



ESB Asset Development UK Limited

# Chleansaid Wind Farm

Environmental Impact Assessment Report (Volume 1)

662367



MARCH 2022



## RSK GENERAL NOTES

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**Project No.:** 662367  
**Title:** Chleainsaid Wind Farm Environmental Impact Assessment Report (Volume 1)  
**Client:** ESB Asset Development UK Limited  
**Date:** March 2022  
**Office:** Glasgow  
**Status:** Final

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of RSK Environment Ltd.

## PREFACE

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ESB Asset Development UK Limited (the 'applicant') is submitting an application under Section 36 of the Electricity Act 1989 for consent for the Chleainsaid Wind Farm, located 13 km to the north-east of Lairg in the Scottish Highlands, near the A836–A838 Junction. It is proposed that up to 16 turbines will be constructed in the turbine area, and that each turbine will have a maximum height to blade tip up to 200 metres. The individual turbine generating capacity is anticipated to be approximately 6 Megawatts (MW), with the total installed capacity for the Proposed Development in excess of 50 MW.

RSK Environment Limited ('RSK') has been commissioned by the applicant to undertake an environmental impact assessment of the Proposed Development. This Environmental Impact Assessment (EIA) Report describes the findings of environmental assessments undertaken during the development of the Proposed Development.

Information relating to the EIA Report and supporting documentation is available in three volumes:

**Volume 1** – Environmental Impact Assessment Report

**Volume 2** – Figures

**Volume 3** – Appendices

When the Section 36 application for the Proposed Development is lodged with Scottish Government Energy Consents Unit (ECU), the applicant will advertise the application in the Edinburgh Gazette and the local press confirming by when representations on the application should be made. The ECU will also invite formal representations on the application, which will be taken into account before reaching a decision on the application.

Any representations to the application may be submitted via the ECU website at [www.energyconsents.scot/Register.aspx](http://www.energyconsents.scot/Register.aspx); by email to the Scottish Government, Energy Consents Unit mailbox at [representations@gov.scot](mailto:representations@gov.scot); or by post to the Scottish Government, Energy Consents Unit, 4<sup>th</sup> Floor, 5 Atlantic Quay, 150 Broomielaw, Glasgow, G2 8LU, identifying the application and case reference number and specifying the grounds for representation.

Further information on the Proposed Development can be found on the project website at:

<https://esbenergy.co.uk/chleainsaid-wind-farm>

Hard copies of the EIA Report are subject to a charge of £1000 and are available on written request from:

RSK Environment Ltd, 65 Sussex Street, Glasgow, G41 1DX.

Hard copies of the non-technical summary are available free of charge. A digital version of the EIA Report can be downloaded free from the ECU portal or from <https://esbenergy.co.uk/chleainsaid-wind-farm>, or provided on USB stick or DVD-ROM by written request as above.

## EIA Quality Mark

This Environmental Statement, and the Environmental Impact Assessment (EIA) carried out to identify the significant environmental effects of the proposed development, was undertaken in line with the EIA Quality Mark Commitments.

The EIA Quality Mark is a voluntary scheme, operated by IEMA, through which EIA activity is independently reviewed, on an annual basis, to ensure it delivers excellence in the following areas:

- *EIA Management*
- *EIA Team Capabilities*
- *EIA Regulatory Compliance*
- *EIA Context & Influence*
- *EIA Content*
- *EIA Presentation*
- *Improving EIA practice*



To find out more about the EIA Quality Mark please visit: <http://www.iema.net/eia-quality-mark/>

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## GLOSSARY

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air quality standard	concentration of a pollutant, over a specified period, above which adverse effects on health and/or the environment may occur, and which should not be exceeded
alternatives	different design, layout and technological possibilities that could be considered during project development that have potential to fulfil the project objectives
ambient	of or relating to the immediate surroundings of something (e.g. ambient noise level)
ancient woodland	woodland that has existed continuously since at least AD 1600
appropriate assessment	process whereby projects, either alone or in combination, are considered to see if it can be ascertained that they will not adversely affect the integrity of a European protected site
assessment	process by which information about effects of a proposed plan, project or intervention is collected, assessed and used to inform decision making
avoidance	form of mitigation consisting in preventing the impact from happening. E.g. placement of access roads outside of rare habitats.
baseline conditions	environment as it appears (or would appear) immediately prior to the implementation of the project together with any known or foreseeable future changes that will take place before completion of the project
baseline studies	work done to determine and describe the environmental conditions against which any future changes can be measured or predicted and assessed
biodiversity	variety of life forms; different plants, animals and microorganisms; the genes they contain; and the ecosystems they form
catchment	drainage/basin area within which precipitation drains into a river system and eventually into the sea
committed development	development projects that are either under construction or have valid planning permissions/consents
compensation	measures taken to offset the unavoidable negative environmental impacts of a development by counterbalancing them with environmental gains, aiming to achieve a net neutral or beneficial outcome
competent authority	authority responsible for determining the application for consent, permission, licence or other authorisation to proceed with a development
construction phase	period during which the building or assembling of a proposed development and its infrastructure is undertaken
consultation	process by which those organisations or individuals with an interest in the area associated with the Proposed Development are identified and engaged as part of the EIA process
consultation bodies	organisations that the competent authority is required to consult by virtue of the EIA Regulations

Controlled Activities Regulations	Controlled Activities Regulations (CAR), also known as the Water Environment (Controlled Activities) (Scotland) Regulations 2011, apply regulatory controls over activities which may affect Scotland's water environment. SEPA risk assesses the proposed activities before granting an authorisation if it is appropriate. The type of authorisation depends on the environmental risk, and could be General Binding Rules, registration, or a licence.
controlled waters	surface waters, ground waters and coastal waters to which UK pollution legislation applies
culvert	pipe or box-type conduit through which water is carried under a structure
cumulative impact	impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project. cumulative impact may arise as the result of (a) the combined impact of a number of different environmental topic-specific impacts from a single environmental impact assessment project on a single receptor/ resource or (b) the combined impact of a number of different projects within the vicinity (in combination with the environmental impact assessment project) on a single receptor/resource.
decommissioning	period during which a development and its associated infrastructure are removed from active operation
design event	event such as a rainstorm or flood of given magnitude and probability (usually derived from previous records)
do-nothing scenario	the conditions that would persist in the absence of the implementation of a development
effect	term used to express the consequence of an impact (expressed as the 'significance of effect'), which is determined by correlating the magnitude of the impact with the importance (or sensitivity) of the receptor or resource in accordance with defined significance criteria. For example, land clearing during construction results in habitat loss (impact), the effect of which is the significance of the habitat loss on the ecological resource.
EIA Regulations	collective term for the various statutory instruments through which the previous Directives on Environmental Assessment have been implemented in the UK. The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 apply to the Proposed Development.
emission standard	maximum amount or concentration of a pollutant allowed to be emitted from a particular source
emissions inventory	collection of data relating to the characteristics of processes or activities that release pollutants into the atmosphere
Energy Consents Unit	part of the Scottish Government's Energy Division, the unit processes and administers energy infrastructure applications for Scottish Ministers under the 1989 Electricity Act; the unit is made up of two teams, the Section 36 team and the Section 37 team,
enhancement	measure that seek to improve an environmental condition and is over and above what is required to mitigate the adverse effects of a project

environmental assessment	method and a process by which information about environmental effects is collected, assessed and used to inform decision-making. Assessment processes include strategic environmental assessment, assessment of implications on European sites, and environmental impact assessment.
environmental impact assessment	statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. Involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Regulations, including the publication of an EIA Report.
Environmental Impact Assessment Report	otherwise known as an EIA Report. Document produced in accordance with the EIA Regulations that reports the outcomes of the EIA process
environmental information	information that must be taken into account by the decision maker (the competent authority) before granting any kind of authorisation in any case where the EIA process applies. It includes the Environmental Impact Assessment Report, including any further information, any representations made by any body required by the Regulations to be invited to make representations, and any representations duly made by any other person about the environmental effects of the development
environmental management plan	structured plan that outlines the mitigation, monitoring and management requirements arising from an environmental impact assessment
estuary	downstream part of a river where it widens to enter the sea
European protected species	all the plant and animal species included in the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) Schedule 2 and Schedule 4
European site	sites that make up the European ecological network (also known as Natura 2000 sites). These include sites of community importance (SCIs), special protection areas (SPAs) and potential SPAs (pSPAs), special areas of conservation (SACs) and candidate or possible SACs (cSACs or pSACs), and Ramsar sites.
evaluation	determination of the significance of effects. Evaluation involves making judgements as to the value of the receptor/resource that is being affected and the consequences of the effect on the receptor/resource based on the magnitude of the impact.
existing environment	see 'baseline conditions'
Gate check	Procedure adopted by the Energy Consents Unit to review work undertaken by the applicant for a Section 36 or Section 37 development prior to submission of their EIA Report and consent application.
Habitats Regulations	The Conservation (Natural Habitats) Regulations 1994 (most recently amended in 2012), is more commonly known as the Habitats Regulations. The Habitats Regulations cover requirements for sites that are internationally important for threatened habitats and species (e.g. Natura sites), species that require strict protection (e.g. European protected species), and other aspects of the previous Habitats Directive.

Habitats Regulations assessment	assessment of the impacts of implementing a plan or policy on a European site, the purpose being to consider the impacts of a project against conservation objectives of the site and to ascertain whether it would adversely affect the integrity of the site
hydraulics	processes and regimes of water flow (velocities, volumes, duration, frequency etc) in hydrological systems such as surface waters and groundwater
hydrodynamics	mechanical properties of fluids, such as those concerned with flow
hydrogeology	study of the distribution and movement of groundwater
impact	change that is caused by an action; for example, land clearing (action) during construction that results in habitat loss (impact)
intertidal	area of land between mean high water and mean low water
invertebrates	animals without backbones
local development	development type identified as local under the Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009
major development	development type identified as major under the Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009
mean (high/low) water	highest/lowest average level water reaches on an outgoing tide
method statement	document that sets out intended working or survey practices
mitigation	measures intended to avoid, reduce and compensate adverse environmental effects
monitoring	continuing assessment of the performance of the project, including mitigation measures. This determines if effects occur as predicted or if operations remain within acceptable limits, and if mitigation measures are as effective as predicted.
national development	development type identified as national under the Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009
non-statutory consultee	organisations and bodies that may be consulted on relevant planning applications
non-technical summary	information for the non-specialist reader to enable them to understand the main predicted environmental effects of the proposal without reference to the main EIA Report
operation	functioning of a development on completion of construction
pasture	grassland maintained primarily for and by grazing, and on which grazing stock is kept for a large part of the year
phase 1 habitat survey	Recognised methodology used for collating information on the habitat structure of a particular site.
photomontage	superimposing of an image onto a photograph to create a realistic representation of proposed or potential changes to a view
piling	installation of bored and driven piles into the ground
planning authority	local authority that is empowered by law to exercise planning functions for a particular area of the United Kingdom
pollution	any increase of matter or energy to a level that is harmful to living organisms of their environment (when it becomes a pollutant)

preferred option	chosen design option that most successfully achieves the project objectives and becomes subject to further design and assessment
programme	series of steps that have been identified by the applicant, or series of projects that are linked by dependency
project	One (or more) aspect of a programme or plan that has been identified by the applicant and usually involves a direct physical intervention
project objectives	objectives of the project, set by the applicant
Proposed Development	a plan or project that the applicant or promoter seeks to implement
Ramsar	areas designated by the UK Government under the International Ramsar Convention (the Convention on Wetlands of International Importance)
receptor	defined individual environmental feature usually associated with population, fauna, flora, water bodies, soils, landscapes and cultural heritage features with the potential to be affected by a project
residual effect	those effects that remain following the implementation of mitigation measures
resource	defined but generally collective environmental feature usually associated with soil, water, air, climatic factors, landscape, material assets, including the architectural and archaeological heritage that has potential to be affected by a project
roosting site (birds)	place where birds rest or sleep
roosting site (bats)	place where bats live (e.g. built structures and trees)
run-off	precipitation that flows as surface water from a site, catchment or region water bodies such as rivers and lakes and ultimately flows to the sea
Section 36 Application	in Scotland, the construction and operation of power stations of a certain capacity requires an application to be made to Scottish Ministers under Section 36 of the Electricity Act 1989. Applications to the Scottish Ministers need to be accompanied by an EIA Report. The ECU's Section 36 team will process applications for onshore power station applications, including wind farms over 50MW and hydro developments over 1MW.
Section 37 Application	in Scotland, applications for powerlines and wayleaves should be made to Scottish Ministers under Section 37 of the Electricity Act 1989. Applications to the Scottish Ministers need to be accompanied by an EIA Report. The ECU's Section 37 team will process applications for offshore power station applications, transmission lines, necessary wayleaves, and compulsory purchase orders for electricity lines and gas pipelines.
Schedule 1 project	plans or projects listed Schedule 1 of the EIA Regulations
Schedule 2 project	plans or projects listed in Schedule 2 of the EIA Regulations
scoping	process of identifying the issues to be addressed by the environmental impact assessment process. It is a method of ensuring that an assessment focuses on the important issues and avoids those that are considered not significant.
scoping opinion	opinion provided by a competent authority that indicates the issues an environmental impact assessment of a proposed development should consider

screening	formal process undertaken to determine whether it is necessary to carry out a statutory environmental impact assessment and publish an Environmental Impact Assessment Report in accordance with the EIA Regulations
sediment	organic and inorganic material that has precipitated from water to accumulate on the floor of a water body, watercourse or trap
semi-natural	habitat, ecosystem, community, vegetation type or landscape that has been modified by human activity but consists largely of native species and appears to have similar structure and functioning to a natural type
significance	see 'significance of effect'
significance of effect	measure of the importance or gravity of the environmental effect, defined by either generic significance criteria or criteria specific to the environmental topic
significant environmental effect	environmental effect considered material to the decision-making process
sites of special scientific interest	main national conservation site protection measure in Britain designated under the Wildlife and Countryside Act 1981
special area of conservation	international designation implemented under the Habitats Regulations for the protection of habitats and (non bird) species
special protection area	sites designated under the previous EU Directive (79/409/EEC) for the conservation of wild birds
stakeholder	organisation or individual with a particular interest in the project
study area	spatial area within which environmental effects are assessed (i.e. extending a distance from the project footprint in which significant environmental effects are anticipated to occur). This may vary between the topic areas.
The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017	The EIA Regulations applicable to the Proposed Development
threshold	specified level in grading effects (e.g. the order of significance)
visual amenity	value of a particular view or area in terms of what is seen
vehicle movement	movement of project vehicles only
visualisation	computer generated wireline or photomontage illustrating change over time of the landscape where the Proposed Development will be located
wildlife corridor	linear habitats/landscape features such as hedgerows that may increase connectivity by acting as routes between habitat patches
worst case	principle applied where environmental effects may vary (e.g. owing to seasonal variations) to ensure the most severe effect is assessed



## ABBREVIATIONS

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AA	Appropriate Assessment
AIL	abnormal indivisible load
ADLS	aircraft detection lighting system
AOD	above Ordnance Datum
BAP	biodiversity action plan
bgl	below ground level
BGS	British Geological Survey
BS	British Standard
CA	competent authority
CAR	Controlled Activities Regulations
CEMP	construction (or contract) environmental management plan
CIEEM	Chartered Institute of Ecology and Environmental Management
CifA	Chartered Institute for Archaeologists
COSHH	control of substances hazardous to health
CRTN	calculation of road traffic noise
dB(A)	decibel (A-weighted), a unit of noise measurement
DBA	desk-based assessment
ECU	Energy Consents Unit
EclA	ecological impact assessment
EHO	environmental health officer
EIA	environmental impact assessment
EIAR	Environmental Impact Assessment Report or EIA Report
EPS	European protected species
EU	European Union
FRA	flood risk assessment
GDL	garden and designed landscapes
GHG	greenhouse gas
GIS	geographic information system
GPS	global positioning system
GWDTE	Groundwater dependent terrestrial ecosystems
HDV	heavy duty vehicle
HER	Historic Environment Record
HGV	heavy goods vehicle
HRA	Habitats Regulations assessment
HES	Historic Environment Scotland
HSE	Health and Safety Executive

HVAC	heating, ventilation and air-conditioning
IEMA	Institute of Environmental Management and Assessment
ILP	Institute of Lighting Professionals
IPP	Independent Power Producer
JNCC	Joint Nature Conservation Committee
km	kilometre
kV	Kilovolt
LCA	landscape character area
LCT	landscape character types
LBAP	local biodiversity action plan
LDP	local development plan
LGV	light goods vehicle
LI	Landscape Institute
LiDAR	Light detection and ranging
LNR	local nature reserve
LTP	local transport plan
LVIA	landscape and visual impact assessment
MAGIC	Multi-Agency Geographic Information for the Countryside
MV	Medium Voltage
MW	Megawatts
NER	Neutral Earth Resistor
NNR	national nature reserve
NTS	non-technical summary
NVC	National Vegetation Classification
OS	Ordnance Survey
PA	Planning authority
PAC	pre-application consultation
PAN	proposal of application notice
PCS	power conversion systems
RIGS	regionally important geological and geomorphological site
RSPB	Royal Society for the Protection of Birds
SAC	special area of conservation
SCADA	Supervisory control and data acquisition
SEPA	Scottish Environment Protection Agency
SINC	site of importance for nature conservation
SLA	special landscape area
SM	scheduled monument
SNH	Scottish Natural Heritage (now NaturesScot)

SoCC	statement of community consultation
SoS	Secretary of State
SPA	special protection area
SPP	Scottish Planning Policy
SSSI	site of special scientific interest
SuDS	sustainable drainage system
SWT	Scottish Wildlife Trust
TA	transport assessment
TALS	Transponder activated lighting system
TIA	traffic impact assessment
THC	The Highland Council
TMP	traffic management plan
TNO	Transmission Network Operator
TPO	tree preservation order
TRICS	Trip Rate Information Computer System
UK	United Kingdom
VAR	volt-ampere reactive
WFD	Water Framework Directive
ZTV	zone of theoretical visibility

# 1 INTRODUCTION

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## 1.1 Background to Proposed Development

- 1.1.1 ESB Asset Development UK Limited (hereafter ‘the applicant’) is proposing to submit an application for consent for the Chleainsaid Wind Farm (hereafter ‘the Proposed Development’), located 13 km to the north-east of Lairg in the Scottish Highlands, near the A836–A838 Junction.
- 1.1.2 The applicant is seeking to secure approval for the Proposed Development by way of a consent application under Section 36 (‘S36’) of the *Electricity Act 1989 and the Electricity Works (Environmental Impact Assessment) (Scotland) (EIA) Regulations 2017 to Scottish Ministers*.
- 1.1.3 The turbine area currently comprises of a sporting estate and rough grazing for sheep. The surrounding land uses include commercial forestry, agricultural and sporting and recreational uses. The Proposed Development will comprise up to 16 turbines, with a maximum height to blade tip up to 200 m. Associated infrastructure will also be developed including access tracks, borrow pits, transformers, underground cables, onsite sub-station/control building, a prospective energy storage facility, telecommunications equipment and temporary construction compounds. The individual turbine generating capacity is anticipated to be approximately 6 MW, with the total generating capacity for the Proposed Development in excess of 50 MW. **Figure 1.1** shows the Proposed Development context and location.

## 1.2 Environmental Impact Assessment (EIA)

- 1.2.1 EIA is a process for identifying the likely consequences on the existing biological, physical and human environment arising from development progression.
- 1.2.2 The process is undertaken to ensure that the environmental effects of certain types of development proposal are fully investigated, understood and taken account of in the consenting and authorisation process.

### Statutory Context

- 1.2.3 The requirement that an EIA should be prepared by the promoters of certain types of development prior to consent being granted, and the process by which an EIA should be undertaken, was originally prescribed in 1985 within a previous European Council Directive.
- 1.2.4 *The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017* (hereafter ‘the EIA Regulations’) set out the statutory requirements. and apply where planning consent is being sought for developments under the Section 36 of the Electricity Act 1989.
- 1.2.5 Whilst not a statutory requirement, as part of the EIA process, the applicant sought a formal scoping opinion from the Energy Consents Unit (ECU) on behalf of the Scottish Ministers under the EIA Regulations. This was submitted on 5<sup>th</sup> March 2020.. In further

recognition of the Proposed Development's potential effects, applicant has decided to volunteer to undertake an EIA in support of the application.

### **Environmental Impact Assessment Report**

- 1.2.6 It is a requirement of the EIA Regulations that an EIA Report be prepared to describe the likely significant effects of a proposed development on the environment.
- 1.2.7 This EIA Report accompanies the S36 application and reports the formal process and outcomes of the EIA undertaken for the Proposed Development. Its purpose is to present the Proposed Development and its predicted environmental effects in a concise, objective and non-promotional manner in order to provide the Scottish Ministers, Local Authority, consultation bodies, interested bodies and the general public with sufficient information to assess its likely environmental effects.
- 1.2.8 This EIA Report has been prepared under the supervision of, and reviewed by, persons having suitable competency in environmental impact assessment, which is also a requirement of RSK Environment Limited's ('RSK's) continued registration on IEMA's 'EIA Quality Mark' scheme. Amongst other things, RSK defines 'suitable competency' as sufficient relevant qualifications and experience (e.g. a minimum of five years) in working on EIA projects and suitable professional standing as recognised by, for instance accreditation as a Chartered Environmentalist or equivalent.

## **1.3 Structure of Environmental Impact Assessment Report**

- 1.3.1 The Environmental Impact Assessment (EIA) Report is presented in 3 volumes:
  - **Volume 1:** Environmental Impact Assessment Report
  - **Volume 2:** Figures
  - **Volume 3:** Appendices
- 1.3.2 A non-technical summary (NTS) of the EIA Report has been prepared as a separate document, in accordance with the requirements of the EIA Regulations.

### **Volume 1**

- 1.3.3 EIA Report **Volume 1** comprises 16 sections, which are structured in the following manner.
  - **Section 1 Introduction** introduces the Proposed Development and explains the underlying objectives of the proposals, describes the statutory basis for the EIA, outlines the structure adopted in this EIA Report and identifies the team of competent experts responsible for undertaking and reporting the EIA.
  - **Section 2 Proposed Development** identifies the location of the project and characterises the site and its surroundings; establishes the need for the Proposed Development; summarises the reasonable alternatives that have been considered in the development of a preferred design solution; provides a detailed description of the key design components and characteristics of the Proposed Development and associated land take; and outlines the planned timescales for construction and implementation.
  - **Section 3 Consultation** summarises stakeholder consultation undertaken during the EIA and the design development of the Proposed Development.

- **Section 4 Environmental Assessment Process** summarises the EIA Scoping process undertaken to establish the scope of the EIA, the adopted approach to the EIA and format of the individual technical assessments, and modifications made to the EIA scope that have arisen during the design development and assessment of the Proposed Development.
- **Section 5 Planning and Policy Context** provides a summary of the legislative and policy framework relevant to the Proposed Development including an overview on the climate emergency the response to COVID-19.
- **Sections 6 to 16 Technical Assessments** report the findings of the detailed environmental assessments and the residual effects on the environment predicted to occur as a result of implementation of the Proposed Development.
- **References** of documents used or considered during the EIA are provided at the end of each section, where relevant.

## **Volume 2**

- 1.3.4 **Volume 2** comprises a series of plans, figures and photographs (referenced in **Volume 1**) that illustrate the relationship between the existing environment and the Proposed Development.

## **Volume 3**

- 1.3.5 **Volume 3** comprises technical appendices (referred to in **Volume 1**) containing detailed reports of the individual environmental assessments and other relevant supporting documentation.

## **1.4 EIA Team**

- 1.4.1 RSK has undertaken the EIA and preparation of this EIA Report on behalf of the applicant.
- 1.4.2 The relevant expertise and qualifications of the experts involved in the preparation of this EIA Report are detailed in Error! Reference source not found. below

**Table 1.1 EIA Team Responsibilities**

Name	Qualifications	Company	Role and expertise
<b>EIA project management team</b>			
Joe Somerville	MA (Hons), MSc	RSK	EIA Project Manager Member of the Chartered Institute for Archaeologists (MCIfA) Practitioner of the Institute of Environmental Management and Assessment (PIEMA)
Tim Cramp	PhD BSc  Memberships		EIA Technical Reviewer Over 30 years of EIA experience Chartered Environmentalist Member of the Chartered Institute of Water and Environmental Management (CIWEM) Member of the Institution of Environmental Sciences (IES)
Mike Kelly	BSc (Hons)	RSK	EIA Project Director 22 years of experience of EIA project management
Giulia Arancio	BSc (Hons), MSc	RSK	EIA Project Support Socio-economics, land use and Tourism Practitioner of the Institute of Environmental Management and Assessment (PIEMA)
Spyridonas Angeli	BSc (Hons), MSc	RSK	EIA Project Support
<b>EIA technical specialists</b>			
Alison Sidgwick	BSoc Sc (Hons), MURP, MRTPI	Stephenson Halliday	Technical lead - Planning
Sarah Sinclair	MA (Hons) MRTPI	Stephenson Halliday	Planning
Neil Elliot	MA (Hons)	LUC	Landscape and Visual Chartered Member of the Landscape Institute

Name	Qualifications	Company	Role and expertise
Sam Oxley	BSc (Hons), MA	LUC	Landscape and Visual Chartered Member of the Landscape Institute
Jen Richards	BA (Hons), PG Dip, MCIFA	Headland Archaeology	Archaeology and cultural heritage Member of the Chartered Institute for Archaeologists (MCIFA)
Owen Raybould	BSc	Headland Archaeology	Archaeology and cultural heritage Member of the Chartered Institute for Archaeologists (MCIFA)
Colin Bonnington	BSc (Hons), MSc, DPhil	Avian Ecology	Ornithology and ecology Member of the Chartered Institute of Ecology and Environmental Management (CIEEM)
Howard Fearn	MSc	Avian Ecology	Technical lead - ornithology and ecology Member of the Chartered Institute of Ecology and Environmental Management (CIEEM)
Catherine Isherwood	MA, MSci, MSc, PhD	RSK	Technical lead – Hydrology, Geology Chartered Geologist, Fellow of the Geological Society of London, Professional Graduate of the Institute of Materials, Minerals and Mining
Casey McGuire	BA (Hons)	RSK	Hydrology and geology Fellow of the Geological Society of London
Matthew Cand	Dipl Eng, PhD	Hoare Lea	Technical Lead – Noise Member of the Institute of Acoustics
Ian Wickett	HCN	RSK	Traffic and Transport Fellow of the Chartered Institution of Highways and Transportation, Member of the Transport Planning Society



Name	Qualifications	Company	Role and expertise
Jon Hassel	BEng (Hons)	RSK	Traffic and Transport Member of the Chartered Institution of Highways and Transportation, Member of the Transport Planning Society
Danielle King	BA (Hons), LLM	RSK	Climate Change LLM in International Energy Law and Policy
Ian Fletcher	BEng	Wind Business Support	Technical lead - aviation

## 1.5 References

Scottish Government (2017). The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, published by the Scottish Government (2017)

United Kingdom Government (1989). Electricity Act 1989 published by the United Kingdom Government (1989)