

# TROSTON LOCH WIND FARM

## EIA Report – Volume 1 – Main Text

### Chapter 1

### Introduction



## CHAPTER 1

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# 1 INTRODUCTION

## 1.1 PURPOSE

This Environmental Impact Assessment Report (EIA Report) is submitted in support of an application made by EDF Renewables Limited (the Applicant), for consent pursuant to Section 36 of the Electricity Act 1989<sup>1</sup> to install and operate a wind farm comprising 14 wind turbines, with a generation capacity exceeding 50 megawatts (MW), and associated infrastructure, at a site within Dumfries and Galloway for a period of thirty years (the Development). In addition, the Applicant is also seeking a Direction from the Scottish Ministers for planning permission to be deemed to be granted under Section 57(2) of the Town and Country Planning (Scotland) Act 1997, as amended.

Given that the Development is expected to exceed 50 MW and is classed as a Section 36 application, the EIA will be undertaken in accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017<sup>2</sup> referred to as the EIA Regulations. The EIA Regulations came into effect of 16<sup>th</sup> May 2017, transposing the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000. A request for a Scoping Opinion was made after 16<sup>th</sup> May 2017 and therefore the transitional provisions are not applicable.

The Development is a Schedule 2(a) development, which is defined as follows:

*“carrying out of development (other than development which is Schedule 1 development) to provide any of the following-*

- (1) A generating station;
- (2) ...”

In line with EIA Regulations, the Applicant recognises the Development is an ‘EIA Development’ following consideration of the characteristics of the Development, the location of the land within the site boundary in which the Development is located (the Site) and the characteristics of the potential impacts as outlined within Schedule 3 of the EIA Regulations.

This EIA Report presents information on the likely significant environmental effects of the proposed development. The EIA Report also informs the reader of the nature of the Development and the measures proposed to protect the environment during site preparation, construction, operation and decommissioning.

This Chapter of the EIA Report is supported by the following figures provided in Volume 2a EIA Report Figures:

- Figure 1.1: Site Location; and
- Figure 1.2: Site Boundary Plan.

## 1.2 SITE CONTEXT

The land within the site boundary (the Site) which contains the turbines and associated infrastructure covers an area of 437 hectares (ha), centred on National Grid Reference (NGR) 268500, 589500. Moniaive is the closest settlement to the Development at 7 kilometres (km) to the east, while St John’s Town of Dalry is 8 km south west and Carsphairn is approximately 11 km to the west as shown on Figure 1.1. The Site lies wholly within the administrative boundary of Dumfries and Galloway Council.

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<sup>1</sup> UK Government, 1989, Electricity Act 1989 [Online] Available at:  
<http://www.legislation.gov.uk/ukpga/1989/29/contents> (Accessed 21/11/2018)

<sup>2</sup> The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017  
<http://www.legislation.gov.uk/ssi/2017/101/contents/made> (Accessed 21/11/2018)

The topography of the Site and immediate vicinity is complex. The elevation of the Site itself ranges from approximately 380 metres (m) above ordnance datum (AOD) in the northeast of the site near Troston Loch and falls to 250 m AOD in the south and southwest of the site. A string of hills form the northwest boundary of the Site consisting of Bennielloan (360 m AOD), College Hill (350 m AOD) and Lochlee Hill (352 m AOD). The Site is in turn surrounded by generally higher hills than those within the Site itself, particularly to the north, east and south. There are a number of watercourses within the Site and two waterbodies, Troston Loch and Mackay's Loch.

The Site predominantly comprises of commercial coniferous plantation at varying degrees of maturity. Much of the Site has recently been felled and either comprises of clear fell or young plantation. The southern section of the Site is used for livestock grazing.

No public roads are located within the Site, although there are number of existing good quality forest roads. The northernmost boundary of the Site runs adjacent to the B729 for a short section.

There are a number of dispersed properties surrounding the Site, predominantly to the east and north, although none are located within 1 km. There are no residential properties within the Site.

There are no statutory designated sites within or immediately surrounding the Site.

### 1.3 APPLICATION DETAILS

The Development comprises up to 14 three-bladed horizontal axis turbines of up to 149.9 m tip height. The main components of the Development are as follows:

- Up to 14 wind turbines, each with a maximum tip height of 149.9 m and rotor diameter of up to 133 m;
- Associated foundations and crane hardstandings at each wind turbine location;
- Access tracks linking the turbine locations comprising of a combination of new and upgraded tracks;
- Temporary construction compound;
- Up to two borrow pits for aggregate extraction;
- Network of underground cabling;
- Operational anemometry mast;
- Substation building, contain control elements and battery storage facility; and
- Site access junction off the B729.

Further details on the Development are provided in **Chapter 4 – The Development**.

The purpose of the Development is to generate electricity from a renewable source of energy, offsetting the need for power generation from the combustion of fossil fuels. Consequently, the electricity that will be produced results in a saving in emissions of Carbon Dioxide (CO<sub>2</sub>) with associated environmental benefits, which is discussed in **Chapter 15 – Climate Change**.

### 1.4 THE APPLICANT

The Applicant is EDF Renewables Limited. EDF Renewables Limited is the trading name of EDF Energy Renewables Limited, a renewable energy company jointly owned by EDF Energy plc (EDF Energy) and EDF Energies Nouvelles (EDF EN).

EDF Renewables Limited is the main vehicle for developing, constructing and operating wind farm projects within the UK on behalf of EDF EN and EDF Energy, and has a combined UK renewable energy portfolio of 957 MW of installed capacity (as of the end of 2018) plus a large portfolio of projects in development. EDF Energy is one of the largest energy companies in the UK, supplying around 6 million residential and business

accounts with electricity and/or gas and producing around one-fifth (20%) of the nation's electricity.

## 1.5 PROJECT TEAM

This EIA Report has been compiled by Arcus Consultancy Services Limited (Arcus) on behalf of the Applicant.

While Arcus have had overall responsibility for the EIA Report, certain sub-consultants have prepared specialist assessment chapters and provided input to the EIA as indicated in Table 1.1 below. For each topic, the detailed assessment of likely significant effects has been undertaken by organisations with relevant specialist skills, drawing on their qualifications, experience of working on other development projects, good practice in EIA and on relevant published information. Table 1.1 lists the organisations that have been involved in each topic in this EIA Report.

**Table 1.1 Project Team**

Chapter Number	Title	Organisation Responsible, Specialist Assessor and Experience
1	Introduction	Arcus Tom Parkyn BSc (Hons) MSc (10 years) Heather Wylie BSc (Hons) (2 years) Dr Della Lansley BSc (Hons) MSc (Disc.) PhD (15 years)
2	EIA Methodology	
3	Site Selection and Design	
4	The Development	
5	Energy and Planning Policy	Arcus Elena Sarieva MA (Hons) MSc (4 years) Clare Walters MA CEnv MRICS (25 years)
6	Landscape and Visual Impact Assessment (LVIA)	Optimised Environments (OPEN) Stuart Cargill BA Hons MLA CMLI (13 years) Simon Martin MLPM CMLI (17 years)
7	Ecology	Arcus Dr Mike Gray BSc MRes PhD MCIEEM CEnv (17 years) Nicolas Wright BSc (Hons) MRes MCIEEM CEnv (10 years)
8	Ornithology	Ecology Consulting Dr Steve Percival BSc (Hons) PhD (23 years)
9	Geology, Hydrology and Hydrogeology	Arcus Liam Nevins BSc MCIWEM (13 years) Ross Ewart BSc (Hons) MSc (4 years) David Ballentyne BSc (Hons) (17 years)
10	Archaeology and Cultural Heritage	Arcus Heather Kwiatkowski BA MA MCifA (19 years) Eva Heimpel BA (Hons) MA PCifA (1 year)
11	Noise	Arcus Alan Moore BA (Hons) MIOA (10 years) Martin Stevenson BSc (Hons) IOA Diploma MIOA (10 years)
12	Traffic and Transportation	Arcus Tomos Ap Tomos BEng (Hons) MIHT (22 years) Kenneth Laing BEng (Hons) GMICE (4 years)

Chapter Number	Title	Organisation Responsible, Specialist Assessor and Experience
13	Forestry	DGA Forestry James Anderson BArch DipArch (7 years) Sandy Anderson BSc (Hons) MICFor MBA (40 + years)
14	Socio-economics, recreation and land-use	Arcus Dr Della Lansley BSc (Hons) MSc (Disc.) PhD (15 years) Heather Wylie BSc (Hons) (2 years)
15	Climate Change	Arcus Dr Della Lansley BSc (Hons) MSc (Disc.) PhD (15 years)
16	Other Issues (to include: Health and Safety, Infrastructure, Telecommunications, Aviation and Shadow Flicker)	Arcus and Pager Power Tom Parkyn BSc (Hons) MSc (10 years) Martin Stevenson (Shadow Flicker) BSc (Hons) IOA Diploma MIOA (10 years) Michael Watson (Aviation) BEng (Hons) PPL (17 years)
17	Summary of Mitigation	Arcus

## 1.6 STRUCTURE OF THE EIA REPORT

The EIA Report contains the findings of the assessment of likely environmental effects of the Development and comprises of the following volumes:

- **Volume 1** – EIA Report Text;
- **Volume 2** – EIA Report Figures;
  - **Volume 2a** – Figures excluding LVIA;
  - **Volume 2b** – LVIA Plan Figures;
  - **Volume 2c** – LVIA Visuals Part 1 of 2;
  - **Volume 2d** – LVIA Visual Part 2 of 2;
- **Volume 3** – EIA Report Technical Appendices; and
- **Volume 4** – EIA Report Non-Technical Summary.

An outline of Volume 1 of the EIA Report which is split into 17 separate chapters is presented below:

- **Chapter 1: Introduction** – Provides background information about the Applicant and an overview of the Development;
- **Chapter 2: EIA Methodology** – Provides an overview of the EIA process, its regulatory context and an outline of the methodology used to assess environmental effects and ensure a consistent and transparent approach to assessment. It describes the scoping and consultation process that assisted in the identification of likely significant environmental effects to be given further consideration;
- **Chapter 3: Site Selection & Design** – Provides details of the site selection exercise and alternative layouts that were considered within the design evolution process;
- **Chapter 4: The Development** – Provides a detailed description of the Development including details of the construction, operational and decommissioning arrangements;
- **Chapter 5: Energy and Planning Policy** – Identifies the energy and land use policy and outlines the need for the Development and its benefits within the context of international climate change agreements and European, UK and Scottish renewable energy policy;
- **Chapters 6 – 16: Technical EIA Chapters (excluding Chapter 13 Forestry)** – Each technical chapter as shown in Table 1.1 will provide a description of the

baseline environmental conditions specific to the relevant topic and will assess the potential environmental impacts (positive or negative) due to the Development in line with the EIA methodology. This will include a description of any proposed mitigation or enhancement measures and a statement of predicted residual impacts. The Forestry technical chapter will follow a different structure in that it will describe the baseline forestry conditions and will provide a forest design plan as a result of the Development, but will not describe the environmental impacts as a result of this forest design plan which will be assessed within each specific technical chapter; and

- **Chapter 17 – Summary of Mitigation:** Provides a summary of the findings of the EIA, including a tabular summary of all residual effects and proposed mitigation.

## 1.7 ADDITIONAL DOCUMENTS

### 1.7.1 Planning Statement

A Planning Statement has been prepared to accompany the application. The Planning Statement sets out an assessment of the Development in the context of the development plan and national planning and energy policy and emerging planning policies. It also considers the potential benefits and harm which may arise and concludes as to the overall acceptability of the proposal in relation to the planning context. This does not form part of the EIA Report.

### 1.7.2 Design Statement

There is no statutory requirement for a Design and Access Statement for a Section 36 application, but the Applicant considers that the preparation and submission of this document will be helpful to the decision maker, consultees and interested parties. The statement focusses on the design considerations with an aim to explain the design process behind the Development.

### 1.7.3 Pre Application Consultation Report

In common with the above there is no statutory requirement for a Pre Application Consultation (PAC) Report for a Section 36 application. The Applicant has however undertaken extensive consultation and engagement at the pre-application stage with a range of statutory and non-statutory consultees, local communities, organisations and individuals. A Pre Application Consultation (PAC) Report has therefore been prepared which forms part of the application submission.

## 1.8 OBTAINING FURTHER INFORMATION

The EIA Report will be publicised in accordance with Part 5 of the EIA Regulations and the Electricity (Applications for Consent) Regulations 1990<sup>3</sup>.

The EIA Report and supporting documentation is available on the Troston Loch Wind Farm project website: [www.edf-re.uk/our-sites/troston](http://www.edf-re.uk/our-sites/troston)

In addition copies of the EIA Report will be made available for public inspection during the consultation period at the following locations during normal opening hours:

- Scottish Government Library at Victoria Quay, Edinburgh, EH6 6QQ;
- Dumfries and Galloway Council, Council Headquarters, English Street, Dumfries, DG1 2DD; and
- Dalry Library, 81 Main St, St John's Town of Dalry, Castle Douglas DG7 3UP.

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<sup>3</sup> The Electricity (Applications for Consent) Regulations 1990  
<http://www.legislation.gov.uk/uk/si/1990/455/regulation/4/made> [accessed 31/01/2019]

Copies of the Non-Technical Summary and DVD copies of the complete application submission are available free of charge while stocks last. Hard copies of the application submission may be obtained at a reasonable charge reflecting the cost of making the relevant information available.

To request a copy of the application submission please contact:

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