

1. Introduction

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1. Introduction

1.1 Background and Site Description

Introduction

- 1.1.1 Sandy Knowe Wind Farm Ltd (a wholly owned subsidiary of ERG Power Generation (hereafter referred to as the ‘Applicant’) is proposing the development of a wind farm (hereafter referred to as the ‘Proposed Development’) at Sandy Knowe, near Kirkconnel, in Dumfries and Galloway Council (DGC). This EIA Report has been prepared in support of an application submitted to the Scottish Government under Section 36 of the Electricity Act 1989 (as amended), seeking consent to construct and operate the Proposed Development for a limited period of 28 years.

Site Description

- 1.1.2 The site boundary is located approximately 1.7 km south-west of Kirkconnel and Kelloholm in Dumfries and Galloway, with the closest turbine being 2.6 km from Kirkconnel and Kelloholm. It comprises of the upland areas of White Hill and White Knowe, Sandy Knowe and Libry Moor. The elevation of the site ranges from 240 m to 440 m above ordnance datum (AOD). The site occupies an area of 389 hectares (ha). The central grid reference for the site is NS 701 106. The site location and site boundary are shown in Figure 1.1.
- 1.1.3 The site comprises mainly grazed upland, with a section of coniferous woodland plantation on the Libry Moor eastern side of the site. The Polneul Burn, part of which is designated as a Site of Special Scientific Interest (SSSI) for its exposed geology, runs across the site from south to north. No buildings or structures are located within the site boundary.

Background

- 1.1.4 The Applicant submitted an application to the Scottish Government under the Electricity Act 1989 at the site in 2012 to construct and operate a 30 turbine wind farm development (hereafter referred as the ‘Section 36 Application’). This was followed by submission of Supplementary Environmental Information (SEI) in 2013 (hereafter referred as the ‘Section 36 Addendum’). The Scottish Government refused Section 36 consent in February 2015.
- 1.1.5 Drawing on the main reasons for refusal for the Section 36 Application, the Applicant subsequently submitted a planning application to the Local Planning Authority (LPA) (Dumfries and Galloway Council (DGC)) under the Town and Country Planning (Scotland) Act 1997 (as amended) at the site in 2015 to construct and operate a 24 turbine wind farm development. On 24 November 2016, DGC granted planning permission for the development (refer to Appendix 1.1) as described below:
- “erection of 24 wind turbines (maximum height 125m to blade tip) and meteorological mast, formation of new access to the A76 and improved access to c125n, access tracks, water crossings and hardstanding, installation of temporary construction compounds, site substation and associated works”*
- 1.1.6 On 21 March 2017 DGC granted a non-material variation to the planning permission allowing a 101 m rotor to be implemented within the permitted 125 m tip height (refer to Appendix 1.2) (hereafter referred to as the ‘Consented Development’).

- 1.1.7 The planning permission granted is subject to 39 conditions, some of which are suspensive requiring development not to commence until further details have been agreed with DGC.
- 1.1.8 There are S.75 obligations that are agreed between the relevant parties (landowners, Sandy Knowe Wind Farm Ltd and DGC) and are registered on the title.
- 1.1.9 The planning permission granted requires development to have commenced by 24 October 2021. The contracted grid connection for the project is for October 2021.

1.2 Proposed Development

- 1.2.1 This Section 36 application for the Proposed Development (refer to Chapter 3) is for exactly the same physical development as the Consented Development which has planning permission, except for the capacity of the generator proposed to be housed within the turbine nacelle.
- 1.2.2 The Proposed Development comprises 24 wind turbines of up to a maximum 125 m height from ground to blade tip when vertical (up to 76 m hub height and up to 49 m blade length), each being around 3.4 MW in power rating. A number of ancillary elements are also proposed, including two temporary construction compounds, permanent hardstandings adjacent to the wind turbines for maintenance and decommissioning cranes, external transformers, internal access tracks, underground cables between turbines, an on-site substation and maintenance building with welfare facility, and a permanent meteorological monitoring mast. The proposed site layout is shown in Figures 1.2 and 1.3.
- 1.2.3 The proposed locations of the turbines were defined in order to enable the EIA to assess fully the Proposed Development for which permission is being sought. The British National Grid coordinates denoting where each of the turbines are proposed to be located are listed in Table 3.1 of Chapter 3.
- 1.2.4 Whilst these locations have been determined through an iterative environmental based design process, there is the potential for these exact locations to be altered through micro-siting allowances prior to construction. A micro-siting allowance of up to 100 m in all directions is being sought in respect of each turbine and its associated infrastructure in order to address any potential difficulties which may arise in the event that preconstruction surveys identify unsuitable ground conditions or environmental constraints that could be avoided. Any variation of between 50 m and 100 m shall only be permitted following prior written approval of the Planning Authority in consultation with the MOD, NATS, Glasgow Prestwick Airport and where relevant SEPA and/or SNH. It is proposed that the final positioning of all infrastructure will be agreed through an appropriately worded planning condition. This micrositing allowance is as per that allowed for the Consented Development. The total power output of the Proposed Development would be at least 81.6 MW based on the candidate turbine described in Chapter 3. Based on recorded wind speed data, the annual indicative total power output for the site is expected to be 236 GWh, indicating that the Proposed Development would generate enough electricity to power over 60,512 average Scottish households (based on Renewable UK, 2017 UK average domestic household consumption is 3.9 MW). This is broadly a 40% increase in power output from that which would be achievable for the Consented Development. Based on fossil fuel-mix electricity it is anticipated that it will take the Proposed Development one year to payback that carbon lost (refer to Chapter 3 for details).

- 1.2.5 The connection from the onsite substation to the national grid is currently subject to separate procedures that are being managed by the network operator, Scottish Power Electricity Networks (SPEN). The proposed point of connection to the 132 kV transmission network is via Glenglass substation to the south-west of the site.

1.3 Consenting Framework

- 1.3.1 Due to the proposed electricity generation capacity of the Proposed Development exceeding 50MW, an application for consent is submitted to the Scottish Ministers under the terms of Section 36 of the Electricity Act 1989 (as amended). If Section 36 consent is granted the Scottish Ministers may also give a direction that planning permission for the development is deemed to be granted under Section 57(2) of the Town and Country Planning (Scotland) Act 1997. However, the Applicant does not seek such a Direction for the reasons set out in the Application Letter and accompanying Planning Statement.
- 1.3.2 In considering the application under Section 36 the Scottish Ministers must fulfil the requirements of Schedule 9 (paragraph 3) of the Electricity Act 1989. This requires the Scottish Ministers to consider the ‘desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest’. In addition, the Scottish Ministers are required in terms of said paragraph to assess whether the Applicant has fulfilled the requirement to ‘do what he reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects’. While the application for consent will be determined by the Scottish Ministers, Dumfries and Galloway Council (DGC) (the local planning authority) is a statutory consultee. As a result of a statutory objection from the local planning authority, or where Scottish Ministers decide to exercise their discretion to do so, a Public Inquiry can be held.
- 1.3.3 Following receipt of all views and representations, Scottish Ministers will determine the application for consent in one of two ways:
- consent the proposal, with or without conditions attached; or
 - reject the proposal.
- 1.3.4 In determining whether to grant Section 36 consent, the Scottish and UK Governments renewable energy policies are of significant relevance as is national planning policy, the relevant terms of the Development Plan and other material considerations.

1.4 Purpose of the EIA Report

- 1.4.1 ITP Energised have been appointed by the Applicant to undertake an Environmental Impact Assessment (EIA) of the Proposed Development in accordance with The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (the EIA Regulations). EIA is the systematic process of identifying, predicting and evaluating the environmental impacts of a proposed development. The EIA process is reported in this EIA Report, which identifies the methodologies used to assess the beneficial and adverse environmental effects predicted to result from the construction, operation and decommissioning of the Proposed Development. Where appropriate, it also sets out mitigation measures designed to prevent,

reduce and, if possible, offset significant adverse environmental effects. An assessment of residual effects, which are those expected to remain following implementation of mitigation measures, is also presented.

- 1.4.2 The main findings and conclusions of the EIA are summarised in a Non-Technical Summary (NTS), as required by the EIA Regulations. The NTS, provides a stand-alone document, summarises the key findings of the EIA in easily accessible, non-technical language, ensuring everyone with an interest in the Proposed Development can understand and access information on its predicted environmental effects.

1.5 Structure of the EIA Report

- 1.5.1 The EIA Report is split into five volumes along with the NTS. Volume 1 of this EIA Report is structured as follows:

- Chapter 2 explains the need for the Proposed Development, project objectives, site selection and the consideration of alternatives;
- Chapter 3 provides a description of the site and details the Proposed Development including the construction, operation, maintenance, and decommissioning processes;
- Chapter 4 sets out the methodology for the EIA, including its scope, justification for topics scoped out and details the Pre-application consultation process undertaken;
- Chapter 5 describes the relevant policy framework for the Proposed Development;
- Chapter 6 assesses the potential landscape and visual impact of the Proposed Development;
- Chapter 7 assesses the potential effects on ecology and nature conservation;
- Chapter 8 assesses the potential effects on ornithology;
- Chapter 9 assesses the potential effects on geology, hydrology and hydrogeology;
- Chapter 10 assesses the potential effects on archaeology and cultural heritage;
- Chapter 11 assesses the potential effects on noise and vibration;
- Chapter 12 assesses the potential effects on traffic and transport;
- Chapter 13 assesses the potential effects on socio-economics and tourism;
- Chapter 14 assesses the potential effects of shadow flicker;
- Chapter 15 assesses the potential effects on residential visual amenity;
- Chapter 16 assesses the potential effects on existing infrastructure, including aviation, radar and telecommunications;
- Chapter 17 assess the potential effects on existing forestry;
- Chapter 18 sets out the Schedule of Environmental Commitments, which summarises all mitigation measures presented in this EIA Report; and
- Chapter 19 provides summary tables of all predicted residual effects.

- 1.5.2 Volume 2 contains the EIA Report Figures, with the exception of landscape and visual figures which are contained in Volumes 3 and 4.

- 1.5.3 Volume 5 contains supporting information for each of the technical chapters, and additional studies that have been prepared to inform the relevant assessments as reported in the EIA Report.

1.6 Assessment Team

- 1.6.1 The assessments were undertaken and the EIA Report compiled by ITP Energised environmental teams supported by Jones Lang LaSalle (policy and consenting). The assessments draw heavily on work previously undertaken for the Consented Development and the following technical specialists:

- VLM Landscape Design (landscape and visual assessment);
- CFA Archaeology (cultural heritage assessment);
- WSP Parsons Brinckerhoff (traffic and transport assessment); and
- Peter Brett Associates (socio-economic assessment).

1.7 Availability of the EIA Report

- 1.7.1 Copies of the EIA Report are available from by contacting:

enquiries@burcotewind.com

or

Sandy Knowe Wind Farm Limited
c/o Burcote Wind Limited
15 Furzton Lake
Shirwell Crescent
Furzton
Milton Keynes
NK4 1GA

- 1.7.2 Electronic copies of the EIA Report can be accessed at www.sandyknowewindfarm.com or obtained by emailing: enquiries@burcotewind.com.

- 1.7.3 Hard copies of the Non-Technical Summary (NTS) are available free of charge from the Applicant, a hard copy of the EIA Report Volumes 1, 2, 3, 4 and 5 are available for £750.00 (including printing and distribution). In addition, all documents are available (as a PDF for screen viewing only) on a DVD for £10.00.

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