

ACHANY EXTENSION WIND FARM

EIA Report
Volume 2: Main Report

July 2021



sse
Renewables

For a better
world of energy

CONTENTS

Glossary and Abbreviations

Preface

1: Introduction

2: Site Selection and Design Evolution

3: Description of Development

4: EIA Process and Methodology

5: Scoping and Consultation

6: Planning Policy and Context

7: Landscape and Visual

8: Ecology

9: Ornithology

10: Hydrology and Hydrogeology

11: Geology and Carbon Balance

12: Cultural Heritage

13: Traffic and Transport

14: Socio-economics and Tourism

15: Noise and Vibration

16: Aviation

17: Other Issues

18: Schedule of Mitigation

GLOSSARY AND ABBREVIATIONS

AADT	Annual Average Daily Traffic Flow
AEP	Annual Exceedance Probability
AESI	Adverse Effects on Site Integrity
AGL	Above Ground Level
AIL	Abnormal Indivisible Load
AM	Amplitude Modulation
AOD	Above Ordnance Datum
ATC	Automatic Traffic Count
ATP	Area Tourism Partnership
BAP	Biodiversity Action Plan
BEIS	Department of Business, Energy & Industrial Strategy
BERR	Department for Business, Enterprise and Regulatory Reform
BGS	British Geological Survey
BoCC	Birds of Conservation Concern
BT	British Telecom
CAA	Civil Aviation Authority
CAPEX	Capital Expenditure
CAR	Controlled Activities Regulations
CBD	Convention on Biological Diversity
CasPlan	Caithness and Sutherland Local Development Plan, the Highland Council, adopted 2018.
CE	Crown Estate
CEMP	Construction Environmental Management Plan
CIEEM	Chartered Institute of Ecological and Environmental Management
Cifa	Chartered Institute for Archaeologists
CIRIA	Construction Industry Research and Information Association
CLVIA	Cumulative Landscape and Visual Assessment
CO ²	Carbon Dioxide
COPA 1974	The Control of Pollution Act 1974
CRM	Collision Risk Modelling
CSL	Construction Site Licence
CTMP	Construction Traffic Management Plan
CWS	County Wildlife Site
dB	Decibel

DFT	Department for Transport
DIO	Defence Infrastructure Organisation
DMP	Deer Management Plan
DMRB	Design Manual for Roads and Bridges
DTI	Department of Trade and Industry
DTM	Digital Terrain Model
DWPA	Drinking Water Protected Areas
DWQR	Drinking Water Quality Regulator for Scotland
EcIA	Ecological Impact Assessment
ECoW	Environmental Clerk of Works
ECU	Energy Consents Unit
EHO	Environmental Health Officer
EIA	Environmental Impact Assessment. A formal process codified by EU directive 2011/92/EU, and subsequently amended by Directive 2014/52/EU. The national regulations are set out in The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. The EIA process is set out in regulation 4(1) of the regulations and includes the preparation of an EIA Report by the developer to systematically identify, predict, assess and report on the likely significant environmental impacts of a proposed project or development.
EIA Regulations	The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
EPA 1990	The Environmental Protection Act 1990
EPS	European Protected Species
ESTU-R-97	The Assessment and Rating of Noise from Wind Farms
EU	European Union
FFD	Freshwater Fish Directive
FID	Flight Initiation Distance
FLS	Forestry and Land Scotland
FTE	Full Time Equivalent
FWPM	Freshwater Pearl Mussel
GB	Great Britain
GCR	Geological Conservation Review
GDL	Gardens and Designed Landscapes
GDP	Gross Domestic Product
GES	Government Economic Strategy
GPG	Good Practice Guidance

GPP	Guidance for Pollution Prevention
GPS	Global Positioning System
GVA	Gross Value Added
GVLIA3	Guidelines for Landscape and Visual Impact Assessment, Third Edition
GW	Gigawatt
GWDTE	Groundwater Dependent Terrestrial Ecosystems
GWP	Global Warming Potential
Ha	Hectare, an area of 10,000 square metres
Habitat Reinstatement	The replacement of temporarily removed vegetation and / or soil cover that is then allowed to naturally regenerate
Habitat Restoration	Involves undertaking measures to actively regenerate degraded habitat
HBRG	Highland Biological Recording Group
HEPS	Historic Environment Policy for Scotland
HER	Historic Environment Record
HES	Historic Environment Scotland
HET	Historic Environment Team
HGV	Heavy Goods Vehicle
HIAL	Highlands and Islands Airports Ltd
HIE	Highland and Islands Enterprise
HLU	Historic Land Use
HMP	Habitat Management Plan
HMU	Habitat Management Unit
HRA	Habitat Regulations Appraisal
HRES	Highland Renewable Energy Strategy
HRSG	Highland Raptor Study Group
HwLDP	Highland-wide Local Development Plan
ICAO	International Civil Aviation Organization
IEF	Important Ecological Features
IEMA	Institute of Environmental Management and Assessment
IFP	Instrument Flight Procedures
IOA	Institute of Acoustics
IOF	Important Ornithological Feature
IUCN	International Union for the Conservation of Nature
JMT	John Muir Trust
JNCC	Joint Nature Conservation Committee

JRC	Joint Radio Company
Km	kilometre
KSDSFB	Kyle & Sutherland District Salmon Fishery Board
kV	kilovolt
LBAP	Local Biodiversity Action Plan
LCA	Landscape Character Area
LCT	Landscape Character Type
LDP	Local Development Plan
LGV	Light Goods Vehicle
LI	Landscape Institute
LiDAR	Light Detection and Ranging
LSE	Likely Significant Effect
LTS	Local Transport Strategy
LUPS	Land Use Planning System
LVIA	Landscape and Visual Impact Assessment
LWS	Local Wildlife Site
m	meters
MBBS	Moorland Breeding Bird Survey
MEF	Maximum Elevation Figure
Mph	miles per hour
MS	Mountaineering Scotland
MSS	Marine Scotland Science
m/s	meters per second
Methodology	The specific approach and techniques used for a given study
Mitigation Measures	Measures including any process, activity or design process to avoid, reduce, remedy or compensate for adverse impacts of a development
MOD	Ministry of Defence
MSA	Minimum Safe Altitude
MSS	Marine Scotland Science
MW	Megawatt
NATS	The National Air Traffic Agency
NBN	National Biodiversity Network
NGO	Non-Governmental Organisation
NHZ	Natural Heritage Zone
NNR	National Nature Reserve

NPF3	National Planning Framework 3
NRHE	The National Record for the Historic Environment
NRTF	National Road Traffic Forecast
NSA	National Scenic Area
NSR	Noise Sensitive Receptor
NTS	Non-Technical Summary
NVC	National Vegetation Classification
NVG	Night Vision Goggles
OAM	Other Amplitude Modulation
OEM	Original Equipment Manufacturer
OHMP	Outline Habitat Management Plan
OLS	Obstacle Limitation Surfaces
OPEX	Operating Expenditure
OS	Ordnance Survey
Otter Holt	A protected den used by otter for shelter, resting or breeding
OWESG	Onshore Wind Energy Supplementary Guidance
PAN	Planning Advice Note
PCA	Peatland Condition Assessment
PCH	Potential Collision Height
PCZ	Potential Collision Zone
PIRP	Pollution Incident Response Plan
PMP	Peat Management Plan
Planning Statement	A separate standalone Planning Statement to be submitted in support of the planning application, providing an assessment of the proposal
PPG	Pollution Prevention Guidelines
PPP	Pollution Prevention Plan
Proposed Development	The Proposed Development is taken to be the description of: the location of the development; the physical characteristics of the wind farm and associated infrastructure; and temporary works such as compound areas, batching plant facilities, and borrow pits.
PSR	Primary Surveillance Radar
PLHRA	Peat Landslide and Hazard Risk Assessment
PWS	Private Water Supply
QRA	Qualitative Risk Assessment
Ramsar Site	Wetland of international importance designated under the Ramsar Convention

RBMP	River Basin Management Plan
Residual Effects	Effect of development after mitigation / embedded mitigation or design proposals are taken into account
RIGS	Regionally Important Geological Sites
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation – designated under Directive 92/42/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (known as – The Habitats Directive)
SBL	Scottish Biodiversity List
SCI	Site of Community Importance
Section 36	An application for development consent under Section 36 of the Electricity Act 1989
SEPA	Scottish Environment Protection Agency
SF	Scottish Forestry
SG	Supplementary Guidance
Significance	A measure of importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic
SINC	Site of Interest for Nature Conservation
SLA	Special Landscape Area
SM	Scheduled Monument
SMAC	Surveillance Minimum Altitude Chart
SNH	Scottish Natural Heritage
SOC	Scottish Ornithologist Club
SPA	Special Protection Area – designated under Directive 2009/147/EC on the Conservation of Wild Birds (the Birds Directive)
SPP (Planning)	Scottish Planning Policy
SSE Renewables	SSE Renewables Development (UK) Limited, “the Developer”
SSE Generation Ltd	The Applicant
SSSI	Site of Special Scientific Interest – designated by SNH under the Nature Conservation (Scotland) Act 2004
SuDS	Sustainable Drainage System
SW	Scotways
THC	The Highland Council
TMP	Traffic Management Plan
TS	Transport Scotland
UK	United Kingdom
UN	United Nations
VP (Landscape and Visual)	Viewpoint

VP (Ornithology)	Vantage Point
WFD	Water Framework Directive
WLA	Wild Land Area
WSI	Written Scheme of Investigation
WTG	Wind Turbine Generator
ZOI	Zone of Influence
ZTV	Zone of Theoretical Visibility – the computer-generated theoretical visibility of an object in the landscape