

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

Appendix 12.1.84 – Woodland Report Parcel 5264, Aultmore Forest





# APPENDIX 12.1.84 – Woodland Report. Parcel 5264, Aultmore forest.

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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 5264, Aultmore Forest. 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, 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 12.1.84a: Parcel 5264 Location Map. The Aultmore forest is an even-aged productive forestry block north of Aultmore, 4.5 km northwest of the town of Keith (NJ 401355 545292), within the Moray Council area. It is split into two halves by the B9016.

# 3 Development Requirements

### 3.1 400kV 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) 2002<sup>1</sup> and The Electricity Act 1989<sup>2</sup>. 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 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.

<sup>&</sup>lt;sup>1</sup> UK Gov (2002). The Electricity Safety, Quality and Continuity Regulations 2002. Available at: The Electricity Safety, Quality and Continuity Regulations 2002

<sup>&</sup>lt;sup>2</sup> UK Gov (1989). Electricity Act 1989. Available at: Electricity Act 1989



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  - 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.
  - The typical OC required within areas of commercial conifer forestry for a 400 kV OHL is 90 m (i.e. 45 m either 312 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.
  - A resilient OC of 90 m in width is required within the commercial forest and 70m within the broadleaved woodland within Woodland Parcel 5264 taking into account the requirements of the conductor blowout assessment. The OC is illustrated in Figure 12.1.84b: Parcel 5264 Proposed Felling Requirement.

### 3.2 Access Track Route Design

3.2.1 The tracks associated with this section of the OHL are within the OC.

#### 4 **Woodland Characteristics**

#### 4.1 Woodland Composition and Site Conditions

- 4.1.1 The woodland was surveyed in November 2024. The forest in and around the Operational Corridor (OC) consists largely of even-aged, productive Sitka spruce (SS) with small elements of other age classes and species such as Scots pine (SP), larch (LA) and broadleaves.
- The forest sits within an upland farmland landscape and is entirely surrounded by agricultural land 4.1.2
- 4.1.3 The forest is moderately exposed with a maximum Detailed Aspect Method of Scoring (DAMS) of 13<sup>3</sup>.
- 4.1.4 The National Soil Map of Scotland<sup>4</sup> indicates identifies the site as being predominantly humus iron podzols. Soil conditions throughout the ownership are characterised by a high-water table leading to significant gleying and inhibiting rooting. There are several knolls and gullies in the forest block with better drainage on top of the knolls and very poor drainage in the gullies.
- 4.1.5 The Ecological Site Classification (ESC)<sup>5</sup> identifies the site as having a cool, moderately exposed and moist climate. The soils have a wet moisture status and a very poor nutrient status.
- 4.1.6 No environmental designations apply to the parcel.

<sup>&</sup>lt;sup>3</sup> 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.

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

<sup>&</sup>lt;sup>5</sup> Forest Research Decision Support Tools. Ecological Site Classification. Available at: http://www.forestdss.org.uk/geoforestdss/



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  - 4.1.7 The Burn of Auchinderran flows through the forest block. Furthermore, two ponds are found in the block, one where the Burn of Auchinderran enters the block, the other where it leaves the block. It is highly likely the burn is the water supply to the Aultmore Distillery.
  - 4.1.8 A existing OHL runs through the block along the Burn of Auchinderran
  - 4.19 No existing forest management approvals could be found for the block through the Scottish Forestry Web Viewer.
  - 4.1.10 The remains of an old railway line, including a railway bridge, are found on the western side of the B9106 at the proposed location of CB14-22.
  - 4.1.11 The proposed section of OHL consists of a section of OC between towers CB14-22 and CB14-24. Proposed tracks in this section are found within the OC.
  - 4.1.12 There is limited forest road infrastructure in the block. The forest block on the eastern side of the B9106 is accessible via an existing access coming of the main road. This access will need significant upgrade prior to forest operations taking place. If the current infrastructure is not extended across the Burn of Auchinderran the burn will need to be crossed using a log bridge. Considering the woodland, soils and geomorphology this is operationally feasible but would result in a risk of diffuse pollution. The block west of the B9106 is currently not accessible and an access off the B9106 will need to be created, this is classified as an Agreed Route by the Timber Transport Forum<sup>67</sup>. The current access is proposed through the OC and through extremely wet ground. Due to the access restrictions, it is recommended that the proposed temporary access tracks are installed prior to felling to facilitate extraction.
  - 4.1.13 Liaison with the local road authority will be key to facilitate the felling operations along the roadside as trees are within falling distance of the road.
  - 4.1.14 Considering the quality and quantity of the material and the landform, operations can be carried out by harvester / forwarder combinations. An element of hand felling is likely required for the mature trees along the roadside.

#### 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.

<sup>&</sup>lt;sup>6</sup> The Timber Transport Forum. Introduction to Agreed Routes Map. Available at: <a href="https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/">https://timbertransportforum.org.uk/agreed-routes-map/introduction-to-agreed-routes-map/</a>

<sup>&</sup>lt;sup>7</sup> Roads which can be used for timber haulage without restriction other than as regulated by the Road Traffic Act 1988. "A" roads (e.g. the A9) are classified as Agreed Routes by default unless covered by one of the other categories (e.g. Consultation Route).



Photo 1: Existing infrastructure, broadleaved planting and Sitka spruce crop east of the B9106 (NJ 401415





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Photo 2: Burn of Auchinderran with existing OHL and Sitka spruce crop on the west of the B9106 between CB14-22 and CB14-23 (NJ 399645 542731, looking N)



Photo 3: Sitka spruce crop adjacent to pond on the north of the block (NJ 399781 545791, looking northeast)





Photo 4: Wet soil conditions, native broadleaved planting and Sitka spruce plantation at CB14-23 (NJ 404036 544567, looking southwest)





Photo 5: Extremely wet soil conditions in larch in the south of the forest block (NJ 404527 540100, looking southwest)





Photo 6: Native broadleaved planting and area of wet ground between historic railway line and B9106 (NJ 400685 544701, looking northeast)



Photo 7: Sitka spruce plantation at CB14-22 over historic railway line (NJ 400512 544728, looking north)





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Photo 8: Area of mature Scots pine, windblow and Sitka spruce plantation (left) from north of CB14-22 (NJ 399768 545879, looking south)



### 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), which is covered in more detail in the **Chapter 12**: Forestry in Section 12.4.

  Management felling would be considered as part of any application for felling permission. This would provide restocking as agreed with Scottish Forestry which would result in balancing the loss of woodland. 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 for the implementation of the works.
- 5.1.2 Considering the management history, the height and the rooting potential of the crop there is a high risk of windblow as a result of the felling of the OC.

# 6 Woodland Management Impact

- 6.1.1 The impact on woodland management within this forest block is likely high. The OC, along with the recommended management felling constitutes the majority of the forest block. From a production perspective the felling would be considered premature which will impact the profitability of the block.
- 6.1.2 Considering the block has not been thinned and the productive areas are now past their first thinning it is likely that the blocks would have been clearfelled and restocked. The Proposed OHL Alignment will not impact the management style but will impact the scale and timing of the operations.

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  - 6.1.3 The infrastructure built for this section of the OHL could provide a benefit to the landowner for future forest management as it could provide long term access into the blocks either side of the B9106 to which access is currently poor. As part of construction works, dedicated crossing points and long-term access opportunities should be discussed with the landowner(s).
  - 6.1.4 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"8).
  - 6.1.5 The total loss of Native Broadleaved woodland resulting from the proposed alignment is 0.37 ha.

### 7 Mitigation Opportunities

#### 7.1 Woodland Mitigation Measures

7.1.1 To mitigate the landscape impact on this section of the Proposed Development, a replanting strategy has been set out in **Appendix 7.6 Forestry Landscape Mitigation Principles** in the Landscape chapter will be followed where possible, as demonstrated in **Figure 12.1.84c: Parcel 5264 Proposed Planting Areas**.

#### 7.2 Restructuring

- 7.2.1 Considering the size of the felling in relation to the size of the forest block the structure of the block will be severely impacted. The OC and management felling together constitute approximately half of the forest block. The block is currently even aged and as such the change will create age diversity although, at the scale proposed, this is not the optimal approach to restructuring.
- 7.2.2 The felling of the OC for the development will create new green edges, which will allow the landowner to work to in the future if that is desired.

#### 7.3 Restocking

- 7.3.1 As set out in the Landscape chapter under the 'Landscape Replanting Proposals', restocking can potentially take place within the OC to mitigate the visual impact of the OC. Restocking within the OC will be carried out by the applicant. Detail shown in Figure 12.1.84c: Parcel 5264 Proposed Planting Areas
- 7.3.2 In case the management felling takes place there will be a restock obligation on the landowner.

# 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 CB14-21 and CB14-24. They detail the areas designated for clear felling, both within the OC and additional recommended Management Felling outside the OC to address windthrow risks and forest design considerations.

Table 8.1: Woodland removal for Infrastructure, within OC

Item	Woodland Type	Area (ha)
Operational corridor felling	Mature Conifer Plantation (90m)	5.48
Operational corridor felling	Native broadleaves (70m)	0.37
Total area		

<sup>&</sup>lt;sup>8</sup> Forest Industry Safety Accord (2020), FISA 804 Electricity at Work: Forestry. Available at: https://ukfisa.com/Safety/Safety-Guides/fisa-804



Table 8.2: Compensatory Planting

	Woodland Type	Area (ha)
Compensatory Planting Area	Mature Conifer Plantation	5.48
Operational corridor felling	Native broadleaves	0.37
Total area		5.85

Table 8.3: Woodland Removal Impact of Infrastructure

ltem	Area (ha)
Total Loss of Woodland Area	5.85
Total Compensatory Planting Area	5.85
Total Net Loss of Woodland Area	

Table 8.4: Woodland removal for Management Felling, outwith OC

ltem	Woodland Type	Area (ha)
Management Felling	Mature Conifer Plantation	20.61
Replanting / Restocking Opportunities	Conifer Plantation	20.61
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) <sup>9</sup>. 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 5.85 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 within the same local authority area. It is proposed that full details of the areas subject to this offsite compensatory planting is notified to Scottish Forestry prior to energising the Proposed OHL Alignment.

<sup>&</sup>lt;sup>9</sup> Forestry Commission Scotland (2009). Control of Woodland Removal Policy. Available at: <a href="https://www.forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal/viewdocument/285">https://www.forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal/viewdocument/285</a>





