

# 14 FORESTRY

### 14.1 Introduction

- 14.1.1 This chapter assesses the potential effects on forested areas associated with the construction and operation of the Proposed Development. This chapter (and its associated Figures and Appendices) is not intended to be read as a standalone assessment and reference should be made to the introductory chapters of this EIA Report (**Volume 2, Chapters-1-5**).
- 14.1.2 The assessment has been carried out by Lina Viciulyte, Forest Project Manager, SSEN Transmission, HND in Sustainable Forest Management, MSc in Climate Change and Development and 12 years of professional development.
- 14.1.3 This chapter is supported by the following figures and technical appendices:
  - Volume 3a: Figures
    - Figure 14.1 Landownership Boundary Maps; and
    - Figure 14.2 Forestry Project Felling Maps.
    - Volume 4: Technical Appendices
      - Technical Appendix 14.1 OHL Woodland Reports;
      - Technical Appendix 14.2 Native Broadleaf Management Plan; and
      - Technical Appendix 14.3 Compensatory Planting Management Strategy.
- 14.1.4 Figures and technical appendices are referenced in the text where relevant.

## 14.2 Assessment Methodology and Significance Criteria

### Scope of the Assessment

- 14.2.1 This chapter considers likely impacts of the Proposed Development on forestry. This includes an assessment of the sensitivity of the forest areas and a determination of the likely level of impact upon them that would arise from the Proposed Development, with particular emphasis on forest structure and management.
- 14.2.2 The assessment is based on the requirement to form an Operational Corridor (OC) while recognising the potential impact over broader forest management from the Proposed Development. This Chapter assesses the OC only and does not address the overall Long-Term Forest Plans (LTFPs) covering the surrounding areas. This is because any felling undertaken outwith the OC would be solely under the control of the landowner, and the Applicant would not have any control over such. Consequently, the assessment is limited to consideration of the effects of the Proposed Development on the present forest composition and yield.

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### **Extent of the Study Area**

- 14.2.3 The Study Area for this assessment is based around the OC. The Applicant defines the OC as the area in which it has rights to remove woodland for the purposes of creation of new overhead lines (OHLs), 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 typical OC required within areas of commercial conifer forestry for a 275 kV OHL is 85 m. The OC is defined with reference to the distance at which a tree could fall and cause damage to the overhead line, resulting in a supply outage<sup>1</sup>. As a result, the final corridor 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. The proposed OC illustrated in **Figure 14.2: Forestry Project Felling Maps (EIAR Volume 3a)** has been assessed on the likely height of the woodland at maturity and therefore, varies in width according to the woodland type present (from 85 m through the conifer compartments, reduced to 60 m through the broadleaved sections, and further reductions where possible).
- 14.2.4 For the purposes of this report the OC may lie anywhere within the 100 m Limit of Deviation (LOD), which forms the extent of the Study Area, as indicated on **Figure 2.1: Proposed Development** (EIAR Volume 3a).
- 14.2.5 The forestry assessment does acknowledge that the scope of woodland removal included as part of the Proposed Development (for consenting purposes) has been limited to the woodland removal required to create the proposed OC and required access tracks, as set out in Chapter 2: Description of the Proposed Development (EIAR Volume 2). 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 (windthrow). As a result, the applicant has produced three separate OHL Woodland Reports, Technical Appendix 14.1: OHL Woodland Reports (EIAR Volume 4), to ensure the Proposed Development is incorporated within ongoing forest management activities. The OHL Woodland Reports identify further areas of felling to leave a windfirm edge (categorised as an indirect impact on the OC felling). Indicative areas of felling to address windthrow risk are illustrated on Figure 14.2: Native Broadleaf Management Plan (EIAR Volume 3a). Further detail is provided under the mitigation section of this chapter.
- 14.2.6 The woodlands affected by the Proposed Development lie within a series of separate landholdings, see **Figure 14.1: Landownership Boundary Maps (EIAR Volume 3a)**, north of the village of Inveraray, which are within private ownership.

### **Consultation Undertaken to Date**

14.2.7 Consultation undertaken to date mainly pertains to EIA Scoping. Scoping responses received at the time of writing that are relevant to this chapter are captured in **Table 14-1.** Further information can be found in **Technical Appendix 4.3: Consultation Register (EIAR Volume 4)**.

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<sup>&</sup>lt;sup>1</sup> 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)

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Table 14-1: Scoping Responses and Other Consultations of Relevance to Chapter 14					
Organisation	Type of Consultation	Response	How Response has been Considered		
Scottish Forestry (SF)	Scoping Response, March 2022	The Scottish Government's Control of Woodland Removal Policy (CoWRP) includes a strong presumption in favour of protecting Scotland's woodland resources.	The Proposed Development addresses this through minimising woodland removal both through careful route selection and by defining the OC appropriately for different woodland types. Compensatory planting to achieve no net loss of woodland for the Proposed Development, in-line with CoWRP objectives and commitments by the Applicant, is discussed within this chapter.		
Scottish Environment Protection Agency (SEPA)	Scoping Response, March 2022	Where woodland removal is proposed for development, the relevant Environmental Impact Assessment (EIA) regulations will apply and the EIA Report should justify and provide evidence for the need for woodland removal and the associated mitigation measures.	The woodland assessment methodology is covered in this chapter.		
		Design approaches that reduce the scale of felling required to facilitate the development must be considered and integration of the development with the existing woodland structure is a key part of the consenting process.	The OC though conifer plantations is the minimum safe distance required, which is 85 m, and is reduced to 60 m through the sections of broadleaves due to the mean average height the species is capable of achieving. This is discussed in the Native Broadleaf Management Plan (Technical Appendix 14.2, EIAR Volume 4).		
		The removal of large areas of woodland will not be supported	The total area affected by the OC is less than 4% of the total woodland area affected by the Proposed Development. This is less than the UK Standard of 20% in a 3 year period.		
		The loss of irreplaceable ancient woodland habitat must be given sufficient weight in the analysis	An area of upland oakwood equating to 0.34 ha is classified as Ancient Woodland. However, despite the area's classification, tree cover in		

## Table 14-1: Scoping Responses and Other Consultations of Relevance to Chapter 14



Organisation	Type of Consultation	Response	How Response has been Considered	
			this area has been intermittent since the 1750, and the trees are around 100+ years old. Despite the lack of ancient or veteran trees, there is a good amount of remnant features such as specialist plants and standing deadwoods, hence for the purpose of this assessment will be classed as Ancient Woodland. Here the corridor will be reduced to 60 m and will be assessed for further retention in terms of felling operations.	
		Proposals for felled forest material must be shown to comply with our Use of Trees Cleared to Facilitate Development on Afforested Land – Joint Guidance from SEPA, SNH and FCS.	Where there is no target vegetation, mulching and chipping operations will be applied. Stumps harvested low to the ground and where appropriate left in situ. Brash mats used where possible and retained.	

### **Effects Scoped Out**

- 14.2.8 The Proposed Development would not have a fixed operational life as it is assumed to be operational for 50 years or more. Effects associated with the construction phase can be considered to be representative of the worst-case decommissioning effects and therefore decommissioning effects have been scoped out.
- 14.2.9 On the basis that felling proposals to create the OC will be supported by a commitment to comply with Scottish Government's CoWRP through compensatory planting, there would be no likely significant effects on the productive conifer plantation resource.
- 14.2.10 It is noted that the UK Forestry Standard (UKFS)<sup>2</sup> guidance identifies seven elements of sustainable forest management, as follows:
  - Forests and Biodiversity;
  - Forests and Climate Change;
  - Forests and Historic Environment;
  - Forests and Landscape;
  - Forests and People;
  - Forests and Soil; and
  - Forests and Water.

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<sup>&</sup>lt;sup>2</sup> Forestry Commission (2017) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/687147/The\_UK \_Forestry\_Standard.pdf

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14.2.11 The potential environmental impacts and likely significant effects associated with the seven elements of sustainable forest management will be considered within the individual topic chapters where relevant in the EIA Report, rather than in this chapter.

### Method of Baseline Data Collation

#### Desk Study

14.2.12 Property boundary information of each landholding was obtained. The Study Area of 100 m either side of the Proposed Alignment was analysed for existing woodland cover through desk-based survey, using maps, aerial photography and the review of web-based data provided by Scottish Forestry<sup>3.</sup> The desk-based survey was supplemented by consultation with landowners and a review of existing forest data provided by the landowners on woodland type (species/age class) and the existing woodland management regime, including woodland restructuring and LTFP information.

### Field Survey

- 14.2.13 Forest walkover and mapping surveys were undertaken during the period January to March 2022, to confirm the extent of the woodland areas affected by the Proposed Development and further assess the current woodland characteristics. Photographic records were taken to provide visual samples of the woodland types and are included in **Technical Appendix 14.1: OHL Woodland Reports (EIAR Volume 4)**. Woodland volume assessments of the commercial conifer woodlands, were undertaken on Site, with the application of tree measurement techniques in line with industry standard forest mensuration protocols<sup>4</sup>. Changes in land-use of the individual landholdings were also noted.
- 14.2.14 The forest walkovers included the visual assessment of tree health, vigour, ground conditions and existing woodland stability. Observations were also made of potential woodland windfirm boundaries. The forest walkover surveys included the 100 m LOD Study Area.
- 14.2.15 The site visits confirmed that woodland restructuring management is active within the commercial conifer woodland properties.

### Limitations and Assumptions

14.2.16 Forestry information has been provided by the forest and land managers of each landholding and cross checking has only been carried out where observations suggested that the immediate conditions varied from the records.

### **Method of Assessment**

- 14.2.17 This chapter has been written in line with the UKFS5 guidance.
- 14.2.18 The assessment has been made with reference to:
  - The sensitivity of the different types of woodland present in the Study Area taking account of the degree and rate of change in the woodland, both in the recent past and that anticipated in the near future, and therefore the susceptibility/vulnerability of the woodland to change; the quality of the woodland and the extent to which it is rare or distinctive, and the value attributed to the woodland through designations;

<sup>&</sup>lt;sup>3</sup> Scottish Forestry Land Information Search https://map.environment.gov.scot/LIS\_Agri/Agri.html\_

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

<sup>&</sup>lt;sup>4</sup> Forestry Commission (Scottish Forestry) Forest Mensuration; A handbook for practitioners (2006)

<sup>&</sup>lt;sup>5</sup> Forestry Commission (2017) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/687147/The\_UK \_Forestry\_Standard.pdf

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- Magnitude of change and extent of woodland removal;
- Duration and reversibility timescale of effect (days/weeks/months/years) until recovery. Permanent effects are described as such, and likelihood of recovery is detailed where appropriate; and,
- Adverse/beneficial if the effect will be beneficial or detrimental to the feature.
- 14.2.19 The effect on woodland is normally considered to be of an adverse nature (tree felling) however, indirect beneficial effects in some areas may arise where the introduction of the Proposed Development allows for the removal of ecologically habitat-poor conifer plantation. This may be followed by natural regeneration or planting of more diverse woodland tree mix or introduction of native woodland species, and the development of more open ground than that which existed originally. While there may be an ecological benefit from the removal of conifer plantation forest, there is a presumption against all forest removal which is supported by the Scottish Government's CoWRP. As such for the purposes of this assessment tree removal is to be considered as having an adverse effect.

#### Criteria for Assessing Sensitivity of Receptors

14.2.20 Four categories of sensitivity are defined in **Table 14-2**.

### Category Description Highly valued, subject of national designation; High Particularly rare or distinctive in a national context; or Considered susceptible to small changes. Valued more locally, subject to local designation; Medium Rare or distinctive in a regional context; and/or Are tolerant of moderate levels of change. Lower value, more commonplace, not designated; Low Considered potentially tolerant of noticeable change; or Undergoing substantial development such that their character is one of change. Already fundamentally changed (e.g., second rotation commercial conifer); Negligible Considered tolerant of noticeable change; or Having undergone substantial development such that their character is one of change.

#### Table 14-2: Sensitivity Criteria

Criteria for Assessing Magnitude of Change

14.2.21 The magnitude of change has been assessed with reference to the four categories defined in Table 14-3.



#### Table 14-3: Magnitude of Change Criteria

Category	Description
High	A noticeable change to the woodland over a wide area or an intensive change over a limited area.
Medium	Small changes to the woodland over a wide area or noticeable change over a limited area.
Low	Very small changes to the woodland over a wide area or small changes over a limited area.
Negligible/None	No discernible change to the woodland.

#### Significance Criteria

14.2.22 The sensitivity of the woodland (**Table 14-2**) and magnitude of change criteria (**Table 14-3**) are then used to inform a professional judgement on the likely significance of the effect. **Table 14-4** provides a framework for assigning significance of effects.

#### Table 14-4: Significance of Effects

Magnitude of Change	Sensitivity of Woodland			
	High	Medium	Low	Negligible
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	None
Low	Moderate	Minor	None	None
Negligible/None	Minor	None	None	None

14.2.23 Major and moderate effects have been assessed as being significant in the terms of the EIA regulations.

#### Sensitivity of Receptor

14.2.24 A summary of the sensitive woodland receptors, which have been 'scoped-in' to the assessment are provided in **Table 14-5** along with the justification for inclusion.

Receptor	Sensitivity	Justification
Plantation conifer forest	Low	Tolerant to the proposed changes and having no environmental designation.
Ancient Woodland and semi natural woodland	Medium	Ancient Woodland is a valued (non- statutory) designation. Semi natural woodland is noted to have biodiversity and amenity value. Both are considered locally tolerant to moderate levels of change. This assessment is based on the regional sensitivity. It is recognised there may be some localised areas considered to have increased sensitivity. Within this assessment the sensitivity is considered to be medium <sup>6</sup>

 Table 14-5: Summary of Receptor Sensitivity

<sup>&</sup>lt;sup>6</sup> It is noted that the assessment of the sensitivity of this resource in ecological terms is high; however, this chapter is looking solely at the forestry and woodland resource impacts, and indirect effects on biodiversity are addressed within Chapter 8 Ecology

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14.2.25 Given the dynamic nature of productive forests, which are subject to restructuring, the environmental sensitivity of the forest as a commercial asset and land use is low. An area of upland oakwood equating to 0.34 ha is classified as Ancient Woodland (AW). However, despite the area's classification, tree cover in this area has been intermittent since the 1750, and the trees are around 100+ years old. Despite the lack of ancient or veteran trees, there is a good amount of remnant features such as specialist plants and standing deadwoods, hence for the purpose of this assessment will be classed as Ancient Woodland, with a medium environmental sensitivity.

### 14.3 Baseline Conditions

### **Current Baseline**

- 14.3.1 In total, approximately 9 km of the Proposed Alignment was assessed as being within woodland and associated open ground, where tree clearance would be required to form an OC (see Figure 14.2: Forestry Project Felling Maps, EIAR Volume 3a).
- 14.3.2 The baseline characterisation work carried out identified four landowners (see Figure 14.1: Landownership Boundary Maps, EIAR Volume 3a) with forest or woodland potentially affected by the Proposed Development. Following consultation with Scottish Forestry (SF), the Applicant has produced an OHL Woodland Report for the affected forest properties, being three reports in total (see Technical Appendix 14.1: OHL Woodland Reports, EIAR Volume 4). Each of these sites were visited and existing data sourced from the forest owners and their agents was reviewed and confirmed against the woodland site surveys.
- 14.3.3 The woodland habitats recorded for the Proposed Development are summarised in **Table 14-6**.

Habitat Type	Area (ha)
Broadleaved woodland of which native broadleaved woodland	1.41
Broadleaved woodland of which ancient woodland	0.34
Other broadleaves	0.85
Coniferous plantation woodland	24.21
Total Broadleaved and Coniferous Woodland:	26.81

#### Table 14-6: Woodland Habitat Types

### **Future Baseline**

14.3.4 Under the future "do nothing scenario" it has been assumed that coniferous plantation areas will continue to be managed principally in line with commercial objectives and woodland restructuring, including their felling and replanting with similar species. It is not considered likely that there will be a net reduction in the area of forest as a result of this scenario overall, although there will clearly be local changes. The native broadleaved woodland would be anticipated to remain in a similar condition in the absence of the Proposed Development. On this basis, the current baseline has been used for the purposes of this assessment and no further consideration will be given to future baseline scenarios.

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## 14.4 Assessment of Effects

- 14.4.1 The assessment of likely effects associated with the construction and operational phases of the Proposed Development is based on the typical activities and characteristics described in Chapter 2: Description of the Proposed Development (EIR Volume 2). The assessment is structured around the consideration of the following:
  - Direct construction effects: loss of areas of forest through woodland removal to create the OC and access, in the context of the regional forest resource for both commercial conifer forest and native broadleaved woodland;
  - Indirect construction effects: increased windthrow and secondary felling agreed with landowners;
  - Direct operational effects: loss of areas of forest and woodland associated with periodic vegetation management to maintain the OC;
  - Indirect operational effects: effects on forest management systems;
  - Indirect operational effects: restrictions on forest access; and
  - Cumulative effects: combined loss of woodland from direct and indirect (management) felling.
- 14.4.2 The introduction of the Proposed Development into woodland would give rise to a combination of short term and long-term effects during both construction and operation. The following interrelated effects could arise from the introduction of the Proposed Development within woodland areas associated principally with the requirement for tree felling and vegetation management.

### **Potential Effects**

### Potential Construction Effects

### Woodland Removal

- 14.4.3 Based on the forestry mapping (**Figures 14.2: Forestry Project Felling Maps, EIAR Volume 3a**) for the Proposed Development, the total area of direct and gross7 woodland removal is 26.81 ha. Of this, 24.21 ha is conifer plantation woodland and 2.6 ha is categorised as broadleaved woodland which includes native broadleaf woodland as well as Ancient Woodland (see **Table 14-6**). The loss of 24.21 ha of commercial forest is assessed as a medium magnitude of change in the context of a noticeable change over a limited area, equating to a 0.012% impact of woodland removal within the regional forest resource area of 200,000 ha. This effect is assessed as minor adverse, long term effect and not significant.
- 14.4.4 In terms of broadleaves the estimated area impacted by the Proposed Development is 2.6 ha (as per **Table 14-6**). Within this, 1.75 ha is classed as native woodland and 0.34 ha as Ancient Woodland. The local authority (Argyll and Bute Council) recorded area of native/Ancient Woodland is 34,716 ha, therefore the impacted area of 0.34 ha of Ancient Woodland would represent a maximum of 0.005% of the regional resource. The impacted areas could potentially be further avoided or reduced through detailed design where a combination of factors (e.g. topography, tower height, tree species and height) may reduce the area of native broadleaved woodland to be felled within the 60 m OC. For example, the extent of tree clearance may be reduced where it can be demonstrated through further detailed survey that the trees can be safely overflown by the Proposed Development or that the trees can be accommodated within closer proximity to the Proposed Development with either no work being required, or a degree of crown reduction only. In terms of the forestry assessment of this

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 $<sup>^{7}\,</sup>$  Gross' loss is taken to mean the total woodland removal for the Proposed Development.



impact, the sensitivity is medium8, the magnitude of change is medium and as such the effect is assessed as moderate adverse, long term and significant. The assessment of the impact of the clearance of native and ancient broadleaved woodland in biodiversity terms is addressed within **Chapter 8: Ecology (EIAR Volume 2)**.

#### Windthrow

- 14.4.5 The tree felling through areas of mature and semi mature conifers to create the Proposed Development OC would result in an indirect effect of increasing potentially unstable forest edges where retained trees stand immediately adjacent to the OC. These areas, known within the forest industry as 'brown edges', have relatively unstable trees within them which previously depended upon the now felled neighbouring trees for support. The risk of windthrow is that these brown edge trees will be damaged and blown over due to the lack of shelter. This assessment identifies an additional area of 14.87 ha which would be at increased risk of windthrow. This additional area of forestry would represent 0.007% of the regional resource and as such the effect is assessed as minor adverse, long term and not significant.
- 14.4.6 Notwithstanding this assessment, the Applicant has produced OHL Woodland Reports (**Technical Appendix 14.1: OHL Woodland Reports, EIAR Volume 4**), which recommend proposals to landowners to remove this risk by identifying additional areas of felling out to the nearest 'windfirm' edge (known as a 'green edge'), where the trees have developed next to open ground. The extent of additional (secondary) 'management felling' required to achieve this reduction in windthrow risk would be the total area of 14.87 ha<sup>9.</sup> The sensitivity of the forest for removal of trees outwith the Proposed Development OC is considered low in that the forest is deemed tolerant to this level of change and that such change could be expected to occur during normal forest management practices. The additional felling requirement introduced by the Proposed Development would only be to potentially bring felling activity forward and as such can be considered to be a temporary effect, with replanting likely to be required as a condition of any statutory felling license granted. The nature of native broadleaved woodland is such that it is not deemed to be susceptible to windthrow and has been assessed as low risk to windthrow adjacent to the OC.

### Potential Operational Effects

#### Woodland Removal

14.4.7 The direct operational effects on forests and woodland associated with the Proposed Development would be limited to periodic vegetation management to maintain the OC. Within the OC, following the construction of the Proposed Development, there would be an ongoing need to manage the growth of vegetation to facilitate access for maintenance of the OHL and to maintain the required tree clearance zones for the safe and resilient operation of the OHL. The OC, after woodland removal, is deemed to be of negligible sensitivity and the impact of vegetation management is considered to represent a low magnitude of change. Overall, the adverse effect during operation is assessed as none and not significant.

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<sup>&</sup>lt;sup>8</sup> It is noted that some areas of woodland would have locally higher sensitivity; however, overall in forestry terms, the sensitivity is considered to be medium.

<sup>&</sup>lt;sup>9</sup> This felling is not included within the scope of the Proposed Development (for the purpose of the application for consent under S37 of the Electricity Act 1989). This additional 'management felling' would be subject to a requirement for separate felling licence approval from Scottish Forestry.

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14.4.8 In addition, there is the potential for a medium to long term beneficial effect through the opportunity to manage lower growing vegetation to provide biodiversity enhancement in the OC. This development of a species diverse area of lower growing shrub species would provide valuable habitat for local fauna and flora. The assessment of this effect is provided in Chapter 8: Ecology (EIAR Volume 2).

### Effects on Forest Management Systems

14.4.9 The introduction of a new OHL through areas of managed forest would require a review by each landowner of the existing management system. Most larger commercial forest areas have a long-term forest plan (LTFP) which identifies the operations intended for the ongoing management of the forest over a 20-year period. This LTFP also provides the forest owner with consents from Scottish Forestry, as the forest authority, to undertake felling and replanting of the forest over a 10 year period. The impact of the Proposed Development is therefore only in terms of individual LTFP's having to be revised to address the construction of the OHL and the associated tree clearance works on the future management of the Site. In the absence of mitigation, the requirement for forest owners to revisit their LTFP to incorporate the existence of the Proposed Development could be considered to be onerous. The sensitivity of the management system to revision is considered to be low; however, the magnitude of change required in terms of restructuring the LTFP to incorporate felling for the OC and potentially additional felling to avoid windthrow could be, locally or for the individual landowner, of high magnitude and thus the effect is moderate adverse and **significant**.

#### **Restrictions on Forest Access**

14.4.10 At the time of tree harvesting the forest industry has a range of operations, some of which can be restricted by the presence of an OHL. Live electrical lines provide a number of risks in terms of tree felling and extraction of timber to the roadside. Loading and haulage of timber off site can also be restricted within the proximity of the OHL. The sensitivity of the woodlands to this impact is considered to be low and the magnitude is defined as none, due to the working area being located approximately 42.5 m from the proposed OHL within the OC. This assessment assumes that planning work for proposed felling would incorporate standard health and safety management measures e.g., the forest industry safety accord<sup>10</sup>. As such, the effect is assessed as none and not significant.

### 14.5 Mitigation

- 14.5.1 Good practice measures have been incorporated into the environmental management controls set out in **Chapter 2: Description of the Proposed Development (EIAR Volume 2)**, including:
  - adherence to Forestry Commission (Scottish Forestry) Guidelines e.g., to ensure protection and enhancement of the water environment; and
  - implementation of tree harvesting and extraction methods to ensure minimisation of soil disturbance and compaction.
- 14.5.2 All woodland removal operations contracted by the Applicant would adhere to the UKFS.

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<sup>&</sup>lt;sup>10</sup> Forest Industry Safety Accord (FISA) Electricity at work: Forestry, FISA Safety Guide 804 (2020): URL:-FISA 804 (ukfisa.com



### **Mitigation During Construction**

- 14.5.3 No significant effects are predicted based on the area of woodland removal proposed in conifer plantation or considering the potential for increased windthrow. On this basis no mitigation is proposed, however the Applicant proposes to implement a suite of standard good practice working methods to ensure that all construction activity (including woodland removal) avoids significant effects on ecological and hydrological receptors.
- 14.5.4 The permanent loss of native broadleaved woodland areas as part of the Proposed Development is considered to be significant in ecological terms and would be mitigated by a reduction in the OC width (from 85 m through the conifer compartments to 60 m through the broadleaved sections) and further retention of woodland features in areas where existing tree cover does not breach safety clearances and allows for safe construction activity.
- 14.5.5 In order to address the potential significant effect on forest land-use management, the Applicant has committed to the development of OHL Woodland Reports for each forest ownership (see **Technical Appendix 14.1: OHL Woodland Reports, Volume 4**). The OHL Woodland Reports identify all areas of felling required to form the OC and access corridors. In addition, the OHL Woodland Reports will aim to reduce the risk of future windthrow by identifying felling to stable forest edges (outside of the OC). The delivery of the felling identified in the OHL Woodland Reports will require working jointly with the forest owner to deliver felling and restocking outwith the OC. This proposed felling will be further reviewed with the landowners to link this with their existing LTFPs, which will, once amended, be required to adhere to the UKFS as part of the approval process with Scottish Forestry. This approval is required prior to any felling being undertaken outwith the Proposed Development OC or proposed access tracks. This method of addressing felling has been successfully used on a number of recent large overhead line projects and has delivered forest design to the satisfaction of Scottish Forestry as the statutory authority.

### **Mitigation During Operation**

14.5.6 No significant effects are predicted based on the area of woodland removal proposed during operations or from restrictions on forest access. The potential for significant effect on forest management systems for individual landowners has been identified as a result of the need to accommodate the felling required to create the OC and access tracks. In order to address this effect, the Applicant is committed to working with landowners in-line with the OHL Woodland Report for the woodland property.

### Compensatory Planting

14.5.7 The Applicant is committed to meeting the Scottish Government's CoWRP objective of no net loss of woodland for the Proposed Development. On this basis the Applicant will replant the area of woodland removed for the Proposed Development. This will be achieved in the form of Compensatory Planting Scheme agreements with landowners within the Argyll and Bute Council boundary. Technical Appendix 14.3: Compensatory Planting Management Strategy (EIAR Volume 4) provides further details.



## 14.6 Residual Effects

### **Residual Construction Effects**

14.6.1 There would be no significant construction effects pre-mitigation and, consequently, no significant residual construction effects would occur. The potential to further reduce the construction effects in the OHL Woodland Reports (in relation to windthrow) has been identified as a good practice measure; however, at this stage the Applicant is limited to committing to working with landowners to seek to agree felling through the OHL Woodland Reports, which would in-turn lead to changes to the LTFP on land outside of the Applicant's control.

### **Residual Operational Effects**

- 14.6.2 Current and future forest land-use management is likely to be affected by the introduction of the Proposed Development and associated felling requirements. This is likely to require forest managers to amend current objectives, plans and techniques for the relevant forest, in particular, the incorporation of felling requirements into their long-term felling and landscape design plans. Taking account of the proposed mitigation in the OHL Woodland Reports, the residual effect on forest management is assessed as minor and not significant.
- 14.6.3 There would be no significant operational effects pre-mitigation on woodland removal or forest access and consequently, no significant residual operational effects would occur.

### **Cumulative Effects**

### **Construction Effects**

#### Woodland Removal

14.6.4 The cumulative effect of direct woodland removal associated with creating an OC and access, combined with the potential indirect (secondary/management felling) effect of woodland removal outside of the OC (under separate felling licence) would potentially comprise 41.68 ha. The loss of 24.21 ha of commercial forest and 2.6 ha of broadleaved woodland is assessed as a medium magnitude of change in the context of the regional resource. This effect is assessed as minor adverse, long term effect and not significant.

#### Windthrow

14.6.5 Due to the scale of woodland removal and/or restructuring required to accommodate windfarm development, there has been a general commitment by windfarm developers to fell to windfirm boundaries thereby removing, or at least minimising, the risk of further windthrow. This is in contrast to the narrower and more linear nature of the OC felling required for the Proposed Development. On this basis, it is assessed that there is no potential for additional or in combination cumulative windthrow effects from the Proposed Development.

#### Forest Management

14.6.6 No direct overlap of woodland removal for the Proposed Development with other proposed programmes of woodland removal has been identified. On this basis, no potential for significant cumulative effects on forest management have been identified.



#### **Operational Effects**

14.6.7 In reviewing the potential for effect interactions, additional and in combination cumulative effects, no significant residual cumulative effects have been identified.

### 14.7 Summary

- 14.7.1 The routeing process (described in **Chapter 3: Alternatives, EIAR Volume 2**) sought to avoid woodland where possible, while taking account of other environmental, technical and cost constraints. The Proposed Development would pass through 1.68 km of woodland, and potentially impact on up to 41.68 ha of woodland (through direct and indirect/secondary effects).
- 14.7.2 The Proposed Development would result in an impact on low sensitivity 24.21 ha of coniferous woodland and a more sensitive 2.6 ha broadleaved woodland (see **Table 14-7**).
- 14.7.3 This chapter has considered the potential for significant effects on the forest resource, forest management and access during construction and operation.
- 14.7.4 The effects of woodland removal, in commercial forestry terms, were assessed as minor and not significant, on the basis of the relatively low magnitude of change in the context of the regional resource, and the low to medium sensitivity of the types of woodland present in the Study Area. The effects on the broadleaved woodland of predominantly oak classification, including Ancient Woodland, were assessed as moderate, and therefore **significant**, based on the impact of a noticeable change over a limited area. To reduce impacts, the application would reduce the OC felling where possible and seek to retain woodland features in areas where existing tree cover does not breach safety clearances and construction activities. However, there is still a residual significant effect. Further detail is provided in **Chapter 8: Ecology (EIAR Volume 2)**.
- 14.7.5 The assessment identifies the potential for significant effects (pre-mitigation) on forest management, due to the requirement for forest managers to amend current objectives, plans and techniques for their forest, in particular, to incorporate the felling requirements for the OC into their long-term felling. The Applicant has proposed mitigation in the form of a commitment to develop 'OHL Woodland Reports' for each land ownership which address management issues such as the Proposed Development's impact on machinery access, timber haulage and impact on operations during construction. This mitigation is deemed sufficient to reduce the residual effect to not significant.
- 14.7.6 No significant effects on forest access were identified.
- 14.7.7 Additional good practice measures are identified for implementation on land outwith the OC, for example additional felling to deliver a wind firm edge. These measures can only be undertaken with the agreement of the affected landowner. It is the intention of the Applicant to encourage the landowners to follow this good practice in terms of redesign of their current LTFPs which in-turn would aim to follow UKFS for the implementation of the works required.
- 14.7.8 The development of compensatory planting scheme agreements will be progressed with landowners within the regional land boundary of Argyll and Bute. This is to mitigate the woodland removal of the Proposed Development in meeting the Scottish Government's CoWRP objective of no net loss of woodland. On this basis the Applicant will replant the area of woodland (41.68 ha) removed for the Proposed Development.
- 14.7.9 **Table 14-7** provides a summary of the residual effects.



### Table 14-7: Summary of Potential Significant Effects of the Proposed Development

Likely Significant Effect	Mitigation Proposed	Means of Implementation	Outcome/ Residual Effect
Direct woodland removal (commercial conifer forest) (24.21 ha)	No mitigation is required.	The Applicant would implement a suite of standard good practice working methods to ensure that all construction activity (including woodland removal) avoids significant effects on ecological and hydrological receptors. Further detail is set out in <b>Technical Appendix 14.1: OHL</b> <b>Woodland Reports (EIAR Volume 4).</b>	Minor and therefore not significant.
Direct woodland removal (Native Broadleaved Woodland including Ancient Woodland) (2.6 ha)	The application would reduce the OC felling where possible and seek to retain woodland features in areas where existing tree cover does not breach safety clearances and construction activities.	N/A	Moderate and therefore <b>significant</b> .
Predicted indirect loss of commercial conifer forest due to windthrow (14.87 ha)	No mitigation possible within the scope of the Proposed Development.	The Applicant has produced OHL Woodland Reports ( <b>Technical</b> <b>Appendix 14.1: OHL Woodland</b> <b>Reports (EIAR Volume 4)</b> for each forest ownership, which will recommend actions to reduce the risk of future wind throw by felling to stable forest edges (outside of the OC).	Minor and therefore not significant.
Indirect effect on woodland management through requirement to incorporate OHL into LTFP	OHL Woodland Reports for each forest ownership, which address management issues such as the Proposed Development's impact on machinery access, timber haulage and impact on operations during construction.	OHL Woodland Reports (Technical Appendix 14.1: OHL Woodland Reports (EIAR Volume 4).	Minor, therefore not significant.
Operation			
Direct effect on access for felling	No mitigation is required, based on the set back and use of standard safety measures.	N/A	Minor, therefore, not significant.