Scottish & Southern Electricity Networks

Spittal to Loch Buidhe to Beauly 400 kV OHL Connection

Environmental Impact Assessment

Volume 5, Appendix 13.1 – AJ:

Woodland Reports

Aigas Community Forest

July 2025

Scottish & Southern Electricity Networks

Contents

1. Introduction 2
2. Purpose of this Woodland Report 2
3. Woodland Property 2
4. Development Requirements 3
4.1 400 kV Operational Corridor 3
4.2 Access Track Route Design 4
5. Woodland Characteristics 4
6. Windblow Risk Impact 9
7. Woodland Management Impact 9
8. Mitigation Opportunities 10
9. Woodland Removal Impact 11
10. Compensatory Planting 12

1. Introduction

1.1 Scottish and Southern Electricity Networks (SSEN) Transmission, hereafter referred to as 'the Applicant', owns, operates, develops and maintains the high voltage electricity transmission system in the north of Scotland and the Scottish islands. Due to the growth in renewable electricity generation in the north and north-east of Scotland, upgrade of the transmission network is required to provide the necessary increase in transmission capacity. The Applicant is applying for consent under Section 37 of the Electricity Act 1989 to construct and operate a new double circuit 400 (kilovolt) kV overhead line (OHL).

1.2 This report provides an assessment of woodland impact related to the Spittal to Loch Buidhe to Beauly 400 kV OHL Connection project (the 'Proposed Development'). The report details the woodland area affected by the Operational Corridor (OC), new access tracks (permanent), and additional felling required due to windblow risk within individual ownerships. It also includes mitigation considerations and compensatory planting recommendations.

2. Purpose of this Woodland Report

2.1 As part of the Environmental Impact Assessment (EIA) process, it was identified that construction of the OHL and associated access tracks would cross a number of woodland areas within both public and private landholdings. The landholding property boundaries are identified in **Figure 1: Woodland Impacted by the Proposed Development**.

2.2 This document provides an assessment of the woodland areas that are affected by the Proposed Development, including the requirement for woodland removal and management recommendations to mitigate the impact of the woodland removal.

2.3 Field surveys of the woodland areas have been undertaken and have been used to determine the various woodland characteristics to identify the woodland removal required and recommended. This document also sets out the area, in hectares (ha), of compensatory planting required to ensure no net loss of woodland is achieved.

3. Woodland Property

3.1 Aigas Community Forest is a community-owned and managed woodland, operated by a local social enterprise. It is located approximately 7 km southwest of the village of Beauly, in Crask of Aigas. The nearest public road is the A831, with access via an unclassified road.

3.2 The site's grid reference is NH 46911 43162. Refer to **Figure 1: Woodland Impacted by the Proposed Development**.

4. Development Requirements

4.1 400 kV Operational Corridor

4.1.1 With reference to **Figure 1: Woodland Impacted by the Proposed Development**, the overhead line (OHL) sections relevant to Aigas Community Forest extend from the area south of Tower S226 and from western bank of the River Beauly to 100 m east of Tower S228; however, no towers are allocated within this property.

4.1.2 The Study Area for this assessment is based around an operational corridor of 90 m. The Applicant defines the OC as the area in which it has rights to remove woodland for the purposes of creation of new OHL, resilience and maintenance of OHLs, or protection of electrical plant as required by the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002 regulations and The Electricity Act 1989. The OC is defined as to the distance at which a tree could fall and cause damage to the OHL, resulting in a supply outage. As a result, the final OC width would be based on the safety distance required from the OHL centreline to allow for a mature tree falling towards the OHL, taking account of topography and tree height at maturity.

4.1.3 The OC width that has been assessed and identified for the safe build and energisation of the new OHL through areas of conifer woodland is 90 m (45 m either side of the OHL centreline). Further details can be found in **Section 13.3** of **Volume 2, Chapter 13: Forestry** which outlines the extent of the study area.

4.1.4 The OC width that has been assessed and identified for the safe build and energisation of the OHL through the areas of broadleaves is also 90 m (45 m either side of the OHL centreline). This has been assessed as a maximum OC width required at these woodland locations, with the potential of further narrowing of the OC prior to construction to allow greater tree retention depending on factors such as tree height, topography, crown reduction or other mitigation strategies[1].

[1]As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord. (2020) Safety Guide 804 Electricity at Work: Forestry. [pdf] Available at: FISA 804 (ukfisa.com).

4.2 Access Track Route Design

4.2.1 There are no direct access tracks within Aigas Community Forest that lead to the woodlands impacted by the Proposed Development features in this property. As no towers are allocated within this property, no new access tracks will be created here. Refer to **Figure 1: Woodland Impacted by the Proposed Development**, which shows tracks that will undergo maintenance and upgrades as part of the construction scope.

4.2.2 However, there is an existing access track within Aigas Community Forest that will be used to reach neighbouring woodlands where towers are planned. See **Figure 1: Woodland Impacted by the Proposed Development** for reference.

4.2.3 This existing access track will serve as the main arterial construction route. Tree felling and timber extraction from other sections of the line will make use of these existing tracks prior to any construction activities.

4.2.4 Where existing tracks require maintenance or upgrading, this may involve the removal of trees and scrub to facilitate the works, particularly to accommodate the creation of additional passing places. While much of the upgrade activity would fall within standard forest access maintenance, which typically involves the removal of scrub, regeneration, and crown management, some sections may require additional tree clearance within a corridor of up to 12 m in width.

5. Woodland Characteristics

5.1 A desk-based study of the woodland areas was conducted, to identify current woodland environmental designations and classifications.

5.2 The web-based data provided by Scottish Forestry and referencing the Scottish Government's Ancient Woodland Inventory (AWI), and

- The Scottish Forestry Map Viewer provides spatial data on the Native Woodland Survey of Scotland (NWSS) and classifies the woodland types into four categories[2] [3]:

1. Native woodland
2. Nearly-native woodland
3. Open land habitat
4. Plantations on Ancient Woodland Sites (PAWS)

5.3 Within Aigas Community Forest, two separated wooded areas are identified, a strip of conifer woodland along the northwestern edge of the property, south of the proposed location of Tower S226, and woodland areas located to the west and east of the main public road A831, where the Proposed Development intersects this property.

5.4 The woodland sections to the west and east of the public road A831 within this ownership are classified as Ancient Woodland Sites of Semi-Natural Origin (AWSNO), according to the AWI. Those areas are also classified within the NWSS as PAWS and Native woodland. Refer to **Table 5.1.**

Table 5.1: Woodland Designations

Item	Type of Infrastructure	Woodland Designations	Area (ha)
Operational corridor	Permanent	NWSS- PAWS	1.57
		NWSS- Native woodland	0.29
		AWI- AWSNO (1a)	1.57
		AWI- AWSNO (2a)	0.29

[2] Scottish Forestry Map Viewer URL https://scottishforestry.maps.arcgis.com/apps/webappviewer/index.html?id=0d6125cfe892439ab0e5d0b74d9acc18

[3] Scottish Forestry Native Woodland Survey of Scotland: Glossary of Terms; URL: Main Title (forestry.gov.scot)
Native Woodland – woods where the canopy cover is composed mainly of native species (i.e., over 50%).
Nearly Native Woodland - where native species make up between 40% and 50% of the canopy. These are woods that could have potential to be converted into native woodlands by altering their species mix.
Open Land Habitat – areas with <20% canopy cover of trees and shrubs adjoining a native woodland.
PAWS - Plantation on Ancient Woodland Sites. These are surveyed in the NWSS where they are recorded in the Scottish ancient woodland inventory (SAWI). These woodlands appear to have originated through natural regeneration sometime before the mid-19th century, but were later converted to planted wood.

5.5 The western woodland to the public road A831, known as An Druim, is situated on a small hill with a steep, rocky slope descending towards the road. This AWSNO (1a) 1750 site has recently undergone clear-felling and is currently awaiting restocking. It is also identified as a PAWS under the NWSS. Refer to **Plates 1 and 2**.

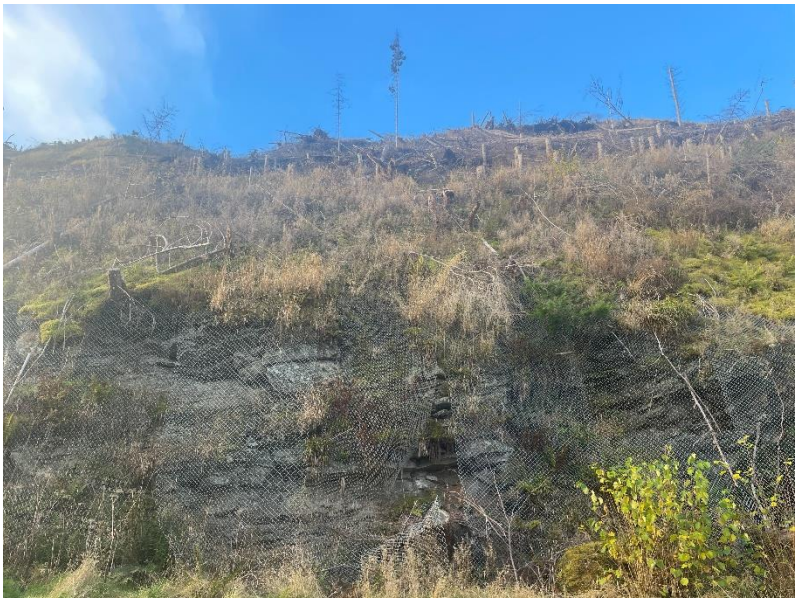

Plate 1. The Ancient Woodland of Semi-Natural Origin (1a) site recently underwent clear-felling operations. Photograph taken from public road A831, looking uphill onto the clear-felled site. Grid ref: NH 47029 43110.

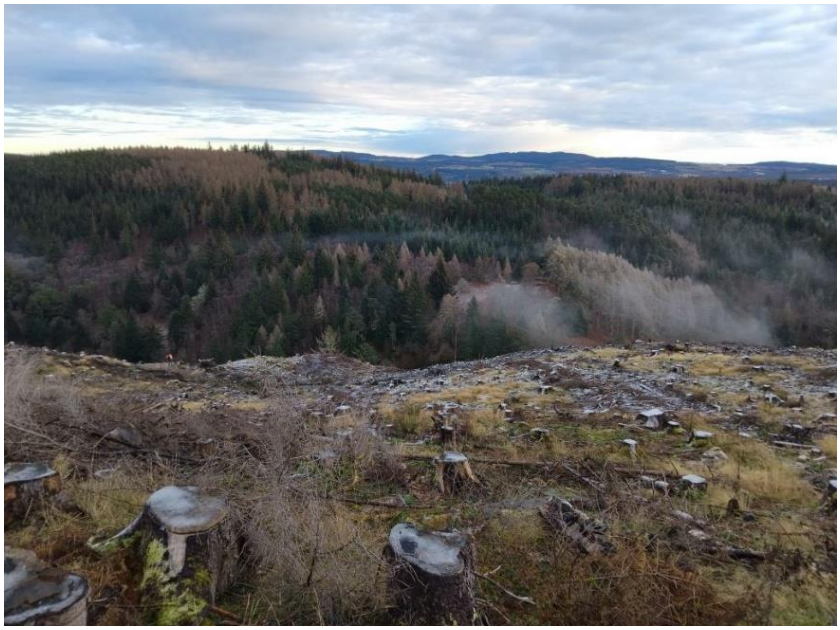

Plate 2. Grid ref: NH 46887 43197. Photograph taken from Aigas Community Forest looking across at Ruttle Wood at the centre of the OHL.

5.6 To the east of the A831, within the OC, a broadleaved woodland located on the steep bank of the River Beauly shares the same classification as the western side, with a different code of antiquity; this area is classified as AWSNO 2a, 1860. This area consists of mature birch, ash, and minor species such as rowan, Scots pine, interspersed with scattered non-native mature conifers, including firs, spruce, and larch. While mature conifers in the rocky gorge banking reach heights of over 25 m, native broadleaved species range from 5 to 12 m tall, with obvious scattered signs of regeneration.

5.7 This woodland strip continues along the steep gorge along the River Beauly, and it is also categorised as Native Woodland (Upland Birchwood and Ashwood) within the NWSS. Refer to **Plate 3**.

Plate 3- Ancient Woodland classified as AWSNO 2a (1860) and native woodland comprising upland birchwood and mixed ashwood, with evidence of conifer establishment along the banks of the River Beauly. Grid reference: NH 47043 43120.

5.8 The remaining woodland on the northwestern side of the property is not under any classification. It consists of a strip of financially mature larch trees forming the edge of a larger commercial conifer plantation extending southwards. These trees average around 17 m in height and show signs of past windblow, with some gaps in the upper canopy. This area does not fall under the Native Woodland classification that applies to most of the conifer woodland on the site. Refer to **Plate 4**.

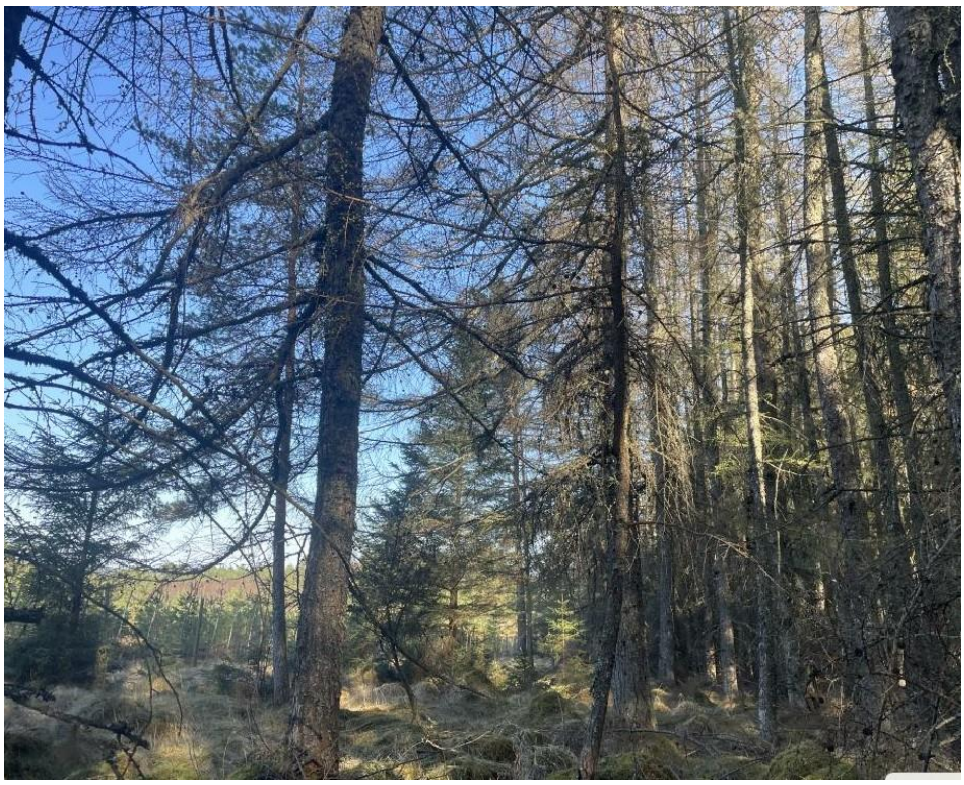

Plate 4- Strip of financially mature larch trees acting as an edge for the remaining conifer woodland of Scots pine. Trees are reaching an average of 17 m high. Grid reference NH 45983 43103.

5.9 The site is characterised by mineral soils with shallow rooting, predominantly cool and moist conditions, Humus-iron podzols.[4]

[4] Scottish Government's Scotland's soils website https://soils.environment.gov.scot

6. Windblow Risk Impact

6.1 An assessment was undertaken of the risk of windblow to areas of woodland adjacent to the OC which would be exposed due to the tree clearance required for the OC. This assessment was based on the professional judgement of the forestry surveyor with consideration being given to the soil and moisture regime, the topography, tree species, top height, exposure, altitude and aspect in relation to the prevailing wind direction and any previous management regimes. This assessment was also based on site visits and observations, and available data of the site. Reference was also made to Forest GALES 2.5 Forest Research decision support system where appropriate.

6.2 Given the nature of some of the woodlands' mix of species and varied tree heights, natural features of the woodlands and the local characteristics of soils, topography and aspect, it is anticipated that the introduction of the OC will not result in future windblow to the adjoining woods.

6.3 The woodland site affected by the Proposed Development has a 'Detailed Aspect Method of Scoring' (DAMS)[5] windblow hazard class score of 10, which is classified as sheltered. The site has mineral soils with shallow rooting which are mostly cool and moist

7. Woodland Management Impact

7.1 The OHL will create additional challenges for the future management of the forest as it dissects existing management coupes and introduces an electrical hazard. The risks associated with the electrical hazard will be reduced by regular maintenance of the OC, so maintaining the compliance of the OC and reducing any need for future tree clearance operations within the "Red Zone".[6]

7.2 The sterilisation of the OC, however, will have an impact on forest restructuring, potentially impacting the landowner's ability to utilise the forest's commercial viability in accordance with the UK Forestry Standard. Mitigation opportunities are discussed in the following **Section 8**.

7.3 The OHL will cross the woodland road network at either approximately 45 or 90 degrees and will be built to the regulatory safe height clearances above forest access tracks, which will reduce the hazard in respect of future timber haulage. It may still, however, impact on machine operations within the proximity of the OHL, such as stacking and loading. Mitigation of which could be incorporated into the access design, following discussions with the landowner.

[5] Detailed Aspect method of Scoring (DAMS) Ref. Forest Research, "Forest Gales software programme" and Forestry Commission Leaflet 85 "Windthrow Hazard Classification"
[6] As specified by the 'Red Zone' set out in paragraph 41 of the Forest Industry Safety Accord (FISA) Safety Guide 804. Electricity at Work: Forestry (2020) FISA 804 (ukfisa.com)

7.4 The OHL may be restrictive to future in-forest machinery access. The requirement for dedicated forestry machine OHL crossing points will be discussed with the landowner and if required, will be identified once the OHL has been constructed, thus providing a safe OHL crossing point(s) for future working within the woodland.

7.5 The impact of the Proposed Development on the overall viability and continuity of woodland management has been considered. The proposed OC intersects several of the woodland compartments within Aigas Community Forest, but given the location of the OC being mostly affected on the edges of the woodland blocks at the western side and currently awaiting restocking on the eastern wood, it is not expected to compromise the implementation of forest operations or ongoing management. There is no anticipated significant fragmentation or isolation of woodland units, and the Proposed Development is not considered to materially affect the viability of the current or future management regime.

7.6 The impacts arising from the Proposed Development are not anticipated to affect the wider woodland management regime, nor are they expected to necessitate any alteration to the current or planned species composition.

8. Mitigation Opportunities

8.1 Mitigation to reduce the extent of tree felling within the OC will be considered and incorporated in areas of broadleaved woodlands as part of the Proposed Development. Refer to **Section 13.5.3** Good practice and **Section 13.7.1** Mitigation within **Volume 2, Chapter 13: Forestry**. This includes effects to the riparian broadleaved trees within the AWI of trees on the bank of the River Beauly. The Applicant will be using a process of 'managed resilience' which will seek to retain naturally regenerated broadleaved trees and shrubs as close as possible to the line to keep as much tree cover as possible. Smaller- and lower-growing tree species and shrubs can be retained closer to the OHL. OHL vegetation maintenance would take place on a 4-yearly cycle as required.

8.2 Impacts on woodland restock opportunities, resulting from the OC sterilisation, could be addressed through the amendment of the Felling Licence Application or the Long-Term Forest Plan (LTFP), adhered to the regulations of the Forestry and Land Management (Scotland) Act 2018, and in line with the UK Forestry Standard guidance to utilise wayleave corridors as designed Open Ground, repurposing currently unplanted areas to maintain the commercial productivity of the woodland.

8.3 Before the construction phase, these areas, along with access tracks, will be assessed for selective felling and also crown reduction to determine if greater tree retention is feasible. The final extent of tree retention will depend on the requirements of the Proposed Development, particularly ensuring the safety of OHL wiring operations during construction.

8.4 The OC woodland removal area is required for the construction and operation of the new OHL infrastructure. Opportunities will be assessed for encouraging woodland regeneration within the OC, the identification of suitable areas cannot be guaranteed due to the requirement of maintaining the safe energisation of the OHL. Reference to **Tables 9.1 to 9.3** below will fully mitigate the loss of forest resource within the OC through compensatory planting of the equivalent area (ha) of woodland removed.

8.5 The impact of stability within the remaining crop has been assessed and reported on above.

9. Woodland Removal Impact

Table 9.1: Woodland Removal for Infrastructure

Item	Type of Infrastructure	Woodland type	Area (ha)
Operational corridor	Permanent	Conifer woodland	0.26
		Broadleaved woodland	0.29
		Felled -awaiting restock	1.57

Table 9.2: Compensatory planting

Compensatory Planting Area		2.12

Table 9.3: Woodland Removal Impact of Infrastructure

Item	Woodland type	Area (ha)
Total Loss of Woodland Area	Conifer woodland	0.26
	Broadleaved woodland	0.29
	Felled- awaiting restock	1.57
Total Compensatory Planting Area off-site	Conifer woodland	1.83
	Broadleaved woodland	0.29
Total Restocking/ Replanting Area on-site		0
Total Net Loss of Woodland Area		**0**

10 Compensatory Planting

10.1 Compensatory planting to achieve the area quantity (ha) of woodland removal as a result of the Proposed Development will be in accordance with the Scottish Government's Control of Woodland Removal Policy of no net loss of woodland. A compensatory planting strategy is set out in **Volume 5, Appendix 13.3: Compensatory Planting Strategy.**

Scottish & Southern Electricity Networks

TRANSMISSION

Breakachy

A

B

C

D

E

Scale 1:350,000

Scale @ A3 1:10,000

N

0.25 0.5 km

S225 S226 S227 S228 S229 S230

Lòn Duchalaidh

Loch an Ùird

An Druim

Creag a' Pheannsail

Cnoc Chluaine

Darach Brae

Crask of Aigas

Torr nan Caorach

Tòrr a' Bhealaidh

Moalnaceap Cottage

Eilean Aigas House

Roe Deer Lodge

Sugar Loaf

Upper Leanassie

Breakachy Farm

Sheep Wash

Black Wood

Cluanie

Spitalfield

Waterfall

Weir

Breakachy Burn

Allt na Craoibag

Allt nan Damh

Burn of Crask

Collects

Ford

Track

Drain

Path

Slipway

Dam

Picnic Site

Masts

Pit (dis)

Legend

- Landownership boundary/parcel
- Central line Operational Corridor
- Proposed 400kV OHL Towers
- 20m Access Corridor
- Access Tracks- Existing Upgrade
- Access Tracks- New Stone Perm
- Access Tracks- New Stone Temp
- NWSS- Native woodland
- Conifer woodland- Operational Corridor 90m
- Broadleaved woodland- Operational Corridor 90m
- Felled - Operational Corridor 90m

Woodland report
Project No- LT000132
Spittal- Loch Buidhe - Beauly 400kV Connection
Figure 1. Woodland Impacted by the Proposed Development
Section E- Aigas Community Forest

Ref No: 28-06-2025