

Beauly to Blackhillock to New Deer to
Peterhead 400 kV Project
Environmental Impact Assessment Report
Volume 5 | Appendices

Appendix 12.1.105: Woodland Report Parcel 3162





APPENDIX 12.1.105: Woodland Report Parcel 3162

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1 Introduction

- 1.1.1 This Appendix presents information relevant to the Beauly to Blackhillock to New Deer to Peterhead 400 kV Overhead Line (OHL) Project (the Proposed Development). It should be read in conjunction with the Environmental Impact Assessment (EIA) Report, specifically **Chapter 12: Forestry**, for full details of the Proposed Development.
- 1.1.2 As part of the EIA, it has been identified that construction of the Proposed OHL Alignment and the associated access tracks would cross several woodland areas within private or publicly owned landholdings.
- 1.1.3 This woodland report assesses the potential effects of the Proposed Development on Parcel 3162. It includes the requirements for woodland removal and management recommendations to mitigate the impact of the woodland removal. The report provides an overview of the characteristics of the affected woodland, including woodland composition, site conditions, soil conditions, exposure levels and existing felling approvals. The report also provides details of existing infrastructure, and potential constraints related to forestry operations. It aims to inform decision-making by identifying key environmental and logistical considerations associated with the Proposed Development. Additionally, it evaluates the feasibility of timber extraction and access whilst highlighting necessary mitigation measures to minimise disruption to the woodland ecosystem and surrounding landscape.
- 1.1.4 Field surveys of the woodland areas have been undertaken and have been used to determine the various woodland characteristics in order to identify the woodland removal required and recommended. This document also sets out the area quantity hectares (ha) to be compensatory planted to ensure no net loss of woodland is achieved

2 Woodland property

- 2.1.1 The landholding property boundaries are identified in **Figure 12.1.105a**: **Parcel 3162 Location Map**. The woodlands are situated within the Bognie Trust Estate, 8 km northeast of Huntly (NJ 617411 422199) in the Aberdeenshire council district.
- 2.1.2 The woodland landscape is characterised by a mix of mature and semi-mature tree stands, interspersed with remnants of historical field boundaries that contribute to the estate's cultural and environmental heritage.
- 2.1.3 The A97 is situated to the west of the estate, serving as a key access route.

3 Development Requirements

3.1 400 kV Overhead Line Infrastructure Requirements

- 3.1.1 The Study Area for this assessment initially focussed on a 100 m width either side of the centreline of the Proposed OHL Alignment and ancillary infrastructure, where relevant, prior to the identification of an Operational Corridor (OC). The Applicant defines the OC as the area in which it has rights to remove woodland for the purposes of the safe construction, resilience and continued maintenance of OHLs, or protection of electrical plant as required by the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002¹ and The Electricity Act 1989². The OC is defined based on two different factors as follows:
 - The first factor in which the OC is determined is with reference to the distance at which a tree could fall and cause damage to the OHL, resulting in a supply outage. As a result, the OC width would be based on the safety distance required to allow for a mature tree falling towards the OHL at the mid-point on an OHL span between two towers, taking account of topography and tree height at maturity. Standard falling distance for a mature conifer tree is considered to be a minimum of 45 m. Where the OC passes through areas of

¹ UK Gov (2002). The Electricity Safety, Quality and Continuity Regulations 2002. Available at: The Electricity Safety, Quality and Continuity Regulations 2002

² UK Gov (1989). Electricity Act 1989. Available at: <u>Electricity Act 1989</u>



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- broadleaved woodland, it is noted that the width of woodland removal is likely to be reduced, due to the general lower height and characteristics of the tree species present.
- The second factor that is considered is the maximum distance that the OHL conductors can blow out from the tower under a 1 in 50-year return period wind condition, plus the required electrical clearance distance. This is to ensure that the OHL conductors do not come into contact with, or come close enough to, any object that could result in an electrical clearance infringement. This conductor blowout distance varies between each tower dependent on span length and must therefore be considered on a span-by-span basis.
- 3.1.2 The typical OC required within areas of commercial conifer forestry for a 400 kV OHL is 90 m (i.e. 45 m either side of the centre line). Where the OC passes through areas of broadleaved woodland, it is proposed that the extent of woodland removal is likely to be reduced due to the lower height of the tree species present. The OC for the Proposed OHL Alignment through areas of broadleaved woodland has been reduced to 70 m (i.e. 35 m either side of the centre line of the OHL). This has been based on the likely height of the woodland at maturity. Where any woodland removal within the OC is proposed to be reduced from the 45 m either side of the line, a site-specific assessment must be carried out to confirm that the conductor blowout does not exceed the OC width. If the conductor blowout exceeds the OC, then the width of the OC must be increased to meet the requirements of the blowout assessment as a minimum. This will ensure compliance with ESQCR requirements and that the required safety clearances are maintained.
- 3.1.3 A resilient OC of 70 m in width is required throughout the native woodland within Woodland Parcel 3162, taking into account the requirements of the conductor blowout assessment. The OC is illustrated in Figure 12.1.105b: Parcel 3162 Proposed Felling Requirement.

3.2 Access Track Route Design

3.2.1 Temporary access tracks will be created across agricultural ground to facilitate access.

4 Woodland Characteristics

4.1 Woodland Composition and Site Conditions

- 4.1.1 Woodland Parcel 3162 was surveyed in December 2024. The OC between towers BN4-5 and BN4-6 intersects a section of semi-mature native woodland, which is rich in broadleaf species. The dominant native species present include Sessile oak (SOK), Willow (WL), and Ash (AH), creating a diverse and ecologically significant stand.
- 4.1.2 The AH is showing signs of AH dieback disease, with a significant amount of standing deadwood present.
- 4.1.3 In addition to the native species, there are some non-native trees interspersed within the stand, notably Sycamore (SYC) and Beech (BCH). While these species are not native to the area, they are typical of estate policy woodlands where non-native species have been historically planted for timber production or ornamental purposes.
- 4.1.4 This section of woodland represents a semi-mature stage of development, where the canopy is beginning to close, and the structure is transitioning towards a more natural woodland composition. The canopy is dominated by broadleaf trees, while the understorey is gradually developing with shrubs and smaller tree species, which include a mix of native species.
- 4.15 Windblow damage is encroaching from the south. However, this damage is occurring outside of the OC felling area, meaning that it is not within the scope of immediate management or harvesting activities. The OC trees, which are the focus of the current felling operations, are located in areas that are generally more open and less densely stocked compared to the windthrow-affected southern section.



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- 4.16 The woodland is categorised within the NatureScot Ancient Woodland Inventory (AWI)³ as Long Established of Plantation Origin (LEPO). This classification acknowledges that, while the woodland has historically been managed as a plantation, it has maintained continuous woodland cover for an extended period, which contributes significantly to the site's ecological value.
- 4.1.7 Although the woodland's origins are linked to plantation forestry, it has progressively evolved over time. The plantation elements, such as non-native conifers, appear to have been gradually removed, allowing for the reestablishment and expansion of native species.
- 4.1.8 Despite its plantation origins, the site retains key characteristics of long-term woodland cover, which can be seen in the mature trees, the age structure of the stand, and the presence of ancient woodland indicators, such as native understorey vegetation and natural regeneration.
- 4.19 The Detailed Aspect Method of Scoring (DAMS) score is showing a maximum of 14⁴, indicating moderately exposed.
- 4.1.10 The National Soil Map of Scotland⁵ indicates, the predominant soil type within the affected areas consists of humus iron podzols. The presence of these soils suggests that the area may experience challenges related to tree stability and growth, particularly in wetter conditions.
- 4.1.11 The Ecological Site Classification (ESC)⁶ identifies the site as having a cool, moderately exposed and moist climate. The soils have a slightly dry moisture status and a very poor nutrient status.
- 4.1.12 The proposed section of OHL consists of a section of OC between towers BN4-5 and BN4-6. The closest road suitable for access within the ownership across several unclassified roads to the A97 to the west, these are classed as Consultation Route⁷. Access to the site will need to be taken through the agricultural field to the west. Considering the quality and quantity of the material operations can be carried out by a combination of hand felling / mulching.

4.2 Photo Record – Operational Corridor Assessment

4.2.1 The following photographs provide a visual record of key locations along the OC. Each image illustrates existing vegetation types, land use, and notable landscape features relevant to the planning and management of the OC. Particular attention has been given to areas of mature woodland, natural regeneration, and locations where proposed works may intersect with ecologically or visually sensitive habitats. The photos are intended to support site assessments and inform mitigation strategies.

³ NatureScot. Available at: https://www.nature.scot/doc/guide-understanding-scottish-ancient-woodland-inventory-awi

⁴ Forest Research (2025). Available at: http://www.forestdss.org.uk/geoforestdss/ The Detailed Aspect Method of Scoring (DAMS) is a system used to assess wind exposure in forestry and land management. It provides a numerical score that quantifies the level of exposure a site experiences based on factors such as elevation, topography, and aspect (the direction a slope faces). The DAMS score helps foresters predict wind risk, which is crucial for understanding tree stability, growth potential, and the likelihood of windthrow (trees being uprooted or broken by wind). The scoring system ranges from 0 to 24, with higher scores indicating more exposure to wind.

⁵ Scottish Government (2024). Available at: https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/

⁶ Ecological Site Classification. Available at: http://www.forestdss.org.uk/geoforestdss/

⁷ The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed routes-map/

The Agreed Routes Maps identify the following categories of roads:

Consultation Routes are recognised as being key to timber extraction but are not up to Agreed Route standard. Consultation with the Local Authority is required and it may be necessary to agree limits of timing, allowable tonnage etc. before the route can be used. B roads and minor roads that are not categorised should be assumed to be Consultation Routes unless covered by one of the other classifications (e.g. Severely Restricted Route).



Photo 1: View from NJ 616901 421432, looking northeast into the windthrow damage to the south of the OC.





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Photo 2: View from NJ 617361 422051, looking northeast within the woodland. This image shows the semi-mature stand of ash within the OC felling. The stand is relatively healthy, though there are some early signs of Ash Dieback observed in a few of the trees with branch dieback present.



5 Windblow Risk

- 5.1.1 It is acknowledged that the creation of the OC would result in wider potential indirect effects on the surrounding woodland areas. These areas would be subject to potential increased risk of damage (windblow). Each woodland report identifies further areas of felling to a windfirm edge, defined as 'Management Felling' (categorised as an indirect secondary impact). This is covered in more detail in the Forestry Chapter in **Section 12.4**. Any felling undertaken out with the OC would be solely under the control of the relevant landowner (and not the Applicant). It is the intention of the Applicant to encourage the landowners to follow this good practice in terms of redesign of their current Long-Term Forest Plans, which in-turn would aim to follow UK Forestry Standard (UKFS)⁸ for the implementation of the works required.
- 5.1.2 Considering the age and open grown nature of the species present there is little risk of windblow as a result of the felling of the trees in the OC.

⁸ Scottish Forestry (2024). Available online at: https://www.forestry.gov.scot/publications/sustainable-forestry/uk-forestry-standard-ukfs

6 Woodland Management Impact

- 6.1.1 As the woodland is not managed commercially, there will be no long-term negative impact on woodland management.
- 6.1.2 The infrastructure built for this section of the OHL could provide a benefit to the landowner for future woodland management as it could provide long term access. As part of construction works, dedicated crossing points and long-term access opportunities should be discussed with the landowner(s).
- 6.1.3 The Proposed OHL Alignment furthermore introduces an electrical hazard, but the constraint associated with the electrical hazard will be reduced by regular maintenance of the OC which will avoid the incidences of "Red Zone" trees (reference Forest Industry Safety Accord, FISA 804 "Electricity at Work: Forestry").
- 6.1.4 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 0.72 hectares (ha).

7 Mitigation Opportunities

7.1 Woodland Mitigation Measures

7.1.1 There is potential opportunity for compensatory planting out with the OC. This opportunity could be explored with the landowner.

7.2 Restructuring

7.2.1 Considering the size of the felling the proposals there is no impact on structure expected.

7.3 Restocking

7.3.1 It is anticipated that native broadleaved regeneration is likely to occur within the OC, as a result of its proximity to existing seed sources.

8 Net Effect / Summary

8.1.1 **Tables 8.1 to 8.4** outline the operational requirements for forestry management within the OC between towers BN4-5 and BN4-6. They detail the areas designated for clear felling, within the OC and forest design considerations.

Table 8.1: Woodland removal for Infrastructure, within OC.

Item	Woodland Type	Area (ha)
Operational corridor felling	Native Broadleaved Woodland (70 m)	0.72
Total area		0.72

Table 8.2: Compensatory Planting

Item	Woodland Type	Area (ha)
Compensatory Planting Area	Native Broadleaved Woodland (70m)	0.72
Total area		0.72

⁹ Forest Industry Safety Accord (2020), FISA 804 Electricity at Work: Forestry. Available at: https://ukfisa.com/Safety/Safety-Guides/fisa-804



Table 8.3: Woodland Removal Impact of Infrastructure

Item	Area (ha)
Total Loss of Woodland Area	0.72
Total Compensatory Planting Area	0.72
Total Net Loss of Woodland Area	

Table 8.4: Woodland removal for Management Felling, outwith OC.

ltem	Woodland Type	Area (ha)
Management Felling		0.00
Replanting / Restocking Opportunities		0.00
Net Loss of Woodland Area		0.00

9 Compensatory Planting

- 9.1.1 Only areas directly impacted by the OC will be included in the compensatory planting total, in accordance with the Control of Woodland Removal Policy (CoWRP)¹⁰. This policy ensures that woodland loss due to development is mitigated by appropriate replanting or regeneration efforts, but it specifically applies to areas where tree removal is necessary for the Proposed Development. See **Appendix 12.3 Compensatory Planting Management Strategy**.
- 9.1.2 Any additional felling outside the OC, such as areas cleared for windthrow management or forest design improvements, falls under the responsibility of the landowner and is not included in the compensatory planting requirements. Instead, these areas may be replanted under a forest plan revision or felling license at the landowner's discretion. This approach aligns with national forestry guidelines, balancing infrastructure development with sustainable woodland management.
- 9.1.3 The total amount of net felling requiring compensation under the CoWRP is 0.72 ha.
- 9.1.4 In order to provide a greater balance limiting long-term impacts on forestry interests it is proposed that the majority of this woodland loss is compensated via offsite compensatory planting.

¹⁰ Forestry Commission Scotland (2009). Control of Woodland Removal Policy. Available at: https://www.forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal/viewdocument/285



