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 (Novar SPA)

July 2025

Scottish & Southern Electricity Networks

TRANSMISSION

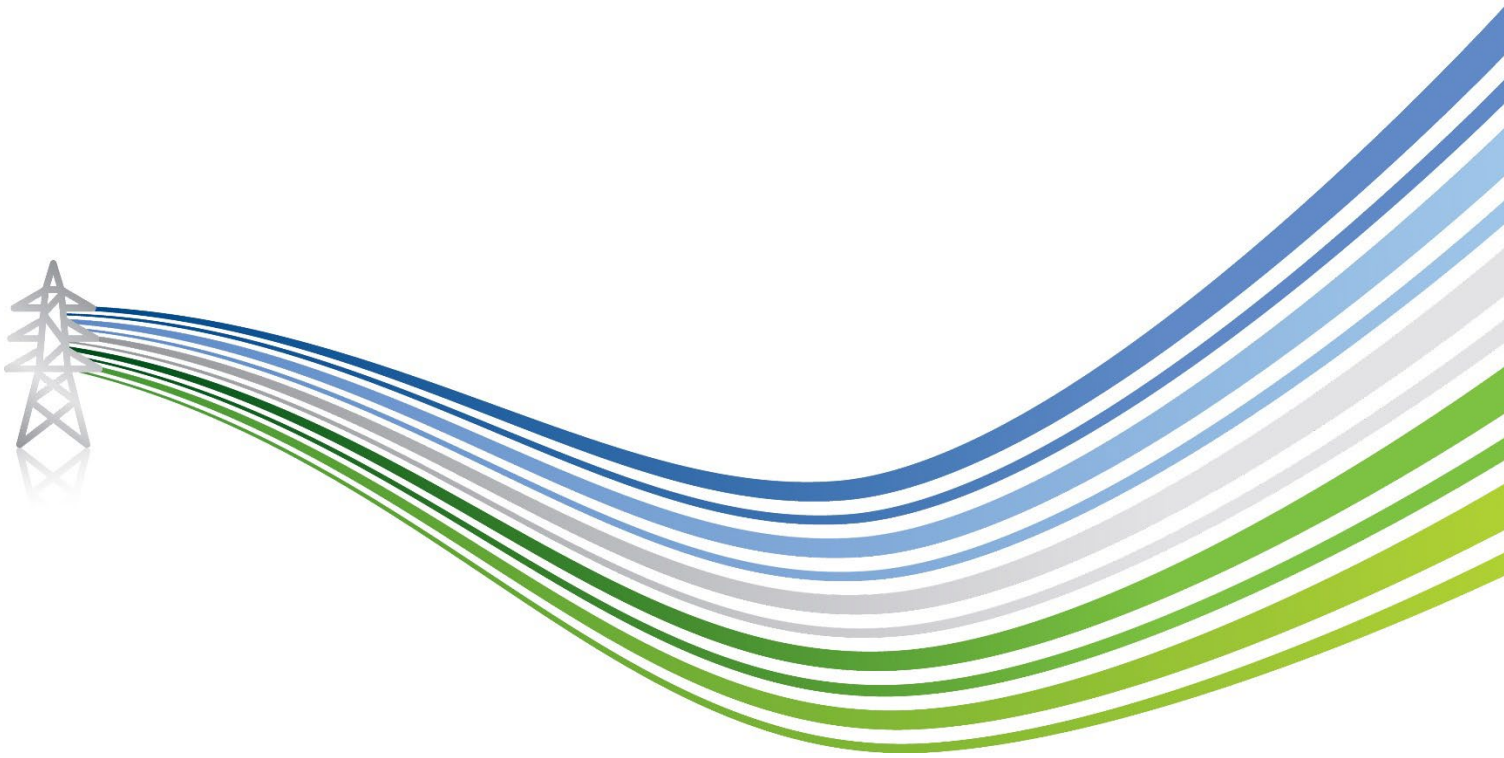
Spittal – Loch Buidhe – Beauly 400 kV OHL Connection

Habitats Regulations Appraisal (HRA)

Report to inform Appropriate Assessment

Novar Special Protection Area

July 2025



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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 (the "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 Novar Special Protection Area (SPA). Novar SPA is 1054.65 ha in area and qualifies[1] under Article 4.1 of the Birds Directive by regularly supporting a breeding population of European importance of the Annex I (of the Birds Directive) species capercaillie (*Tetrao urogallus*). The site supports approximately 13 individuals (mean 1999 – 2003), representing about 1.2 % of the GB population.

[1] NatureScot Site Link – Novar SPA Citation https://www.nature.scot/sites/default/files/special-protection-area/8662/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 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] 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.
[10] NatureScot (2001). Natura casework guidance: Consideration of proposals affecting SPAs and SACs.

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 as to 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 a European site's integrity (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).

[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 for the Novar SPA because the potential for LSEs could not be ruled out for the qualifying interest feature breeding capercaillie (*Tetrao urogallus*).

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

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

3.1.3 In addition, due to the potential connectivity of the habitats affected by the Proposed Development with the SPA and their potential use by the SPA capercaillie population, direct loss of supporting habitat outside of the SPA has also been assessed.

3.1.4 This section assesses the impacts of the Proposed Development on breeding capercaillie 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**), or whether there will be adverse effects on the integrity of the Novar 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 Novar SPA are set out in Table 3-1.

Table 3-1 Conservation Objectives for Novar SPA

Qualifying Interest Feature	Conservation Objectives

Capercaillie (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.

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.

[12] NatureScot Site Link – Novar SPA COs https://www.nature.scot/sites/default/files/special-protection-area/8662/conservation-objectives.pdf
[13] NatureScot 2025. Novar SPA. Accessed Feb 2025 at: https://sitelink.nature.scot/site/8662

Table 3-2 Summary of Site Condition

Qualifying Interest Feature	Latest Assessed Condition	Date of Assessment	Negative Pressures
Capercaillie, breeding	Favourable Maintained	5 May 2008	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 Novar SPA. The Proposed Development is approximately 1.9 km to the west of Novar SPA at its closest point. No temporary or permanent infrastructure, nor construction or operational works, associated with the development will occur within the SPA. The Screening Assessment, taking a precautionary approach, concluded that in the absence of mitigation, it is possible that construction activities could result in LSEs on the SPA from indirect impacts on breeding capercaillie due to disturbance and displacement from habitat. It is also possible that operation could result in LSES from direct loss (mortality) due to collision with infrastructure and indirect barrier effects from the presence of infrastructure.

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 of the Wildlife and Countryside Act (1981 as amended), which includes capercaillie.
- 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 Bird SPP) and will be set by the ECoW. The minimum and maximum protection distance for capercaillie is recommended to be 500 – 750m [14].
- 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.
- Specific mitigation such as dissuasion techniques (habitat management, active dissuasion/disturbance) and removal of disused nests.

[14] Disturbance Distances in selected Scottish Bird Species – NatureScot Guidance | NatureScot

3.3.4 The embedded 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). There are also additional mitigation measures which may be deemed necessary in relation to LSEs on capercaillie, including the following.

- If works are required during the breeding season, this will necessitate the production and approval of a species protection plan, incorporating control of vehicle / pedestrian movements, and toolbox talks to all personnel.
- In line with NatureScot (2022) advice, a buffer zone of 500-1,000 m will be established to protect leks and a buffer zone of 100 m will be used to protect nesting females.
- Within the Operational Corridor, under-planting of lower-growing native shrubs (e.g. blaeberry) between Towers S111 and S129 will provide suitable compensatory mitigation through supplying foraging habitat and encouraging birds to enter and cross the operational corridor, whilst also meeting maintenance and operational Health and Safety (H&S) requirements for maintaining access and conductor clearance for the OHL. Providing sufficient ground cover will also allow birds to move across the operational corridor and reduce habitat fragmentation. Subject to the levels of browsing by deer, the area will be over-planted to accommodate a degree of loss to deer browsing.

3.4 Assessment of Effects

3.4.1 The Proposed Development is located approximately 1.9 km west of Novar SPA at its closest point. No temporary or permanent infrastructure, nor construction or operational works, associated with the development will occur within the SPA. One field sign of capercaillie caecal pellet (dropping), was recorded during baseline surveys in June 2024, located within the survey buffer of the Proposed Development but outwith connectivity distance from the SPA. No breeding evidence of capercaillie was recorded during baseline surveys and no flights by capercaillie were recorded. Desk study records detail one record of a female bird within 2 km of the Proposed Development within the last five years and older records of field signs (latrines) of birds within 1.5 km of the Proposed Development west of Novar between 2013-2014. Numerous records of field signs, leks and breeding territories exist from within and beyond Novar SPA over 2 km from the proposed alignment. There is mature forest within the construction and operational corridor with potential connectivity for foraging and dispersing SPA capercaillie.

Direct loss from mortality due to collision with infrastructure

3.4.2 During the breeding season flight movements of capercaillie involve smaller distances are less than during pre- and post-breeding dispersal phases when (predominantly female) birds have been recorded moving up to 20 km from established territories. (Fletcher, K. and Baines, D., 2020)[15] , (Moss, R. and Picozzi, N., 1994)[16]. Capercaillie are categorised as being more vulnerable to collision risk with overhead wires, compared with many other birds, due to their high wing loading, with the risk exacerbated if a line is situated between feeding and roosting and lekking areas[17]. The route of the proposed alignment passes (at its closest point) within 1.9 km of the SPA, Capercaillie have relatively small home ranges (range of 0.12 – 0.4km^2 for three females studied in Strathspey) but disperse more widely during the spring or autumn (Fletcher, K. and Baines, D., 2020). As a result, resident SPA birds are predicted to be unlikely to interact with the Proposed Development, however birds dispersing from this population may cross the proposed alignment. Capercaillie typically fly relatively low to the ground, with collision with deer fences recognised as potentially impacting on juvenile survival rates[18]. Studies in Norway have recorded collision of capercaillie with OHLs, however, included a range of different voltages from 22 kV to 300 kV, likely including OHLs at lower heights than those planned as

[15] Fletcher, K., and Baines, D. 2020. Observations on breeding and dispersal by Capercaillie Strathspey. Scottish Birds 40, pp 27-34.
[16] Moss, R. & Picozzi, N. 1994. Management of Forestry for Capercaillie in Scotland. Forestry Bulletin 113. Institute for Terrestrial Ecology, Banchory.
[17] Bevanger, K., Bird interactions with utility structures; collision and electrocution, causes and mitigation measures. Ibis 136: 412-425

part of the Proposed Development. Given their relatively low flight height, and the small number of flights which will occur of dispersing birds, the risk of collision with the conductors or earth wire of the Proposed Development are considered to be very low. Birds could conceivably collide with towers supporting the OHL, however the towers which will be installed for the Proposed Development are large steel lattice structures which will be more visible than deer fences which are known to be a cause of collision, and birds are predicted to be able to avoid the towers, as they avoid trees in their woodland habitat.

3.4.3 As a result, and with the likely low number of flights of birds from the SPA across the alignment, the risk of collision is negligible and therefore no adverse effect on capercaillie in relation to the conservation objectives for the site is predicted..

Barrier effects as a result of the presence of infrastructure

3.4.4 During 12 months of baseline surveys no capercaillie flights were recorded crossing the proposed alignment observed. However, felling of woodland as part of the Proposed Development, and maintenance of a 90 m de-forested operational corridor could in theory affect the ability of birds from the SPA to disperse to new habitats.

3.4.5 In areas with potential connectivity for foraging and dispersing capercaillie, under-planting and management of lower-growing native shrub and scrub species, primarily blaeberry, will provide suitable compensatory mitigation through supplying foraging and eventual roosting habitat. Providing sufficient cover will also allow birds to move across the operational corridor, and will also provide suitable foraging habitat.

3.4.6 With these mitigation measures implemented, there are not expected to be barrier effects to capercaillie movement and therefore no adverse effect on capercaillie in relation to the conservation objectives for the site is predicted.

Direct loss of supporting habitat

3.4.7 No temporary or permanent infrastructure, nor construction or operational works, associated with the development will occur within the SPA.

3.4.8 Clearance of 107.98 ha of mature forest within Section D for construction and the operational corridor in areas with potential connectivity for foraging and dispersing capercaillie will lead to a reduction in the amount available foraging and roosting habitat and potential fragmentation of forested areas. However, this loss is considered to be negligible in terms of the overall area of woodland in the wider area. The habitat mitigation proposed through enhancement of the habitat for capercaillie will provide foraging and eventual roosting habitat. Management felling could result in up to a further 146 ha of plantation forestry being felled in Section D and E of the Proposed Development (which would include all areas within 20 km of the SPA), however this woodland will be replanted and would have been subject to ongoing forestry management without the activities of the Proposed Development.

3.4.9 Given the distance of the forest clearance from the SPA, the availability of other more suitable habitat within the SPA, and the temporary loss of habitat that will subsequently be enhanced for capercaillie; direct habitat loss for the Proposed Development will not result in an adverse effect in relation to the conservation objectives for the site.

Indirect loss of habitat due to disturbance and displacement

3.4.10 Capercaillie have a moderate to high sensitivity to disturbance with non-breeding birds tolerant to disturbance to within 100 m. During the breeding season, however, this distance increases to 150 m for nesting females and 1,000 m for displaying males (NatureScot 2024).

3.4.11 Although the Proposed Development is beyond 1 km from the SPA and therefore no disturbance nor displacement impacts on birds within the SPA will occur during the construction phase, there is the potential for birds from the SPA to use functionally linked woodlands that may be affected by the Proposed Development.

3.4.12 With the implementation of species protection plans, monitoring surveys, appropriate protection zones and enhancement of habitats within the operational corridor ; the risk of disturbance or displacement of capercaillie is very low and will not result in an adverse effect in relation to the conservation objectives for the site.

3.5 Summary of Effect on Site Integrity

3.5.1 No adverse effects on the qualifying interest feature, capercaillie, in relation to the conservation objectives for the site are predicted and therefore no adverse effect on the integrity of the Novar SPA is anticipated.

- Tower Location
- Alignment Section D
- Temporary Tower Compound Area
- Equipotential Zones (EPZs) (Pulling Locations)
- Temporary Access Track - Cut/Fill
- Temporary Access Track - Trackway Panels
- Permanent Access Track - Cut/Fill
- Permanent Access Track - Floating
- Special Protection Area (SPA)

S100 S105 S110 S115 S120 S125

Novar SPA

Strathrusdale
Loch Glass
A9
Dingwall

0 0.5 1 1.5
Kilometres

N

SCALE: See Scale Bar	VERSION: A03
SIZE: A3	DRAWN: CI
PROJECT: 0652629	CHECKED: PW
DATE: 8/11/2025	APPROVED: KG

Figure 1
Spittal - Loch Buidhe - Beauly 400 kV OHL Connection
Novar SPA

ERM

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PROJECTION: British National Grid