Document history

Author	Emma Thackeray	23/08/2021
Checked	Louise Broatch	09/02/2022
Approved	Kirsty Clarke	17/11/2022

Client Details	
Contact	Julie Aitken
Client Name	Fred. Olsen Renewables Limited
Address	c/o Fred. Olsen Renewables Ltd.2nd Floor, 36 Broadway London, SW1H 0BN, United Kingdom

Issue	Date	Revision Details
A	25/02/2022	First Draft
B	06/04/2022	Second Draft
C	13/05/2022	Third Draft for Legal Review
D	09/11/2022	Final draft for submission

Chapter 1

Introduction

Contents

1.1 STRUCTURE OF THE ENVIRONMENTAL IMPACT ASSESSMENT REPORT 2
1.2 INTRODUCTION 3
1.3 BACKGROUND OF WINDY STANDARD DEVELOPMENTS 3
1.4 APPLICATION DETAILS 4
1.5 THE APPLICANT 4
1.6 PROJECT TEAM 4

Glossary

Term	Definition
Environmental Impact Assessment	Environmental Impact Assessment (EIA) is a means of drawing together by the developer, in a systematic way, a description of the development and information relating to of the likely significant environmental effects arising from a proposed development
Environmental Impact Assessment Report	A document reporting the findings of the EIA and produced in accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 Regulation 5
Windy Standard Complex	The 'Windy Standard Complex' refers collectively to the operational existing Windy Standard I Wind Farm, Windy Standard II Wind Farm and the consented Windy Standard III Wind Farm.
The Proposed Development	The Proposed Windy Standard I Repower Wind Farm
The Proposed Development Area	The area shown delineated by the red line boundary shown on Figure 1.2.
The Applicant	Fred. Olsen Renewables Limited
The application	The application for consent.

List of Abbreviations

Abbreviation	Description
DGC	Dumfries and Galloway Council
ECU	Energy Consents Unit
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
FORL	Fred. Olsen Renewables Ltd
GSP	Grid Supply Point
Ha	Hectare
LVIA	Landscape and Visual Impact Assessment
MoD	Ministry of Defence
MW	Megawatts
NTS	Non-Technical Summary
PAC	Pre-Application Consultation

1.1 STRUCTURE OF THE ENVIRONMENTAL IMPACT ASSESSMENT REPORT

1.1.1 The Environmental Impact Assessment Report (EIAR) comprises the following volumes:

Table 1.1: EIAR contents

Volume	Titles and Contents
1	Non-Technical Summary
2	EIAR Chapters 1-17 Chapter 1: Introduction Chapter 2: Legal and Policy Context Chapter 3: Approach to EIA Chapter 4: Site Selection and Design Evolution Chapter 5: Project Description Chapter 6: Landscape and Visual Impact Assessment Chapter 7: Cultural Heritage Chapter 8: Ornithology Chapter 9: Ecology Chapter 10: Hydrology, Geology and Hydrogeological Chapter 11: Forestry Chapter 12: Traffic and Transport Chapter 13: Aviation and Infrastructure Chapter 14: Noise Chapter 15: Socioeconomics Chapter 16: Climate Change Chapter 17: Synergistic Effects and Summary of Mitigation and Residual Effects
3	Figures
4	Technical Appendices
Supplementary Documents	Planning Statement Pre-Application Consultation (PAC) Report

1.1.2 A detailed outline of Volume 2 is presented below:

- Chapter 1: Introduction, of the EIAR, provides a brief introduction of this document and the application.
- Chapter 2: Legal and Policy Context, of the EIAR, identifies the energy and land use policy and outlines the need for the Proposed Development and its benefits within the context of international climate change agreements and UK and Scottish renewable energy policy.
- Chapter 3: Approach to Environmental Impact Assessment (EIA), presents a methodology for environmental design and assessment of the Proposed Development through gathering baseline environmental data, mitigation of impacts during site design and final assessment of the significance of residual environmental and human effects of the proposal.

- Chapter 4: Site Design and Design Evolution, of the EIAR, provides a detailed description of the site design process for the proposed site. This chapter also discusses the considered alternatives, the design evolution process and mitigation measures that were introduced at the site design stage to reduce environmental impacts.
- Chapter 5: Project Description, of the EIAR, provides a detailed description of the Proposed Development including details of the construction, operational and decommissioning arrangements.
- Chapter 6: Landscape and Visual, of the EIAR, provides an assessment of the Landscape and Visual Impacts (LVIA) of the Proposed Development and cumulative LVIA.
- Chapter 7: Cultural Heritage Assessment, of the EIAR, considers the potential impacts of the Proposed Development upon cultural heritage assets.
- Chapter 8: Ornithology Assessment, describes the ornithological interest at the Proposed Development and assesses the predicted effects on these interests.
- Chapter 9: Ecology Assessment, of the EIAR, provides an overview of the baseline and assess the effects of ecological conditions relating to the habitats and (non-avian) fauna present within the Proposed Development Area and immediate surrounding environment.
- Chapter 10: Hydrology, Geology and Hydrogeological Assessment, of the EIAR, assesses the impacts on the hydrological, geological and hydrogeological environment at the Proposed Development.
- Chapter 11: Forestry Assessment, of the EIAR, assesses the potential impacts on the changes to the structure of the woodlands at the Proposed Development.
- Chapter 12: Traffic and Transport Assessment, of the EIAR, assesses the effects due to transport and access resulting from the construction, operation and decommissioning of the Proposed Development.
- Chapter 13: Aviation and Infrastructure, of the EIAR, assesses the potential for impact upon aviation, Ministry of Defence (MoD) interests, communication operations and existing site infrastructure, demonstrates the consulting process undertaken and outlines mitigation where it is deemed necessary. This chapter also considers Shadow Flicker and Ice Throw.
- Chapter 14: Noise Assessment, of the EIAR, assesses the findings of the construction and operational noise assessments that were carried out to assess the noise impact of the Proposed Development.
- Chapter 15: Socioeconomics, of the EIAR, assesses the predicted socioeconomic and tourism impacts of the Proposed Development on local, regional and national levels.
- Chapter 16: Climate Change, of the EIAR evaluates the effects of the Proposed Development on climate change via carbon balance assessment.
- Chapter 17: Synergistic Effects and Mitigation and Residual Effects, of the EIAR, summarises the findings of the EIA presented in the EIAR chapters described above. This chapter also includes synergistic effects.

1.2 INTRODUCTION

1.2.1 This EIAR has been prepared in support of an application submitted under Section 36 of the Electricity Act 1989 to construct and operate the Proposed Windy Standard I Repower Wind Farm (the Proposed Development) comprising of:

- Up to eight turbines;
- External transformer housing;
- Crane pads, turbine foundations;
- Access tracks;
- One substation;
- Underground electricity cables between the turbines and the onsite substation;
- Underground electricity cable between the onsite substation and the grid supply point (GSP);
- Borrow pits;
- Drainage attenuation measures necessary;
- Health and Safety signage;
- Temporary construction and storage compounds;
- A concrete batching plant ancillary infrastructure.

1.2.2 It is intended the Proposed Development will utilise the existing infrastructure on site as far as practical, including sections of existing upgraded track, see Chapter 5: Project Description, of the EIAR for more information.

1.2.3 An application has been submitted by Natural Power Consultants Ltd (Natural power) on behalf of the Applicant Fred. Olsen Renewables Limited (FORL). This EIAR accompanies the application for consent (the application) to develop a wind farm comprising of up to eight wind turbines and associated infrastructure.

1.2.4 The Proposed Development is located within Carsphairn Forest, near Carsphairn in Dumfries and Galloway and will act as a replacement to the existing Windy Standard I Wind Farm and an addition to Windy Standard II Wind Farm and Windy Standard III Wind Farm (the Windy Standard Complex). At the time of writing, Windy Standard I Wind Farm and Windy Standard II Wind Farm are both operating and Windy Standard III Wind Farm has been granted consent.

1.2.5 Figure 1.1 in Volume 3 of the EIAR shows the regional context of the Proposed Development including the Windy Standard Complex.

1.2.6 Figure 1.2 in Volume 3 of the EIAR shows the location of the Proposed Development alongside the Windy Standard Complex.

1.2.7 Figure 1.3 in Volume 3 of the EIAR shows the Proposed Development site layout.

1.2.8 This document 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, operation and decommissioning phases. It assesses the potentially significant effects that the development would have on the biological environment, the physical environment and on human health and population and the alternatives studied (see Chapter 3: Approach to EIA for more information). It also describes the policy context for renewable energy in Dumfries and Galloway, Scotland and the UK, the overall policy context as set out by international agreements to reduce emissions of climate change gases, and targets set for the growth of renewable energy generation.

1.2.9 Volume 1 of the EIAR is dedicated to the Non-Technical Summary (NTS) which is a summary of the key details of the project in laypersons language and aims to be accessible to a variety of readers.

1.2.10 Volume 2 contains the EIAR chapters and assessments.

1.2.11 Volume 3 contains Figures.

1.2.12 Volume 4 contains Appendices.

1.2.13 The Section 36 application (under the Electricity Act 1989) will be accompanied by a Pre-Application Consultation (PAC) Report which is an informative description of the PAC undertaken for the Proposed Development, and a Planning Statement which considers the Proposed Development against relevant national and regional policies.

1.3 BACKGROUND OF WINDY STANDARD DEVELOPMENTS

Windy Standard Complex

1.3.1 Windy Standard is located north-east of the Cairnsmore of Carsphairn. Today the summit area and much of its north-west slopes form part of a wind farm which has the collective name of the Windy Standard Complex. The

Windy Standard Complex (Figure 1.2, Volume 3) is currently made up of three developments: Windy Standard I (with Life Extension), Windy Standard II and Windy Standard III. Windy Standard I is set to be decommissioned by 2027 and it is proposed to repower the site with new turbines.

1.3.2 For a short period of time, Windy Standard was known as Brockloch Rig I, however the Proposed Development will revert back to the previous name and will therefore be referred to as Windy Standard henceforth.

Windy Standard I Wind Farm

1.3.3 The existing Windy Standard I Wind Farm is located on Gallow Rig and Polwhat Rig, above Carsphairn Forest, and consists of 36 Nordtank wind turbines with a height of 53.5 m to tip and a combined rated output of 21.6 megawatts (MW).

1.3.4 A planning application for the original Windy Standard I Wind Farm was submitted to Dumfries and Galloway Council (DGC) by FORL and National Wind Power Ltd, on behalf of Gallow Rig Windfarm Ltd and Polwhat Rig Windfarm Ltd, on 21 July 1995 to establish a wind farm at Windy Standard. DGC granted consent for the wind farm on 7 March 1996 (95/P/2027) and the wind farm was commissioned in December 1996 and has been operational since this date.

Windy Standard I Life Extension

1.3.5 The operational period for Windy Standard I was extended to December 2027 by an application made in July 2018 under Section 42 of the Town and Country Planning (Scotland) Act 1997 (DGC ref. 18/1142/FUL) which was approved in November 2018.

Windy Standard II & Windy Standard III

1.3.6 With over 50 MW installed capacity planned, the Windy Standard II scheme was consented as an extension to Windy Standard I under the Section 36 process in 2007 with DGC as a consultee. Windy Standard II is currently operating and consists of 30 turbines. Construction of Windy Standard II commenced in 2014, was operational in 2017 and has an operational life of 25 years.

1.3.7 The Windy Standard III development was consented in March 2021 for 20 turbines, with eight turbines of a maximum height from base to tip not exceeding 125 m and 12 turbines of an overall height from base to tip not exceeding 177.5 m. It is expected that Windy Standard III will be fully operational within the next five years and its operational life will be up to 35 years per condition 26 of the Windy Standard III consent. The Windy Standard III site boundary covers an area of approximately 610 hectares (ha) within Carsphairn Forest, adjacent to the west of the existing Windy Standard II development.

1.4 APPLICATION DETAILS

1.4.1 The application is submitted in accordance with:

- The Electricity Act 1989; and
- The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017.

1.4.2 The application seeks consent under Section 36 of the Electricity Act 1989. The application also seeks a direction under Section 57(2) of the Town and Country Planning (Scotland) Act 1997 as amended that planning permission be deemed to be granted.

1.4.3 A full Scoping Report was submitted to the Energy Consents Unit (ECU) on 13 August 2021. A copy of this can be found in Appendix 1.1 in Volume 4 of the EIAR. The Scoping Opinion was received on 22 December 2021. This can be found in Appendix 1.2 in Volume 4 of the EIAR.

1.5 THE APPLICANT

1.5.1 FORL (hereby referred to as “The Applicant”) (see Table 1.2 below) has been developing and operating wind farms since the mid 1990’s and is fully committed to the Scottish and UK renewable energy generation market, with an operational portfolio generating capacity of 529.7 MW. In the UK, The Applicant have a total of eight operational wind farms. These include all the wind farms within the Windy Standard Complex.

1.5.2 With over twenty-five years’ experience in consenting, developing and operating wind farms, The Applicant is one of very few developers that take a project all the way from initiation and development, through to operations.

1.5.3 The Applicant was the first developer to bring forward community benefit in Scotland. To date, the Applicant has made available over £6 million to eligible communities surrounding its wind farms and is substantially increasing this investment as new projects come online. The Applicant has committed to maximising opportunities for the local supply chain. This includes committing to ensuring that all main contractors will spend at least 30 % of the contract value locally and incentivising all contractors to use local content.

1.5.4 The Applicant is a wholly owned subsidiary of Bonheur ASA and is responsible for the group’s renewable energy activities.

Table 1.2: Details of the Applicant

Applicant		
Fred. Olsen Renewables Limited	Registered Address: c/o Fred. Olsen Renewables Ltd, 2nd Floor, 36 Broadway London SW1H 0BH United Kingdom	Tel: +44 (0)207 931 0975

1.6 PROJECT TEAM

1.6.1 The project has been designed and assessed by the Applicant in association with their lead consultants, Natural Power (Table 1.3). Natural Power has been appointed to coordinate and produce this EIAR and associated EIA documentation.

1.6.2 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. As well as development and EIA services, Natural Power also provide expert advice and due diligence consultancy, site construction management and site operation and maintenance.

1.6.3 Natural Power currently employs over 450 people working full time providing renewable energy services nationally and internationally. Natural Power’s Headquarters office in Dumfries and Galloway ‘The Green House’ is located approximately 12.4 miles from the Windy Standard I Repower site entrance and currently employs approximately 100 renewable energy experts. Contact details of other consultants involved in the production of the EIAR are provided in Table 1.3.

Table 1.3: Details of agent, lead consultancy for ecology, ornithology, hydrology and traffic and transport.

Agent, Lead Wind Energy and Planning Consultancy		
Natural Power Consultants Ltd	The Greenhouse, Forrest Estate Dalry, Castle Douglas, DG7 3XS, Scotland, UK	Tel: +44 (0) 1644 430 008 *Contact: Kirsty Clarke* *Contact: Emma Thackeray*

Agent, Lead Wind Energy and Planning Consultancy		

Table 1.4: Other consultants involved in the production of this EIAR

Consultants		
Cultural Heritage Consultancy		
AMS Consultancy	York Hub, Popeshead Court Offices, Peter Lane, York, YO1 8SU	Tel: 01904 404849 *Contact: Steve Lancaster*
Landscape and Visual Consultancy		
Optimised Environments (OPEN) part of SLR	2nd Floor, 2 Lister Square, Quartermile Two, Edinburgh, EH3 9GL	Tel: 0131 221 5920 *Contact: James Welsh*
Noise Consultancy		
TNEI Services Ltd	Milburn House, Dean Street, Newcastle Upon Tyne, NE1 1LE	Tel: 0191 2111404 *Contact: Gemma Clarke*
Forestry Consultancy		
DGA Forestry	DGA Forestry Lochanhead Wood, Lochanhead, Dumfries, DG2 8JB	Tel: 01387 730 634 *Contact: Sandy Anderson*
Aviation Consultancy		
Aviatica Group Ltd	Reservoir House, Gladhouse, Midlothian, EH23 4TA	*Contact: Malcolm Spaven*
Socioeconomics and tourism		
Biggar Economics	Pentlands Science Park, Penicuik EH26 0PZ	Tel: 0131 514 0850 *Contact: Graeme Blackett*