AI Appendix 9J
Forestry Note

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Introduction

This Appendix has been prepared by Lewis Wind Power and describes the woodland on the Development Site, the amount to be lost as a result of the Proposed Development, and describes proposals for new planting and other habitat enhancement proposals.

Legislation, Policy and Guidance

Relevant overarching planning policies for the Development are detailed in EIA **Chapter 5: Legislative and Policy Overview** of the EIA Report and within the **revised Planning Statement 2020** that accompanies the application. A desktop study was undertaken drawing upon published national, regional and local level publications, assessments and guidance to establish the broad planning and forestry context within which the Proposed Development is located.

The forestry related policies and documents listed below have been considered within the forestry assessment. The following section provides an outline of those planning policies which are relevant to the Proposed Development and in particular to forestry.

Scottish Forestry Strategy

The Scottish Forestry Strategy (SFS)[1], published in 2006, provides the wider context and Scottish Ministers' vision for multi-benefit woodland management and expansion focussing on the key themes of climate change, timber, business development, community development, access and health, environmental quality, and biodiversity. It sets out a vision that acknowledges the central role that the forestry resource will play in the culture, environment and economy of Scotland. The SFS informs other policies and guidance about woodland expansion and removal in Scotland.

The SFS sets the following targets:

- 25% woodland cover in Scotland by the second half of this century;
- A woodland creation target of 10,000 hectares (ha) per year over the period 2012-2022; and
- The forestry sector delivering annual carbon savings of 0.6 million tonnes of carbon (MtC) by 2010, 0.8MtC by 2015, and 1.0MtC by 2020.

The Scottish Government completed consultation in November 2018 on the Forestry Strategy 10-year framework for action for the period 2019 – 2029 to help achieve the 50-year vision for Scotland's woodlands and forests.

[1] The Scottish Executive (2006). The Scottish Forestry Strategy. Edinburgh. https://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/forestry-strategy [accessed 21/01/2019]

The Scottish Land Use Strategy

The Scottish Land Use Strategy[2] sets out a strategic framework for getting the best out of Scotland's land resources. It looks at the potential of the land and the ways which it is used, both now and in the future. Principles of sustainable land use are central to its vision for the future. With specific reference to forestry, the strategy seeks to identify more closely which types of land are best for tree planting in the context of other land-based objectives and promote good practice and local processes in relation to tree planting so as to secure multiple benefits. This will be achieved by a partnership approach through Forestry and Woodland Strategies to be developed by the local authorities.

Third National Planning Framework

Scotland's Third National Planning Framework (NPF3)[3] recognises woodlands and forestry are an economic resource, as well as an environmental asset (NPF3 Paragraph 4.2). It further supports the continued expansion of Scotland's woodland and forestry resource (NPF3 Paragraph 4.23). A key action of NPF3 (NPF3 Paragraph 6.10) is a commitment to create on average 10,000ha per annum of new woodland from 2015.

Scottish Planning Policy

The Scottish Planning Policy (SPP)[4] includes a section on woodlands (SPP Paragraphs 216 - 218). This refers to the Scottish Government's Control of Woodland Removal Policy (Forestry Commission Scotland, 2009) which is discussed in more detail below. The SPP states that woodland removal should only be permitted where it would achieve significant and clearly defined additional public benefits. It further states that where woodland is removed in association with development proposals, developers will generally be expected to provide compensatory planting and that the acceptability of woodland removal, in the context of the Control of Woodland Removal Policy, should be taken into account in determining applications.

Control of Woodland Removal Policy

In parallel with the SFS and other national policies on woodland expansion, there is a strong presumption against permanent deforestation unless it addresses other environmental concerns. In Scotland, such deforestation is dealt with under the Scottish Government's 'Control of Woodland Removal Policy'[5]. The guidance relating to the implementation of the policy was revised and updated in 2015.

The purpose of the policy is to provide direction for decisions on woodland removal in Scotland. The policy document lays out the background to the policy, places it into the current policy and regulatory context, and discusses the principles, criteria and process for managing the policy implementation. The following paragraphs summarise the policy relevant to the Development.

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[2] The Scottish Government (2011). Scottish Land Use Strategy. Edinburgh.
[3] The Scottish Government (2014). Scotland's Third National Planning Framework (NPF3). Edinburgh. https://www.gov.scot/publications/national-planning-framework-3/ [accessed 21/01/2019]
[4] The Scottish Government (2014). Scottish Planning Policy. Edinburgh.
[5] Forestry Commission Scotland (2009). The Scottish Government's Policy on Control of Woodland Removal. Edinburgh.

The principal aims of the policy include:

- To provide a strategic framework for appropriate woodland removal; and
- To support climate change mitigation and adaptation in Scotland.

The guiding principles behind the policy include:

- A strong presumption in favour of protecting Scotland's woodland resources; and
- Woodland removal should be allowed only where it would achieve significant and clearly defined additional public benefits. In appropriate cases a proposal for compensatory planting may form part of this balance.

Woodland removal, without a requirement for compensatory planting, is most likely to be appropriate where it would contribute significantly to:

- Enhancing priority habitats and their connectivity;
- Enhancing populations of priority species;
- Enhancing nationally important landscapes, designated historic environments and geological Sites of Special Scientific Interest (SSSI);
- Improving conservation of water or soil resources; or
- Public safety.

Woodland removal, with compensatory planting, is most likely to be appropriate where it would contribute significantly to:

- Helping Scotland mitigate and adapt to climate change;
- Enhancing sustainable economic growth or rural/community development;
- Supporting Scotland as a tourist destination;
- Encouraging recreational activities and public enjoyment of the outdoor environment;
- Reducing natural threats to forests or other land; or
- Increasing the social, economic or environmental quality of Scotland's woodland cover.

The consequences of the policy are stated as:

- Minimising the inappropriate loss of woodland cover in Scotland;
- Enabling appropriate woodland removal to proceed with no net loss of woodland - related public benefits other than in those circumstances detailed in the policy; and
- Facilitating achievement of the Scottish Government's woodland expansion ambition in a way that integrates with other policy drivers (such as increasing sustainable economic growth, tackling climate change, rural/community development, renewable energy and biodiversity objectives).

Addressing the policy requirements can be met through changes to forest design, increasing designed open space, changing the woodland type, changing the management intensity, or completing off site compensation planting.

Site Description

The Development Site is approximately centred on National Grid Reference (NGR) E 37149, N933373 to the west of Stornoway on the Isle of Lewis. The A859 borders the east and south eastern boundary of the Development Site, and an unclassified road runs through it in an east / west alignment and then along the western boundary, heading south-west.

The Development Site predominantly consists of a mixture of open moorland with areas of woodland and includes a large number of streams and lochs. There is evidence of historical peat extraction across the Development Site, with much of this in close proximity to the A859. The Development Site encloses an area approximately 1,700ha and is shown in **EIA Figure 1.1** and **EIA Figure 1.2**.

The town of Stornoway is located to the east of the Development Site, with the nearest residential property found around 1.5km from its boundary.

There is consent for the 36-turbine Stornoway Wind Farm on the Development Site (the Consented Development).

Current land management practices comprise sheep grazing and small-scale (crofter) peat cutting. In the southern part of the Development Site, sheep numbers are higher and grazing here is more intense. As a result, the vegetation here is much less lush and there are more frequent and extensive patches of bare peat with signs of trampling.

The Development Site comprised approximately 166.45ha of woodland. The areas of woodland were originally planted over 30 years ago and have failed to become established, leading to slow growth, dead standing and fallen trees and an open / gappy habitat creating a mixed mosaic within the surrounding habitats.

Baseline Woodland Cover and Species Composition

The desk top assessment was completed from historical aerial photography (pre-felling) and from the information contained within the 2011 Environmental Statement, and **AI Chapter 9 Ecology**.

The principal species on the Development Site is Sitka Spruce with intimate mixtures of Lodgepole Pine; limited native broadleaf species feature on site.

The total baseline woodland equates to approximately 166.45ha.

Woodland loss

Table 1 provides the total estimated loss of existing coniferous planting within the Development Site. The total direct loss of coniferous plantation woodland relating to forestry removal is approximately 40.61ha (4.51ha of direct loss as a result of implementing infrastructure on the Development Site, and 36.1ha of indirect loss for blade clearance, access track clearance, borrow pits etc).

Table 1 Woodland loss

Phase 1 habitat type	Permanent habitat loss (Infrastructure)			Permanent habitat loss (clearance buffers)	Total area of habitat affected (ha)	Total areas of habitat in development site (ha)	Percentage of total habitat in footprint affected by construction (%)
Planted coniferous woodland	**Turbine bases (ha)**	**Access tracks (ha)**	**Associated permanent infrastructure (crane pads, borrow pits, substations etc) (ha)**	**Turbine blade clearance +10% (ha)** **10m clearance around access tracks (ha)** **10m clearance around associated permanent infrastructure (crane pads, borrow pits, substations etc) (including (ha)**			
	0.031	1.34	3.14	36.1	**40.61**	166.45	24.4%

The areas of Woodland to be removed are shown in **AI Figure 9I 4.1** within **AI Appendix 9I Outline Habitat Management Plan**, and also presented in **AI Appendix 9G Habitat Loss Calculations (Table 9G.2).**

Wind Farm Restocking Proposal

With reference to Forestry Commission Scotland Practice Guide "Deciding Future Management Options for Afforested Deep Peatland", the Development Site has been assessed and the following observations and presumptions have been made:

- Deep peat is evident across the Development Site with significant proportions ranging from 1.0m to greater than 4.0m; please refer to **AI Figure 3.2A-H** within **AI Appendix 9H Peat Management Plan.** Establishing secondary rotations on deep peat may cause a net loss of greenhouse gases; disturbing the peat during cultivation and exposing it to oxygen will cause it to break down, and stored carbon to be released back to the atmosphere. Dissolved Organic Carbon can also be lost through peat drainage.

- There is a presumption to restore to bog habitat as per **AI Appendix 9I Outline Habitat Management Plan** (OHMP). Active bog restoration should be commenced in prescribed areas and deforestation in areas will contribute to enhancing the priority habitats and their connectivity.

The Scottish Governments policy on the control of woodland removal has not been ignored, as the Applicant accepts the responsibility to deliver a woodland area within the Development Site (as set out in the **AI Appendix 9I Outline Habitat Management Plan** (OHMP) at section 3.2.6, and illustrated on **AI Figure 9I.4.1**.

The area of Woodland to be lost as a result of the development equates to 40.61ha. The Applicant will carry out compensatory planting for the total amount of trees to be felled. This replanting is described in the OHMP for up to 5ha, and the remaining 35.61ha is expected to

be planted off site. The planting would be limited to native planting taking place in limited areas within the Development Site (**AI Appendix 9I** and illustrated on **AI Figure 9I.4.1**) in discrete areas where this would be ecologically beneficial and, importantly, where the trees should be able to establish and grow successfully.

Within the areas identified on **AI Figure 9I.4.1**, the areas considered suitable for Peatland Edge Woodland (PEW), the aim would be to achieve at least a 20% canopy cover and planting will comprise of 50% planted and 50% open ground; i.e. 550 stems per hectare. This woodland would have significant biodiversity benefits, including a mixed density woodland edge which may create new habitat for hen harrier and other local species. An element of non-native natural regeneration would be tolerated within these areas as long as it does not compromise the growth of the native species.

All tree planting proposals would be developed in consultation with Forestry Commission Scotland (FCS) and Scottish Natural Heritage (SNH).

Biodiversity / Habitat Management

Consideration has been given to the possibility of removing forestry that has been planted on blanket bog and implementing habitat management measures such as ditch blocking which would raise the water table and restore hydrological function for the benefit of the mire communities. As noted above, the trees that have been planted within the Development Site are generally in poor condition with many being stunted, diseased or dead. However, the bird surveys described in **AI Chapter 8 Ornithology** have found that hen harrier preferentially use the stunted forested areas and removal of trees for the benefit of blanket bog may therefore have a detrimental effect on this recently established population.

Blanket bog habitats elsewhere within the Development Site consist of a range of mire communities which are in good condition and peat is likely to be actively forming throughout, probably even within areas of old peat cuttings. As a result, it is considered that undertaking habitat management within the Development Site to compensate the loss of bog habitats is not feasible; with off-site habitat management considered more likely to result in a better overall outcome from a nature conservation perspective.

AI Appendix 9I (OHMP) sets out criteria for identifying and delivering compensatory blanket bog habitat management offsite. The OHMP also sets out proposals for small-scale native tree planting in appropriate locations within the Development Site and criteria for identifying and managing rush pasture and woodland habitats offsite for the benefit of hen harrier.

All habitat restoration proposals would be developed in consultation with SNH.

Compensatory Planting

In accordance with the UK Forestry Standard (UKFS) and The Scottish Government's Policy on Control of Woodland Removal, compensatory tree planting will be provided to fully offset the loss of coniferous plantation woodland within the Development Site (in this case 40.61ha).

If Consent is granted a Compensatory Planting Plan would be required by condition. The Compensatory Planting Plan would detail details how the woodland to be lost as a result of the development is to be replaced. Some of the compensatory planting would take place on site (at least 5ha, as identified in **Figure AI Appendix 9I.4.1**). The remaining compensatory planting would take place off site (as there is no suitable habitat on site owing to the existing blanket bog habitat).

The Compensatory Planting Plan will include:

a) Assessment of existing Forestry on site – type, yields class etc.
b) Appraisal of Areas of Forestry to be lost as a result of the development to ascertain type and amount of Forestry to be replaced.
c) Replacement of up to 40.6ha of woodland (some of which would be on site), comprising:
    - Appropriate areas of the Development Site (expected to be along the eastern boundary of the Development Site) would be planted with native broadleaf / conifer species. The areas selected for native planting would consist of primarily Downy Birch, Rowan, areas of Alder, Willow and Scots Pine. All species preferred to be from local provenances where available and will be planted in the most suitable site conditions i.e. willow in the wetter areas, birch / Scots pine on the drier knolls, etc.
    - Wetter parts of the Development Site, on land considered as less suitable for conventional restocking, would be planted as peatland edge woodland (PEW) which would consist of primarily Birch, Rowan, Alder and Scots Pine. The areas of PEW would contain a low density woodland which would help avoid net carbon loss that would result from conventional restocking on the poorer ground. The sole purpose of the PEW and Native plantations are for biodiversity benefits of woodland on peatland. The objective of the PEW area is to achieve at least a 20% canopy cover and planting would comprise of 50% planted and 50% open ground; i.e. 550 stems per hectare. An element of non-native natural regeneration would be tolerated within the PEW areas as long as it does not compromise the growth of the native species.
    - Retain significant areas of open ground of which a component would relate to ground managed for environmental objectives including bog restoration.

Conclusion

It is therefore proposed to carry out replacement planting for all woodland that is to be lost as a result of the Proposed Development (4.51ha of direct loss as a result of implementing infrastructure on the site, and 36.1ha of indirect loss for blade clearance, access track clearance, borrow pits etc).

However it should be noted that afforestation of high-quality peat bog is considered to result in a net reduction in nature conservation value. Therefore, approximately 5ha of compensatory planting would be accommodated on site in suitable areas. These are illustrated in **AI Figure 9I.4.1** and provides for native planting across the Development Site in discrete areas where this would be ecologically beneficial and, importantly, where the trees should be able to establish and grow successfully. The remaining planting is expected to be carried out off site.

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