

Loch Liath Wind Farm EIA Report

April 2023

Volume 2: Figures

Loch Liath Wind Farm
Environmental Impact Assessment (EIA) Report
Volume 2: Figures

Prepared by
LUC
on behalf of
Loch Liath Wind Farm Limited

April 2023



Preface

This Environmental Impact Assessment (EIA) Report has been prepared in support of an application by Loch Liath Wind Farm Limited (Ltd) (a company wholly owned by Statkraft UK Limited) ('the Applicant') to the Scottish Government Energy Consents Unit (ECU) for Section 36 consent to construct and operate Loch Liath Wind Farm ('the Proposed Development') in The Highland Council (THC) administrative area. The Proposed Development is located within the Balmacaan Estate, directly west of the Great Glen and Loch Ness, and with the closest turbine being located approximately 13 kilometres (km) south-west of Drumnadrochit. The Proposed Development will comprise up to 13 wind turbines and other associated infrastructure.

The EIA Report comprises the following volumes:

- Volume 1: Written Text;
- Volume 2: Figures (this volume);
- Volume 3 (a): NatureScot Visualisations (Viewpoints 1-10);
- Volume 3 (b): NatureScot Visualisations (Viewpoints 11-20 and AESLQ & WLA Assessment Points);
- Volume 4 (a): Highland Council Visualisations (Viewpoints 1-10);
- Volume 4 (b): Highland Councils Visualisations (Viewpoints 11-20);
- Volume 5 (a): Appendices 1.1-8.5; and
- Volume 5 (b): Appendices 9.1-14.2.

In addition to the above, the application is accompanied by a standalone Non-Technical Summary (NTS), a Planning Statement, a Design and Access Statement and a Pre-Application Consultation (PAC) Report.

A hard copy of the EIA Report will be available for public viewing during the application consultation period at the following address:

Glenurquhart Library and Learning Centre

Drumnadrochit

Inverness

IV63 6XA.

Copies of this EIA Report and further information may be obtained by contacting Loch Liath Wind Farm Ltd on 0800 772 0668 or by emailing uk-post@statkraft.com. A hard copy of the EIA Report is available for £2500. Hard copies of the Non-Technical Summary (NTS) are available free of charge.

The documents will also be available for viewing online on the Scottish Government ECU planning portal (<https://www.energyconsents.scot/ApplicationSearch.aspx>), THC Planning Portal <https://wam.highland.gov.uk/wam/> and on the application website www.lochliath.co.uk.

Any public representations to the application may be submitted via the ECU website at www.energyconsents.scot/Register.aspx; by email to the Scottish Government, Energy Consents Unit mailbox at representations@gov.scot; or by post to the Scottish Government, Energy Consents Unit, 4th Floor, 5 Atlantic Quay, 150 Broomielaw, Glasgow, G2 8LU, identifying the proposal and specifying the grounds for representation. The Applicant will advertise the submission of the Section 36 application in the local and national press and on the dedicated project website. The advert will state the deadline for submitting representations to Scottish Ministers.

Figures

Chapter 1: Introduction

Figure 1.1: Site Location

Chapter 3: Site Selection and Design Strategy

Figure 3.1a: Layout 1: 26 Turbines up to 200m to Blade Tip (Scoping Layout)

Figure 3.1b: Layout 2: 22 Turbines up to 200m to Blade Tip

Figure 3.1c: Layout 3: 20 Turbines up to 200m to Blade Tip

Figure 3.1d: Layout 4: 17 Turbines up to 200m to Blade Tip (this layout was presented to NatureScot and THC in November 2021)

Figure 3.1e: Layout 5: 14 Turbines with a Mixture of Heights 180m/200m to Blade Tip

Figure 3.1f: Layout 6: 13 Turbines with a Mixture of Heights 180m/200m to Blade Tip (Design Freeze)

Chapter 4: Project Description

Figure 4.1a – c: Site Layout

Figure 4.2a: Typical Wind Turbine - 200m Tip Height

Figure 4.2b: Typical Wind Turbine - 180m Tip Height

Figure 4.3: Typical Turbine Foundation

Figure 4.4: Typical Crane Hardstanding

Figure 4.5: Typical Anemometer Mast

Figure 4.6: Typical Cable Trench

Figure 4.7: Proposed Construction Compound and Substation

Figure 4.8: Typical Onsite Control Building - Plan and Elevation

Figure 4.9: Typical Cut and Floating Track Details

Figure 4.10: Drainage Design

Figure 4.11: Typical Watercourse Crossing Methods

Figure 4.12: Proposed Substation Elevations

Chapter 6: Landscape and Visual Amenity

Figure 6.1: Landscape and Visual Impact Assessment Study Area

Figure 6.2a: Blade Tip Height (180-200m) Zone of Theoretical Visibility (ZTV) and Viewpoint Locations

Figure 6.2b: Blade Tip Height (180-200m) Zone of Theoretical Visibility (ZTV) and Viewpoint Locations and Visual Receptors within 20km

Figure 6.2c: Blade Tip Height (180-200m) Zone of Theoretical Visibility (ZTV) and Viewpoint Locations (A1)

Figure 6.3a: Hub Height (102.5-122.5m) Zone of Theoretical Visibility (ZTV) and Viewpoint Locations

Figure 6.3b: Hub Height (102.5-122.5m) Zone of Theoretical Visibility (ZTV) and Viewpoint Locations and Visual Receptors within 20km

Figure 6.4: Blade Tip Height (180-200m) and Hub Height (102.5-122.5m) Comparative Zone of Theoretical Visibility (ZTV) and Viewpoint Locations

Figure 6.5a: Landscape Character Types

Figure 6.5b: Landscape Character Types with Blade Tip Height (180-200m) Zone of Theoretical Visibility (ZTV)

Figure 6.6a: Designated Landscapes & Wild Land Areas

Figure 6.6b: Designated Landscapes & Wild Land Areas with Blade Tip Height (180-200m) Zone of Theoretical Visibility (ZTV)

Figure 6.7a: Other Wind Farm Developments - 60 km

Figure 6.7b: Other Wind Farm Developments - 45 km

Figure 6.8: CZTV - Operational Wind Farms and Loch Liath

Figure 6.9: CZTV - Operational and Consented Wind Farms and Loch Liath

Figure 6.10: CZTV - Operational, Consented and Proposed Wind Farms and Loch Liath

Figure 6.11: CZTV - Bhlaraidh, Corrimony and Loch Liath

Figure 6.12: CZTV - Bhlaraidh, Bhlaraidh Extension, Corrimony and Loch Liath

Figure 6.13: CZTV - Beinneun, Beinneun Extension, Millennium, Millenium South, Bunloinn, Tomchrasky and Loch Liath

Chapter 7: Geology, Hydrology, Hydrogeology and Peat

Figure 7.1: Hydrological Setting

Figure 7.2: National Soil Map of Scotland

Figure 7.3: SNH Carbon and Peatland Map 2016

Figure 7.4: Superficial Geology

Figure 7.5: Bedrock Geology

Figure 7.6a: Hydrology Features

Figure 7.6b: Hydrology Features

Figure 7.6c: Hydrology Features

Figure 7.6d: Hydrology Features

Figure 7.7: Hydrogeological Regime

Figure 7.8: Depth of Penetration and Probe Locations

Figure 7.8a: Depth of Penetration and Probe Locations

Figure 7.8b: Depth of Penetration and Probe Locations

Figure 7.9: Estimated Peat Depth

Figure 7.9a: Estimated Peat Depth

Figure 7.9b: Estimated Peat Depth

Figure 7.10: Temporary Peat Storage Areas

Figure 7.11: Peat Restoration Areas

Chapter 8: Ecology

Figure 8.1: Ecology Survey Area

Figure 8.2: Desk Study

Figure 8.3: Phase 1 Habitat Survey Results

Figure 8.4: National Vegetation Classification (NVC) Survey Results

Figure 8.5: Areas of Guidance-Stated Potential Groundwater Dependency

Figure 8.6: Protected Species Survey Results

Figure 8.7: Bat Survey Area

Figure 8.8: Bat Survey Results

Figure 8.9: Proposed OREP Measures

Chapter 9: Ornithology

Figure 9.1: Designated Sites within 20km

Chapter 10: Cultural Heritage

Figure 10.1: The location of heritage assets in the Inner Study Area

Figure 10.2: The location of designated heritage assets in the Outer Study Area and those beyond the study area whose setting may be effected by the Proposed Development

Figure 10.3: "The location of visualisations to inform the assessment of setting change, including in-combination views of Urquhart Castle"

Chapter 11: Noise and Vibration

Figure 11.1: Noise Locations and Noise Contours

Chapter 12: Traffic and Transport

Figure 12.1: Study Area

Figure 12.2: Traffic Count Locations

Figure 12.3: Accident Locations

Figure 12.4: Abnormal Indivisible Load and Construction Vehicle Delivery Routes

Chapter 13: Socio-Economics

Figure 13.1: Core Paths and Rights of Ways Within 15km of Site Boundary