch Buidhe – Beauly 400 kV OHL Connection

Habitats Regulations Appraisal (HRA) Report to inform Appropriate Assessment East Caithness Cliffs Special Protection Area

July 2025

Scottish & Southern Electricity Networks

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1 INTRODUCTION

1.1.1 This report has been produced to inform the Habitats Regulations Appraisal (HRA) process for Scottish and Southern Electricity Networks Transmission ("SSEN Transmission") application for consent to construct and operate the Spittal to Loch Buidhe to Beauly 400 kV Overhead Line (OHL) Connection (Proposed Development). The project description and overview of the HRA process are presented in the HRA Screening Assessment Report (Screening Assessment) (**Volume 5, Appendix 8.7**). The Screening Assessment presents the HRA Stage 1 Screening Stage assessment of the Proposed Development with respect to its potential to have a Likely Significant Effect (LSE) on European and Ramsar sites of nature conservation importance, either alone or in-combination with other plans or projects.

1.1.2 Separate reports have been produced for each European or Ramsar site identified in the HRA Screening Report as requiring further assessment.

1.1.3 This report provides information to allow the Competent Authority (i.e. the Scottish Ministers for the Proposed Development) to undertake an HRA Stage 2 Appropriate Assessment (AA) for the East Caithness Cliffs Special Protection Area (SPA). The SPA is 11,696.38 ha and qualifies[1] under Article 4.1 of the Birds Directive by regularly supporting a population of European importance of the Annex 1 species peregrine (*Falco peregrinus*) (an estimated 6 pairs, 0.5 % of the GB population and selected as one of the most suitable sites for peregrine in GB).

1.1.4 East Caithness Cliffs SPA further qualifies under Article 4.2 by regularly supporting populations of European importance of the migratory species common guillemot (*Uria aalge*) (106,700 individuals, 3.1 % of north Atlantic biogeographic population); razorbill (*Alca torda*) (15,800 individuals, 1.8 % of total *A. t. islandica* biogeographic population); herring gull (*Larus argentatus*) (9,400 pairs, 1.0 % of NW European biogeographic population); black-legged kittiwake (*Rissa tridactyla*) (32,500 pairs, 1.0 % of north Atlantic biogeographic population), and European shag (*Gulosus aristotelis*) (2,300 pairs, 1.8 % of the north Europe biogeographic population).

1.1.5 East Caithness Cliffs SPA also qualifies under Article 4.2 by regularly supporting in excess of 20,000 individual seabirds. It regularly supports 300,000 individual seabirds including nationally important populations of the following species great black-backed gull (*Larus marinus*) (800 pairs, 4 % of the GB population); cormorant (*Phalacrocorax carbo*) (230 pairs, 3 % of the GB population); northern fulmar (*Fulmarus glacialis*) (15,000 pairs, 3 % of the GB population); razorbill (15,800 individuals, 11 % of the GB population); common guillemot (106,700 individuals, 10 % of the GB population); black-legged kittiwake (32,500 pairs, 7 % of the GB population); herring gull (9,400 pairs, 6% of the GB population) and European shag (2,300 pairs, 6 % of the GB population).

[1] NatureScot Site Link – East Caithness Cliffs SPA Citation https://www.nature.scot/sites/default/files/special-protection-area/8492/spa-citation.pdf

2 METHODOLOGY

2.1 Introduction

2.1.1 The approach to the HRA has followed that set out in the Conservation of Habitats and Species Regulations 2017, as amended ('The Habitats Regulations') and NatureScot guidance on the consideration of plans or projects affecting SACs and SPAs [2, 3, 4]. It has also taken account of a range of other guidance material including the DTA Publications HRA Handbook [5] and that produced by the European Commission (EC) 2018a [6], 2018b [7], 2007 [8], 2002 [9].

2.2 Overview of the HRA Process

2.2.1 The HRA process comprises four main stages:

- **Stage 1 Screening** to identify the likely effects of a project on a European site and consider whether the effects are likely to be significant.
- **Stage 2 Appropriate Assessment** to determine whether the integrity of the European site will be adversely affected by the Project.
- **Stage 3 Assessment of Alternative Solutions** to establish if there are any that will result in a lesser effect on the European site.
- **Stage 4 Imperative Reasons of Overriding Public Interest (IROPI)** and **Compensatory Measures** to establish whether it is necessary for the project to proceed despite the effects on the European site, and to confirm that necessary compensatory measures are in place to maintain the coherence of the National Site Network.

2.2.2 The term "Habitats Regulations Appraisal" encompasses both the initial screening stage and, where required, the follow-on Stages 2 – 4. Stage 1 Screening was described in the HRA Screening Report and will not be considered in this report. Stage 2 is discussed in more detail in the following section.

2.3 Stage 2 – Appropriate Assessment

2.3.1 An AA is undertaken by the Competent Authority to determine potential effects of a project upon the integrity of European sites. As the person applying for consent, the Applicant should provide and analyse sufficient information to allow the Scottish Ministers to determine whether the aspects of the project pertinent to their consents will or will not adversely affect the integrity of European sites.

2.3.2 AA should exclusively focus on the qualifying features of the European site, and it must consider any impacts on the conservation objectives of those qualifying interests. It should also be based on and supported by evidence that can stand up to scientific scrutiny. EC guidance states that without proper reasoning the assessment does not fulfil its purpose and cannot be considered 'appropriate' and therefore the development

[2] NatureScot (Updated 2025) Habitats Regulations Appraisal (HRA) Guidance. Accessed July 2025 at https://www.nature.scot/professional-advice/planning-and-development/environmental-assessment/habitats-regulations-appraisal-hra
[3] NatureScot (2022). European Site Casework Guidance – How to consider plans and projects affecting Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).
[4] NatureScot (2019). Guidance Note - The handling of mitigation in Habitats Regulations Appraisal - the People Over Wind CJEU judgement.
[5] Tyldesley, D. and Chapman, C. (2013) The Habitats Regulations Assessment Handbook, December 2024 edition UK, DTA Publications Limited.
[6] European Commission (2018). Managing Natura 2000 sites. The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.
[7] European Commission (2018). Guidance on energy transmission Infrastructure and EU nature legislation.
[8] European Commission (2007). Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC.
[9] European Commission (2002). Assessment of plans and projects significantly affecting Natura 2000 sites.

cannot be consented. In terms of what is reasonable, guidance states "*to identify the potential risks, so far as they may be reasonably foreseeable in the light of such information as can be reasonably obtained*" [10].

2.3.3 In undertaking an AA, there are two phases:

- a scientific evaluation of all the likely significant effects of the project on the relevant qualifying interests of a European site; and
- a conclusion based on outcomes of the scientific evaluation whether the integrity of a European site will be compromised.

2.3.4 The initial onus when carrying out an AA is to prove that no adverse impacts due to a project will occur, either alone or in-combination with other projects, which would compromise the integrity of a European site (Section 63(5) & (6) of the Habitats Regulations). Site integrity can be defined as: "*The coherence of its ecological structure and function, across its whole area that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified*" [11].

2.3.5 The assessment will also consider any avoidance or mitigation measures which will be implemented to avoid or reduce the level of impact from the project. The Competent Authority may also consider the use of conditions or restrictions to help avoid adverse effects on site integrity.

2.3.6 If the AA concludes that the integrity of the European site would be adversely affected, consent can only be granted if there are no alternative solutions, IROPI is applicable and compensatory measures have been secured (Section 64 of the Habitats Regulations).

[10] NatureScot (2001). Natura casework guidance: Consideration of proposals affecting SPAs and SACs.

[11] NatureScot (2014). Natura casework guidance: How to consider plans and projects affecting Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

3 INFORMATION TO INFORM THE APPROPRIATE ASSESSMENT

3.1 Introduction

3.1.1 The Screening Assessment determined that an AA was required because the potential for LSEs could not be ruled out for the following qualifying interest features of the East Caithness Cliffs SPA site:

- great black-backed gull (breeding) (*Larus marinus*);
- herring gull (breeding/resident) (*Larus argentatus*); and
- peregrine (resident breeding) (*Falco peregrinus*).

3.1.2 The LSEs on qualifying interest features within the SPA are considered to result from the potential for:

- direct loss from mortality due to collision with infrastructure; and,
- barrier effects as a result of the presence of infrastructure.

3.1.3 LSEs on SPA herring gulls are also considered to result from the potential for indirect loss of habitat due to disturbance and displacement.

3.1.4 This section assesses the impacts of the Proposed Development on the qualifying interest features listed above in relation to the conservation objectives for the site. The aim is to identify whether no adverse effect can be concluded (as described in **Section 2.3**), or whether there will be adverse effects on the integrity of East Caithness Cliffs SPA.

3.1.5 The assessment has drawn on the ornithology survey findings which are presented within **Volume 2 Chapter 9 Ornithology** of the Environmental Impact Assessment Report ("EIA Report") and associated Technical Appendices in **Volume 5**.

3.2 Conservation Objectives and Latest Assessed Condition

3.2.1 The Conservation Objectives (COs)[12] for the qualifying interest features of the East Caithness Cliffs SPA are set out in Table 3-1.

Table 3-1 Conservation Objectives for East Caithness Cliffs SPA

Qualifying Interest Feature	Conservation Objectives
great black-backed gull (breeding) herring gull (breeding/resident) peregrine (resident breeding)	• 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: • population of the species as a viable component of the site; • distribution of the species within the site; • distribution and extent of habitats supporting the species; • structure, function and supporting processes of habitats supporting the species; and • no significant disturbance of the species.

[12] NatureScot Site Link – East Caithness Cliffs SPA COs https://www.nature.scot/sites/default/files/special-protection-area/8492/conservation-and-management-advice.pdf

3.2.2 The latest assessed site condition of the qualifying interest features of the SPA are listed in Table 3-2, as detailed on the NatureScot SiteLink [13] site.

Table 3-2 Summary of Site Condition

Qualifying Interest Feature	Latest Assessed Condition*	Date of Assessment	Negative Pressures
Great black-backed gull	Unfavourable	30 June 2015	There are no listed negative pressures for this feature.
Herring gull	Unfavourable	30 June 2015	There are no listed negative pressures for this feature.
Peregrine	Favourable Maintained	4 June 2014	There are no listed negative pressures for this feature.

3.3 Potential impacts and Relevant Mitigation Measures

3.3.1 Figure 1 illustrates the location of the Proposed Development in relation to the East Caithness Cliffs SPA. The proposed OHL is approximately 0.2 km from the nearest point of the SPA (an access track), with the closest construction works at Tower no.121 over 0.8 km to the north west of the SPA. No temporary or permanent infrastructure associated with the Proposed Development is situated within this SPA site.

3.3.2 Embedded project mitigation measures are set out in the Environmental Impact Assessment Report (EIAR) and the General Environmental Management Plans (GEMPs) (**Volume 5, Appendix 3.3: GEMPS**), Species Protection Plans (SPPs) (**Volume 5, Appendix 3.4: SPPs**) and will be further reinforced in the final Construction Environmental Management Plan (CEMP) (an outline CEMP has been included in **Volume 5, Appendix 3.6**).

3.3.3 The Bird SPP has been developed in consultation with NatureScot and kept under review to ensure that it is in line with current guidance, and, if appropriate, updated accordingly. Measures within the Bird SPP relevant to the SPA include, but are not limited to:

- The Ecological Clerk of Works (ECoW) will review whether construction activities are likely to affect breeding birds and, if so, what mitigation options are available. A hierarchical approach to mitigation will be applied to any occupied bird habitat that may be affected under the Project works. Priority will be given to assessing and mitigating impacts to species listed on Schedule 1.
- The ECoW will attend site on a regular basis throughout the construction period to ensure all environmental mitigation relevant to breeding birds is delivered.
- A hierarchical approach to mitigation of Programme / Avoid / Risk Assess will be applied to any birds that may be affected under the Project works. Works to be programmed outwith breeding season, where practicable.
- Appropriate protection zones will be put in place (see Appendix A of the Bird SPP) and will be set by the ECoW.
- A Protected Species Risk Assessment will be completed by the ECoW when works need to be done in protection zones, to assess if disturbance can be avoided.
- An emergency procedure will be implemented if breeding birds are encountered, with all works within 50 m (non-scheduled species) or max protection distance (scheduled species) immediately ceasing.

[13] NatureScot 2025. East Caithness Cliffs SPA. Accessed Jan 25 at: https://sitelink.nature.scot/site/8492

- Specific mitigation such as dissuasion techniques (habitat management, active dissuasion/disturbance), and removal of disused nests.

3.3.4 The mitigation measures set out in the EIAR follow industry best practice and are routinely deployed on SSEN Transmission projects. They will be stipulated in construction contracts and the implementation and audit of these measures will be overseen by a suitably qualified and experienced Environmental / Ecological Clerk of Works (ECoW).

3.3.5 In addition to the embedded mitigation, measures for the protection of herring gull and great black-back gull will also be required to mitigate impacts associated with collision mortality. Specifically bird flight diverters will be installed along the earth wire of the Proposed Development between towers 14-22 (at Loch Toftingall), 95-99 (at Borgue) and 146-149 (at River Helmsdale) as discussed under Section 3.4 below.

3.4 Assessment of Effects

3.4.1 The Proposed Development is located approximately 0.2 km west of the East Caithness Cliffs SPA at its closest point. NatureScot SPA connectivity guidance[14] advises that peregrine has a core foraging range of 2 km, with maximum recorded distance in Britain of 18 km. Onshore foraging ranges have not been published for breeding herring gull or great black-backed gull, however offshore ranges of 73 km for great black-backed gull and 85.6 km[15]. for herring gull have been recommended by NatureScot. Although these connectivity distances mean that birds from the SPA could forage across all Sections of the Proposed Development, the assessment focusses on birds crossing Sections A and B as the majority of birds foraging inland from the SPA are considered likely to forage over these sections of the alignment, rather than Sections C – E which are over 40 km away from the SPA.

Indirect of loss of habitat due to disturbance and displacement

3.4.2 Herring gulls and great black-backed gulls originating from the East Caithness Cliffs SPA may forage across areas affected by the Proposed Development during the breeding season and may be disturbed and displaced from suitable foraging habitat during construction activity. However both herring gulls and great black-backed gulls can forage across a wide range of habitats, including at sea and in urban areas as well as habitats affected by the Proposed Development. Their extensive foraging range also allows them to take advantage of a large area to forage over. Given the abundance of suitable alternative foraging habitat, and the temporary and reversable nature of the impact, impacts from disturbance and displacement will be negligible, and therefore no adverse effects on herring gull or great black backed gull in relation to the conservation objectives for the site are predicted.

Collision risk

3.4.3 Herring gull were recorded crossing the alignment at Collision Risk Height (CRH) on 139 occasions across Sections A and 37 occasions across Section B. Great black-backed gull were recorded crossing the alignment at CRH on 58 occasions across Section A and on one occasion across Section B. Avoidance rates have not been calculated for OHLs for bird species in Scotland; however, avoidance rates calculated for onshore wind farms suggest large gulls have a good ability to avoid obstacles in flight (99.5 % avoidance)[16]. Baseline surveys for the Proposed Development also regularly recorded both herring gull and great black-backed gull crossing

[14] SNH (2016) Assessing Connectivity with Special Protection Areas (SPAs) Guidance. Version 3 - June 2016.
[15] NatureScot (2023) Guidance Note 3: Guidance to support Offshore Wind applications: Marine Birds - Identifying theoretical connectivity with breeding site Special Protection Areas using breeding season foraging ranges https://www.nature.scot/doc/guidance-note-3-guidance-support-offshore-wind-applications-marine-birds-identifying-theoretical
[16] Scottish Government (2017) Marine Scotland - Licensing Operations Team Scoping Opinion for Seagreen Phase 1 Offshore Project. Available online at: https://webarchive.nrscotland.gov.uk/20200317060738/http://www2.gov.scot/Topics/marine/Licensing/marine/scoping/SeagreenPhase1-2017/SO-15092017

existing 132 kV OHLs. Although the risk of collision mortality is considered to be low, given the relatively high volume of flights, additional mitigation is proposed.

3.4.4 Herring gull flight activity was recorded during baseline surveys was concentrated around Loch Toftingall, along the A9 between Latheren and Halsary and over agricultural areas and river valleys, particularly at Borgue and along the River Helmsdale. The majority of flight activity along the A9 was birds flying north-south or vice versa in parallel with the proposed alignment. However, at Loch Toftingall, Borgue and the River Helmsdale flights were frequently across the proposed alignment.

3.4.5 The greatest concentration of great black-backed gull flight activity recorded during baseline surveys was concentrated between the coast and Borgue Loch.

3.4.6 As a result, bird flight diverters will be installed along the earth wire of the Proposed Development between towers 14-22 (at loch Toftingall) 95-99 (at Borgue) 146-149 (at River Helmsdale). With this additional mitigation in place and given the demonstrated ability of SPA birds to avoid existing OHLs, collision impacts are considered to be negligible and therefore no adverse effects on herring gull or great black backed gull in relation to the conservation objectives for the site are predicted.

3.4.7 Five peregrine flights were recorded crossing the proposed alignment in Section A, two of which were at CRH. In Section B, one peregrine flight was recorded during the flight activity surveys, however it did not cross the proposed alignment at CRH. Peregrine are manoeuvrable fliers with acute eyesight and are considered to have a good ability to avoid structures in flight. During baseline surveys, individuals were recorded crossing existing OHLs at CRH. As a result of the low number of flights across the alignment, the risk of collision is considered to be low. As a result, collision impacts on peregrine will be negligible and therefore no adverse effects on peregrine in relation to the conservation objectives for the site are predicted.

Barrier effects

3.4.8 Barrier effects occur where the vertical configuration of wires and towers creates an actual or perceived barrier which birds may not cross. There are existing 132 kV and 275 kV OHLs which run in parallel or in proximity for much of the length to the Proposed Development (particularly Sections A and B) which baseline surveys have shown are frequently crossed by birds. This, together with survey data from other areas of Scotland, demonstrates that birds habituate to the presence of OHLs.

3.4.9 Therefore, during operation of the OHL, it is considered that birds would not treat the Proposed Development as a barrier to movement and the Proposed Development will therefore no adverse effects on herring gull, great black backed gull or peregrine in relation to the conservation objectives for the site are predicted.

In-combination Effects

3.4.10 Four other developments were identified which could result in in-combination effects on the East Caithness Cliffs SPA with the Proposed Development.

<u>Ouglassy Wind Farm</u>

3.4.11 Ouglassy onshore wind farm comprises 8 wind turbines located adjacent to the Proposed Development. The Scoping Report (issued 05.04.2024) defined important ornithological areas in the vicnity including East Caithness SPA for great black-backed gull and herring gull. There is the potential for in-combination effects on these receptors with the Proposed Development. However, there is insufficient information available at this time

on the impacts of Ouglassy Wind Farm to undertake a cumulative assessment. It is assumed that when it is prepared, the EIAR for Ouglassy Wind Farm will assess in-combination effects with the Proposed Development.

Watten Wind Farm

3.4.12 A proposed 7 wind turbine wind farm adjacent to the Proposed Development. The EIAR predicted potentially significant effects on herring gull and great black-backed gull from East Caithness Cliffs SPA. NatureScot advised that with appropriate mitigation measures in place, including a habitat management plan, the project would not adversely impact the features of the SPA. With embedded and additional mitigation measures in place, the effects from the Proposed Development on the SPA will be negligible. Consequently, the in-combination effects will not adversely affect the SPA.

Golticlay Wind Farm Redesign

3.4.13 A proposed up to 13 wind turbines located 2 km east to the Proposed Development. The EIAR and HRA identified potential effects on East Caithness Cliffs SPA. However, the HRA found that there would be no LSEs on any SPA qualifying features either alone or in-combination with other projects. With embedded and additional mitigation measures in place, the effects from the Proposed Development on the SPA will be negligible. Consequently, the in-combination effects will not adversely effect the SPA.

Hill of Lynchrobbie Wind Farm

3.4.14 A proposed 2 turbine wind farm located approximately 2 km east to the Proposed Development. The Scoping Report (issued 06.07.2023) defined important ornithological areas in the vicnity including East Caithness Cliffs SPA. However, there is insufficient information available at this time on the impacts of Hill of Lynchrobbie Wind Farm to undertake an in-combination assessment. It is assumed that when it is prepared, the EIAR for Hill of Lynchrobbie Wind Farm will assess in-combination effects with the Proposed Development.

Camster II Wind Farm

3.4.15 A proposed 11 turbine wind farm located approximately 10 km north-east of the Proposed Development. The EIAR and HRA identified potential effects on East Caithness Cliffs SPA. However, with appropriate mitigation measures in place, including a Habitat Management Plan, NatureScot recommended that the project would not adversely effect any ornithological features. With embedded and additional mitigation measures in place, the effects from the Proposed Development on the SPA will be negligible. Consequently, the in-combination effects will not adversely affect the SPA.

3.5 Summary of Effect on Site Integrity

3.5.1 No adverse effects on the three qualifying bird species (herring gull, great black-backed gull and peregrine) in relation to the conservation objectives for the site are predicted, and therefore no adverse effect on the integrity of the East Caithness Cliffs SPA is anticipated either alone or in-combination with other projects.

N5
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N20
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N100
N105
N110
N115
N120
N125
N130
N135
N140
N145
N150
N155
N160
N165
N170
N175
N180
N185
Dunbeath
Helmsdale
East Caithness
Cliffs SPA

- Tower Location
- Alignment Section A
- Special Arrangement
- Temporary Tower Compound Area
- Equipotential Zone (EPZ) (Pulling Position)
- Temporary Access Track - Cut/Fill
- Temporary Access Track - Floating
- Permanent Access Track - Cut/Fill
- Permanent Access Track - Floating
- Special Protection Area (SPA)

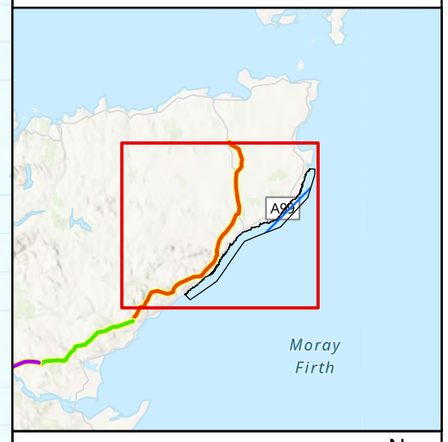

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Figure 1
Spittal - Loch Buidhe - Beauly 400 kV OHL Connection
East Caithness Cliffs SPA

ERM

Scottish & Southern Electricity Networks
TRANSMISSION

PROJECTION: British National Grid

Path: \\uksprdgisfs01\Data\London\Projects\0652629 - SSE Beauly to Loch Buidhe\Maps\0720281 - SLBB - Designated Sites.aprx / 0720281 - SLBB - HRA - 04 - East Caithness SPA - A03