

Chapter 1

Introduction

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Glossary

Term	Definition
Environmental Impact Assessment	Environmental Impact Assessment (EIA) is a means of carrying out, in a systematic way, an assessment of the likely significant environmental effects from a development.
Environmental Impact Assessment Regulations	The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (EIA Regulations)
Environmental Impact Assessment Report	A document reporting the findings of the EIA and produced in accordance with the EIA Regulations
The Proposed Development	The Daer Wind Farm development
The Proposed Development Area	The area within which the Proposed Development will be located

List of Abbreviations

Abbreviation	Description
ECU	Energy Consents Unit
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
LVIA	Landscape and Visual Impact Assessment
NTS	Non-Technical Summary

1.1. INTRODUCTION

- 1.1.1. This Environmental Impact Assessment Report (EIAR) has been prepared in support of an application submitted under Section 36 of the Electricity Act 1989 to construct and operate Daer Wind Farm (the Proposed Development).
- 1.1.2. The Proposed Development is located in both Dumfries & Galloway and South Lanarkshire local authority areas, and lies approximately 8 km west of the nearest town, Moffat, in the southern uplands of Scotland. It is directly adjacent to the southeast of the Daer Reservoir. The maximum topographic height of the site approaches 600 m AOD around Earnscraig Hill, with numerous other peaks on site over 500 m AOD.
- 1.1.3. The EIAR describes the natural and human environment of the area in which the Proposed Development would be situated (if consented). It describes the details of the construction, operational and decommissioning phases of the Proposed Development and assesses the potentially significant effects that the Proposed Development could have on the biological environment, the physical environment and on human health and population, as well as on material assets, cultural heritage and the landscape. It also describes the policy context in relation to the Proposed Development for renewable energy within Dumfries & Galloway and South Lanarkshire, Scotland and the UK, and the overall policy context as set out in international agreements to reduce emissions of climate change gases, and targets set for the growth of renewable energy generation.

1.2. STRUCTURE OF THE EIAR

- 1.2.1. The EIAR has been prepared in accordance with the EIA Regulations and follows the structure presented in Table 1 below. Where relevant each EIAR chapter considers the baseline environment, the likely significant effects for each phase of the development and cumulative impacts.

Table 1: EIAR Structure

Volume	Heading	Description
1	EIAR Chapter 1: Introduction	Presents the Proposed Development and provides a brief overview of the Applicant and the EIAR.
1	EIAR Chapter 2: Site Selection and Design Evolution	Explains the site selection and the design evolution process that has resulted in the Proposed Development.
1	EIAR Chapter 3: Project Description	Provides a detailed description of the infrastructure associated with the Proposed Development.
1	EIAR Chapter 4: Climate Change, Legislative and Policy Context	Identifies the energy and land use policies and outlines the need for the Proposed Development and its benefits within the context of international climate change agreements and European, UK and Scottish renewable energy policy.
1	EIAR Chapter 5: Landscape and Visual Impact Assessment (LVIA)	Provides an assessment of the Landscape and Visual Impacts of the Proposed Development including Residential Visual Amenity and Night-time effects.
1	EIAR Chapter 6: Ecology	Provides an assessment of the habitats and (non-avian) fauna present within the Proposed Development area and immediate surrounding environment.
1	EIAR Chapter 7: Ornithology	Provides an assessment of the potential effects upon avian species.
1	EIAR Chapter 8: Hydrology, Geology & Hydrogeology	Assesses the effects on the hydrological, geological and hydrogeological environment by the Proposed Development, including private water supplies and peat.

Volume	Heading	Description
1	EIAR Chapter 9: Cultural Heritage	Provides an assessment of the potential effects of the Proposed Development upon cultural heritage assets.
1	EIAR Chapter 10: Noise	Provides an assessment of the potential noise effects of the Proposed Development.
1	EIAR Chapter 11: Traffic and Transport	Provides an indicative construction programme, load requirements and assesses the potential effects upon the transport network resulting from the Proposed Development.
1	EIAR Chapter 12: Forestry	Assesses how the Proposed Development will affect the existing plans for felling, restocking, and proposes suitable amendments to forestry design plan(s) to accommodate the Proposed Development.
1	EIAR Chapter 13: Infrastructure and Aviation	Provides an assessment of the potential effects upon aviation, Ministry of Defence (MoD) interests, communication operations and existing site infrastructure.
1	EIAR Chapter 14: Socioeconomics	Provides an assessment of the potential socioeconomic and tourism effects of the Proposed Development.
1	EIAR Chapter 15: Synergistic effects, Summary of Mitigation and Residual Effects	Assesses the potential synergistic effects created by effects from different subject areas in combination and summarises the proposed mitigation and residual effects of the Proposed Development.
2a	Figures	EIAR Figures except for LVIA
2b	Figures	LVIA Figures only
2c	Figures	LVIA and Cultural Heritage Visualisations
3	Technical Appendices	Provide additional supporting documents and data which inform the EIA.
4	Non-Technical Summary	Provides a high-level summary of the EIA's results in terms that can be understood by a layperson.

1.3. KEY PROJECT FACTS

- 1.3.1. Figure 1.1 illustrates the site layout of the Proposed Development. It consists of up to 17 wind turbines and associated infrastructure. It is expected to have an operational period of up to 35 years. Figure 1.2 illustrates the Proposed Development in a regional context and Figure 1.3 illustrates site constraints that were considered in the design evolution of the site layout.
- 1.3.2. The Proposed Development's generating capacity of renewable electricity will be in excess of 50 MW. Therefore, the application is made pursuant to Section 36 of the Electricity Act 1989 and the EIA has been undertaken in accordance with The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017.
- 1.3.3. The Proposed Development comprises the following main elements:
 - Up to 17 wind turbines
 - Turbine foundations
 - External transformer housing
 - Crane pads
 - Substation, control building and compound
 - Battery/energy storage infrastructure
 - Upgrading and new access tracks
 - Underground electricity cables connecting infrastructure within the Proposed Development Area
 - 2 Anemometry masts
 - Signage
 - 4 Temporary borrow pits
 - Temporary construction and storage compounds, laydown areas and ancillary infrastructure
 - Drainage and drainage attenuation measures (as required).
- 1.3.4. Any public road utilised for access to the site entrance may be utilised subject to upgrades where necessary. Habitat management will be undertaken within the Proposed Development Area. Whilst the land where turbines will be erected is not forested, forest felling and replanting will be undertaken to facilitate road widening along the private access track to allow for construction traffic and component deliveries.
- 1.3.5. Full details of the infrastructure associated with the Proposed Development is provided in EIAR Chapter 3. For the purpose of this EIA turbines have been considered to be a maximum of up to 180 m in height to blade tip.
- 1.3.6. A Scoping Report was submitted to the ECU on 11 December 2018. A copy of this can be found in Technical Appendix 1.1 of the EIAR. The full Scoping Opinion was received from the ECU on 27 March 2019 and is provided in Appendix 1.2 of the EIAR. It informs the scope of the EIA undertaken for the Proposed Development. An update to the Scoping Report was also provided by Natural Power on behalf of the Applicant to the ECU which reported upon amendments to the Proposed Development including increasing the turbines from 15 to 18 and changing the site boundary.

1.4. EIA PROJECT TEAM

- 1.4.1. On 01 July 2020, RWE concluded its major asset swap with E.ON, which involved the integration of innogy Renewables in the UK. This established RWE as one of the UK's, and the world's, leading producers of renewable energy. RWE is now the world's second largest offshore wind developer and third largest provider of renewable electricity across Europe.
- 1.4.2. In the UK, this strengthens RWE's position as a leading energy player. RWE's UK & Ireland footprint extends over 80 sites, located across England, Scotland, Wales and Ireland, employing over 2,600 people and

generating over 10% of the UK's electricity needs - enough power for over 10 million homes. This makes RWE the second largest generator in the UK as a whole.

- 1.4.3. RWE has made ambitious commitments to increase the generation of clean, reliable and affordable electricity. Alongside the ambition to be carbon neutral by 2040, RWE continues to invest heavily in wind power and other emerging technologies, such as hydrogen and floating offshore wind. RWE's planned gross growth capex spend 2020-2022 will be €8-9bn globally, of which around 30-35% will be in the UK. The Applicant has the necessary knowledge and experience in renewable energy to develop the Proposed Development.

Table 1.1: Details of the Applicant

Applicant	
RWE Renewables UK Developments Ltd	Greenwood House Westwood Way Westwood Business Park Coventry CV4 8PB

- 1.4.4. The Proposed Development has been designed and assessed by the Applicant in association with its lead consultants, Natural Power (Table 1.2). Natural Power has been appointed to coordinate and produce this EIAR and associated EIA documentation
- 1.4.5. Natural Power has been providing expertise to the renewable energy industry since the company was formed in 1995 and is one of the UK's leading renewable energy consultants. Natural Power currently employs over 400 people working full time providing renewable energy services nationally and internationally. Testimony to Natural Power's experience and ongoing commitment to competency and continual improvement, its Planning & Environment Department is accredited by the Institute of Environmental Management and Assessment. In addition, Natural Power also operates in formally accredited health and safety (IOSAS 18001), environmental (14001) and quality (9001) management systems. As well as development and EIA services, Natural Power also provides expert advice and due diligence consultancy, site construction management and site operation and maintenance. Thus, Natural Power is a competent, experienced consultant to co-ordinate and undertake EIA and to prepare the EIAR.
- 1.4.6. Contact details for Natural Power and other consultants involved in the production of the EIAR are provided in Tables 1.2 & 1.3. Competency statements for other consultants involved in the EIA are provided in their respective EIAR Chapters.

Table 1.2: Details of agent and lead consultancy

EIA Co-ordinator and Planning Consultancy	
Natural Power Consultants Limited	The Green House, Forrest Estate, St John's Town of Dalry, DG7 3XS

Table 1.3: Other consultants involved in the production of this EIAR

EIA Contributors	
LVIA Review	
Wood Environment & Infrastructure Solutions UK Limited	15 Justice Mill Lane Aberdeen, AB11 6EQ Scotland

EIA Contributors	
Cultural Heritage Assessment	
CFA Archaeology Ltd	Old Engine House, Eskmills Park, Musselburgh, East Lothian, EH21 7PQ
Noise Assessment	
Hayes McKenzie Partnership Ltd	Unit 3, Oakridge Office Park, Whaddon, Salisbury, Wiltshire, SP5 3HT
Traffic and Transport Assessment	
Pell Frischmann	93 George Street Edinburgh EH2 3ES
Aviation Assessment	
WPAC Ltd.	Hazards, 38 Hadrian Way, Chilworth, Southampton SO16 7HX
Forestry Assessment	
DGA Forestry LLP	Forestry Managers and Consultants, 40 Main Street, New Abbey, DG2 8BY