VOLUME 1: CHAPTER 12: FORESTRY

12. FORESTRY

12.1 Executive Summary

12.1.1 This Chapter considers the potential for significant effects on the forest resource, forest management and access during construction and operation.

12.1.2 The Proposed Development is predicted to result in the loss of 5.24 ha of woodland due to the requirement to create an Operational Corridor (OC) for the construction and safe operation of the proposed OHL, including the creation of access tracks.

12.1.3 The woodland within Strathy Wood Forest has, for much of the area of interest, been felled previously with natural regeneration of conifer present. The proposed access track requires the removal of mainly windblown conifer with a small area of standing conifer trees.

12.1.4 Mitigation through design is for minimal tree felling and utilising the current unplanted ground where possible. There are no areas of ancient woodland or ancient or veteran trees present. Nearby areas of well-established upland birchwood native woodland are avoided by the Proposed Development.

12.1.5 No significant effects were identified from the direct loss of woodland. The effects of woodland removal, in forestry terms, were assessed as 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.

12.1.6 Given that the Proposed Development would result in the permanent loss of woodland, the Applicant is committed to making arrangements to plant off-site the equivalent area of woodland as compensatory planting, meeting the Scottish Government's Control of Woodland Removal (CoWRP) objective of no net loss of woodland. The development of compensatory planting scheme agreements will be progressed with landowners within the regional land boundary of the Local Authority, of where the Proposed Development is geographically located.

12.1.7 The area of woodland removal required for other consented and proposed development will be mitigated through the Scottish Government's CoWRP objective of no net loss of woodland. In this way there is considered to be no cumulative effect on forestry.

12.2 Introduction

12.2.1 This Chapter assesses the potential effects of the construction and operation of the Proposed Development on forest and woodland areas within Strathy North Forest and Strathy Wood Forest

12.2.2 The assessment has been prepared by Neil McKay MICFor, Director of Neil McKay Forestry Consultant Limited, a professional member of the Institute of Chartered Foresters (ICF) since 1994. A table presenting relevant qualifications and experience of key staff involved in the preparation of this Chapter is included in **Appendix 5.1: EIA Team** of this EIA Report.

12.3 Scope of Assessment

12.3.1 This Chapter considers the likely impacts of the Proposed Development on forestry and woodland. This includes an assessment of the sensitivity of the forest areas located along the route of the Proposed Development and an assessment of the likely impact that would arise from the Proposed Development, with particular emphasis on forest structure and management.

12.3.2 The assessment is based on the description of the Proposed Development that is provided in **Chapter 3 – The Proposed Development**.

12.3.3 This assessment is based on the requirement to form an Operational Corridor (OC) along the route of the Proposed Development within forest areas, while recognising the potential impact over broader forest management areas as a result of the Proposed Development. This Chapter reports on the assessment of the effects associated with the creation of the OC only. Any felling undertaken outside of the OC would be solely under the control of the landowner and the Applicant would not have any influence or control over such.

12.3.4 As provided in terms of the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2022 and Schedule 4 of the Electricity Act 1989, the Applicant has the necessary statutory powers to remove woodland for the purposes of construction and on-going maintenance of new overhead lines (OHLs), and/or protection of electrical plant.

Study Area and Operational Corridor

12.3.5 The forestry study area includes all woodland standing, windblown, felled or regenerating within the Limits of Deviation (LoD) for both the proposed OHL alignment (50 m either side of the centreline of the OHL alignment) and the access tracks (25 m either side of the centreline of the access tracks), prior to identification of an OC (see **Figure 12.1: Forestry Study Area**).

12.3.6 The OC is defined with reference to the distance at which a tree could fall and cause damage to the OHL, resulting in supply outage. As a result, the final OC width would be based on the safety distance required to allow 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.

12.3.7 The typical OC is species sensitive, and for the purposes of this assessment, within areas of commercial conifer forestry for a 132 kV OHL the OC is set at 72 m (36 m either side of the centre line). For new tracks (temporary and permanent) a 25 m OC is required (12.5 m either side of the track plus running width).

12.3.8 The OHL OC and track OC is displayed on **Figure 12.2: Forestry Felling** and **Figure 12.3: Aerial Imagery of Baseline Forestry.**

12.3.9 Wherever appropriate, this OC of woodland removal is reduced by occupying areas of existing open ground. Opportunities to utilise existing open ground (unplanted) / felled or windblown areas within which to locate the OC will be taken into account, to reduce the extent of woodland removal.

12.4 Consultation

12.4.1 The scope of the assessment has been determined through a combination of professional judgement and consultation with stakeholders through a formal EIA scoping process and pre-application advice. **Table 12.1** sets out the comments received from consultees in relation to forestry and the actions taken to address them within this assessment.

Table 12.1: Consultee Scoping Responses

Organisation & Date	Summary of Consultation Response	EIA/Design Response to Consultee
The Highland Council (THC) 27th June 2024	Given that the proposed development runs through an area, although small of designated native woodland, even though this is classified as open land, due to the biodiversity levels associated with this it is the Planning Authority's view that Forestry shall be included within any future assessment.	This Chapter addresses THC's requirement to include forestry within the EIA Report.
	The EIAR should indicate all the areas of woodland / trees that would be felled to accommodate the development, including any off-site works / mitigation. Compensatory woodland is a clear expectation of any proposals for felling, and thereby such mitigation needs to be considered within any assessment. If so minded, permission is only likely to be granted on the basis that compensatory planting proposals are identified in advance. Compensatory planting should be within the Highland area.	The areas of woodland to be removed are shown within **Figure 12.2** and **Table 12.3.** The Applicant is committed to providing compensatory planting within the Highland area.
	Areas of retained forestry or tree groups should be clearly indicated and methods for their protection during construction and beyond clearly described. If timber is to be disposed of, details of the methodology for this should be submitted.	Trees to be retained are outside the OC and are mainly yet to be planted or to be cleared windblow and standing conifer likely to be cleared for the consented Strathy Wood Wind Farm Habitat Management Plan and Forest Plan.
Scottish Forestry (SF) 21st March 2024	Scottish Forestry encourage the planning authority to ensure that proposed changes to woodland address the requirements of the Control of Woodland Removal Policy and other relevant guidance	The Applicant is committed to meeting the requirements of the Scottish Government's Policy Control of Woodland Removal and the supporting guidance. Replanting / compensatory planting proposals will comply with UKFS and associated guidelines which may apply, or any other such replacement standard applied by the planning (consenting) authority. Planting will be supported by an approved replanting plan and shall identify, location, species and woodland design, timing, maintenance, monitoring, and reporting standards.
	Scottish Forestry are concerned that Section 11.2.3 [of the Scoping Report]…scopes forestry out of the EIA process, without a detailed assessment of the potential impacts. The scoping report has not adequately addressed the potential impact on woodland, trees or previously afforested land awaiting restock (irrespective of species, age or stage of establishment).	This Chapter provides an assessment on forestry interest and also sets out compensatory planting requirements.

12.5 Legislation, Policy and Guidance

12.5.1 The key legislation, policy and guidance listed below has been considered in the assessment:

- The Scottish Government's Policy on Control of Woodland Removal (2009)[1];
- Scottish Government's policy on control of woodland removal: implementation guidance (2019)[2];
- National Planning Framework 4 (NPF4) (2023)[3] (see below); and
- UK Forestry Standard 5th Edition (2023)[4].

12.5.2 Policy 6: Trees, woodland and forestry of NPF4 notes that development proposals should not be supported where they would result in:

- any loss of ancient woodlands, ancient and veteran trees, or adverse impact on their ecological condition;
- adverse impacts on native woodlands, hedgerows and individual trees of high biodiversity value or identified for protection in the Forestry and Woodland Strategy;
- fragmenting or severing woodland habitats, unless mitigation measures are identified and implemented; and
- conflict with Restocking Direction, Remedial Notice or Registered Notice to Comply issued by the Scottish Government Forestry Regulator, Scottish Forestry.

12.6 Methodology

Desk Study

12.6.1 The desktop study included a review of the habitat and forest plans for Strathy Wood Wind Farm and Strathy North Wind Farm.

12.6.2 Further open data for the Ancient Woodland Inventory (Scotland) (AWI)[5] and the Native Woodland Survey of Scotland (NWSS)[6] available through the Scottish Forestry Map Viewer[7] was also viewed for the present position of felling permission applications and forest plans. As no forest specific datasets have been used, the National Forest Inventory 2022[8] dataset is the main digital source.

12.6.3 Web based imagery was also reviewed to ensure all forest and woodland cover was included within this assessment.

Field Survey

12.6.4 A forest walkover was undertaken on 23rd July 2024. During the site visit the forest crop condition was checked against the desk study information. The current tree crop condition was recorded as was the tree height. See **Appendix 12.1: Forestry Photographic Records.**

[1] The Scottish Government's Policy on Control of Woodland Removal available at https://www.forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal accessed on 23/08/2024
[2] Scottish Government's Policy on Control of Woodland Removal: Implementation Guidance available at https://www.forestry.gov.scot/publications/349-scottish-government-s-policy-on-control-of-woodland-removal-implementation-guidance accessed on 23/08/2024
[3] National Planning Framework 4 available at https://www.gov.scot/publications/national-planning-framework-4 accessed on 23/08/2024
[4] The UK Forestry Standard: 5th Edition available at https://www.forestresearch.gov.uk/tools-and-resources/fthr/uk-forestry-standard/ accessed on 23/08/2024
[5] Ancient Woodland Inventory (Scotland) available at https://www.data.gov.uk/dataset/c2f57ed9-5601-4864-af5f-a6e73e977f54/ancient-woodland-inventory-scotland accessed on 23/08/2024
[6] Native Woodland Inventory of Scotland available at https://www.forestry.gov.scot/forests-environment/biodiversity/native-woodlands/native-woodland-survey-of-scotland-nwss accessed on 23/08/24
[7] Scottish Forestry Map Viewer available at https://www.forestry.gov.scot/support-regulations/scottish-forestry-map-viewer accessed on 23/08/2024
[8] National Forest Inventory 2022 available at https://www.data.gov.uk/dataset/2f24493b-0c4b-47bb-9e16-3a6e1740a01c/national-forest-inventory-scotland-2022 accessed on 23/08/2024

Assessment of Effects

12.6.5 There are currently no standard criteria for assessing the sensitivity / importance and magnitude for forest felling and restocking or determining the value of woodland loss. As such, the assessment is broadly based upon the methodology set out in **Chapter 5 - EIA Process and Methodology** and based on the requirements of the 2017 EIA Regulations.

12.6.6 Sensitivity / importance is relatively clear in definition as set out in paragraph 12.6.8 below, whereas the criteria for magnitude is defined by area, as set out in paragraph 12.6.9. Assessing the impact of the Proposed Development on the forest structure relies heavily on the General Forestry Practice Guide set in UK Forestry Standard Fifth Edition[4] (UKFS) and NPF4[3] Policy 6 (see paragraph 12.5.2).

12.6.7 The significance of an impact depends upon the sensitivity / importance of the forest area, combined with the magnitude of the impact. The criteria for assessing these, together with the resultant levels of predicted significance, are described in the following paragraphs.

Criteria for Assessing Sensitivity/Importance of Receptors

12.6.8 Criteria for assessing the sensitivity / importance of a forest, is as follows:

- High: Ancient Woodland and ancient or veteran trees;
- Medium: Native woodlands and Plantation on Ancient Woodland Sites (PAWS),
- Low: Productive conifer plantation; and
- Negligible: Unplanted areas.

Criteria for Assessing Magnitude of Change

12.6.9 Criteria for assessing the magnitude of change to a forest or woodland, is as follows:

- High: a change of >40 ha to the forest or woodland;
- Medium: a change of between >15-40 ha to the forest or woodland;
- Low: change of between >0.1-15 ha to the forest or woodland; and
- Negligible: a change of <0.1 ha to the forest or woodland.

Significance Criteria

12.6.10 The predicted significance of impact is determined by consideration of a site's importance / sensitivity in conjunction with the magnitude of change predicted on it. **Table 12.2** provides a framework for reaching a judgment as to the significance of an impact.

Table 12.2 Matrix for Determining the Significance of Direct Impact

		Sensitivity of Receptor / Receiving Environment to Change / Effect			
		High	**Medium**	**Low**	**Negligible**
Magnitude of Change/Effect	**High**	**Major**	**Major**	**Moderate**	Negligible
	Medium	**Major**	**Moderate**	Minor	Negligible
	Low	**Moderate**	Minor	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

12.6.11 Major and Moderate effects are considered to be significant within the context of the 2017 EIA Regulations.

Limitations to the Assessment

12.6.12 The baseline Habitat Management and Forest Plans for Strathy North Wind Farm[9] and Strathy Wood Wind Farm[10] are taken as the planned future habitats and are not currently fully implemented.

12.6.13 Strathy Wood Wind Farm Habitat Management Plan includes the land management for two wind turbines which the developer of the wind farm has since removed from the consented development. An assumption is that this will return to native woodland management as is the case with the adjacent ground.

12.7 Baseline Conditions

12.7.1 Strathy North Forest has, for the greater part, been felled and are being converted to specific areas of native woodlands or other non-forest habitats.

12.7.2 Strathy Wood Forest contains remnant coniferous forest which has mainly been felled with some native woodland replanting.

12.7.3 Mapping of the various woodland components, as displayed on **Figure 12.2**, is based upon the NFI datasets, updated by the use of aerial imagery and fieldwork. **Figure 12.3** illustrates the baseline situation regarding the current forestry position with aerial imagery.

Designations

12.7.4 There are no Ancient Woodlands listed in the AWI within the study area.

12.7.5 Achrugan Forest, approximately 1.8 km to the north of the study area, contains an area described as Other woodlands on 'Roy' maps. These are woodland sites shown as unwooded on the 1st edition maps but as woodland on the Roy maps. Such sites have at most, had only a short break in continuity of woodland cover and may still retain features of Ancient Woodland.

12.7.6 At the southern end of the study area within Strathy Wood Forest, the LoD includes 0.21 ha of NWSS which lists this as upland birchwood; some birch is present, however, the well-established birchwood is avoided by the Proposed Development. Strathy Wood Forest also contains NWSS adjacent to the southern end of the LoD which is open land habitat (see **Figure 12.2** and **Figure 12.3**).

Desk and Field Study

12.7.7 Based on Strathy North Wind Farm Habitat Management Plan, the area within the western extent of the study area that falls within Strathy North Forest, was felled at the time of the wind farm construction and is mainly planned to be "short sward" habitat. Riparian native woodland, yet to be planted, includes a very small area within the study area where the access track LoD leaves Strathy Wood Forest and enters the felled areas of Strathy North Forest.

12.7.8 The field survey observation is that the forestry study area within Strathy North Forest is all felled and lying fallow.

12.7.9 Strathy Wood Wind Farm Habitat Management Plan and Forest Plans includes "short sward" habitat, and native woodland planting.

[9] Environ. (2007). Strathy North Wind Farm Environmental Statement. Prepared for Scottish and Southern Energy Generation Limited.
[10] Atmos. (2015) Strathy Wood Wind Farm Further Environmental Information. Prepared for E.ON Climate & Renewables UK Developments Ltd.

12.7.10 The field survey observations of the forestry study areas within Strathy Wood Forest includes windblown Lodgepole pine with an area of standing mature Lodgepole pine. An area, previously cleared, now contains regenerating Lodgepole pine and Sitka spruce with other areas of felled conifer lying fallow, as displayed on **Figure 12.2.** The field survey also confirms that the small area of NWSS upland birchwood contains scattered birch trees. The open land habitat is clear of trees.

12.8 Embedded Mitigation Measures

12.8.1 The embedded mitigation is a combination of decisions taken during the design process to avoid or minimise the potential for likely significant effects through routeing and alignment of the OHL and access tracks, and the implementation of standard practice mitigation measures that are well established and effective.

Design

12.8.2 The design of the OHL and access tracks have aimed to avoid the areas noted in NWSS and take advantage of areas which are already felled, in particular the route of the proposed new access track from Strathy North Wind Farm which has been routed through a damaged area of windblown conifer within Strathy Wood Forest. This design negates the need for any larger areas of felling of Strathy North Forest coniferous plantation, where subsequent windblow would be a predictable outcome.

Good Practice

12.8.3 Although the areas of standing, blown and regenerating trees is small, good forest practice for removing these trees will be followed as detailed within a site-specific Construction Environmental Management Plan (CEMP) that will be prepared by the successful Principal Contractor, and through the good practice guides within UKFS.

12.9 Assessment of Likely Significant Effects

12.9.1 The assessment of likely significant effects associated with the construction and operational phases of the Proposed Development is based on the activities described in **Chapter 3**.

12.9.2 The assessment has been limited to the forestry and woodland removal required to create the proposed OC for the OHL and required access tracks**.** The forestry areas within these OC limits are contained solely within Strathy North Forest and Strathy Wood Forest.

Direct Effects – Forest Removal

12.9.3 The current transitional habitat conditions of the previous coniferous forests to the wind farm habitats allows the construction and operation of the OC mainly within areas of existing open ground.

12.9.4 The access track does require clearance of windblown and some standing conifer within the Strathy Wood Forest. Within the study area, Strathy North Forest has been previously felled for the Strathy North Wind Farm.

12.9.5 The direct loss of woodland from construction and operation of the Proposed development is set out in **Table 12.3**. This includes the areas proposed to be occupied by the OHL and access track and provides detail of the current and planned future habitats.

Table 12.3 Woodland Condition of the Proposed Development OC

Felling Requirement	Current Woodland	Planned woodland (without Proposed Development)	Area (ha)
OHL OC	Conifer regeneration	Assumed native woodland planting	0.30

Felling Requirement	Current Woodland	Planned woodland (without Proposed Development)	Area (ha)
OHL OC	Previously felled / unplanted	Assumed native woodland planting	3.20
Access track OC	Windblown conifer	Assumed native woodland planting	0.86
Access track OC	Standing conifer	Assumed native woodland planting	0.12
Access track OC	Previously felled / unplanted	Assumed native woodland planting	0.76
Total			**5.24**

12.9.6 The total direct loss of forestry and woodland for construction of the Proposed Development equates to 5.24 hectares (ha).

12.9.7 The sensitivity of the woodland within the study area is Medium. The direct loss of the woodland is assessed as Low magnitude. This effect is assessed as **Minor Adverse** and **Not Significant**.

12.10 Cumulative Effects

12.10.1 The area of woodland removal required for the consented wind farms (Strathy Wood and Strathy South) and other proposed grid connections that form part of the Connagill Cluster Grid Connections, will be mitigated through Scottish Government's CoWRP objective of no net loss of woodland with either compensatory planting or alternative habitat such as forest to bog conversion. This policy will be applicable to the woodland areas of those developments that are not yet consented. In this way there is considered to be no cumulative effect on forestry.

12.11 Mitigation

12.11.1 At the time of construction and operation the Applicant will, where possible, take the opportunity to reduce the width of the OC.

12.11.2 Given the Proposed Development would result in the permanent loss of 5.24 ha of woodland, the Applicant is committed to making arrangements off-site to plant the equivalent area of new woodland as compensatory planting to meet the Scottish Government's CoWRP objective of no net loss of woodland. Compensatory planting to be undertaken will comply with UKFS and associated guidelines which may apply, or any other such replacement standard applied by the planning (consenting) authority. Planting will be supported by an approved replanting plan and shall identify, location, species and woodland design, timing, maintenance, monitoring, and reporting standards.

12.12 Residual Effects

12.12.1 The Proposed Development would result in the loss of 5.24 ha of standing, windblown and regenerating conifer which in the future would have assumed to be planted native woodland as part of the Strathy Wood Wind Farm Habitat Management Plan and Forest Plan.

12.12.2 With the commitment to make arrangements to plant off-site the equivalent area of woodland lost due to construction and operation of an OC for the Proposed Development as compensatory planting, in terms of direct loss of woodland coverage, there are no residual effects.

12.13 Summary and Conclusions

12.13.1 This Chapter provides an assessment of the potential effects of the Proposed Development on forest and woodland areas.

12.13.2 The Proposed Development is predicted to result in the permanent direct loss of 5.24 ha of woodland due to the requirement to create an OC for the construction and safe operation of the OHL including the creation of access tracks. This woodland consists of previously felled areas with some windblown, some standing conifer and some regenerating conifer. There are no areas of AWI or NWSS affected by this woodland removal. No significant effects were predicted for the removal of this woodland

12.13.3 The Applicant is committed to making arrangements to plant off-site the equivalent area of woodland as compensatory planting, meeting the Scottish Government's CoWRP objective of no net loss of woodland. The details and locations of the compensatory planting areas are yet to be confirmed.

12.13.4 Given the adherence to CoWRP by this Proposed Development, other consented developments and those not yet consented, woodland loss will be replaced with compensatory planting or where the determination that the best environmental option is to change from forest to peatland restoration or other habitats then there is assumed to be no cumulative effect.

12.14 References

Atmos. (2015) *Strathy Wood Wind Farm Further Environmental Information*. Prepared for E.ON Climate & Renewables UK Developments Ltd.

Atmos. (2019) *Strathy Wood Wind Farm Further Environmental Information* (Energy Consents Unit). Prepared for E.ON Climate & Renewables UK Developments Ltd.

Environ. (2007). *Strathy North Wind Farm Environmental Statement*. Prepared for Scottish and Southern Energy Generation Limited.

Forestry Commission Scotland. (2009) The Scottish Government's Policy on Control of Woodland Removal, Forestry Commission.

UKFS (2023) General Forestry Practice Guide set in UK Forestry Standard Fifth Edition

The Scottish Government. (2023) National Planning Framework 4, Scottish Government