

1 Introduction

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1 Introduction

1.1 Executive Summary

1.1.1 This chapter provides an overview of the legislative and policy context for the Proposed Development, the site context, application details, details of the Applicant and the project team, as well as a summary of the structure and content of the Environmental Impact Assessment Report (EIA Report).

1.2 Background

1.2.1 REG Strath Tirry Limited (hereafter referred to as the “Applicant”) intends to apply to The Highland Council (THC) for consent for the construction, operation and decommissioning of Strath Tirry Wind Farm (hereafter referred to as the “Proposed Development”), on a site approximately 8km north of Lairg (refer to Figure 1.1).

1.2.2 The Applicant has submitted an application for the Proposed Development to THC under The Town and Country Planning Act (Scotland) 1997 (as amended). This application is supported by an Environmental Impact Assessment (EIA) Report (this document) prepared in accordance with The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017.

1.2.3 It should be noted that at the time of writing, Brexit negotiations are still ongoing. The European Union (Withdrawal) Act 2018 specifies that EU-derived domestic legislation will continue to take effect in domestic law after the UK formally exits the EU. Therefore, this EIA Report continues to reference EU-derived legislation as appropriate.

Site Description

1.2.4 The site is located within The Highland Council area, within Sutherland. The site lies approximately 8km north of Lairg and 4km east of Loch Shin. The site is located within a single landholding at Shinness, which is part of the wider Dalchork Wood and covers an area of approximately 79 hectares. The A836 runs along the western boundary of the site. The southern site boundary is bordered by a private forestry track which leads into the Dalnessie Estate.

1.2.5 The site comprises mainly plantation commercial forestry and scrub birch interspersed with areas of open moorland.

1.2.6 The site slopes gently down in a south-westerly direction with elevation across the site ranging from approximately 155m above ordnance datum (AOD) in the north-eastern site area to approximately 130m AOD in the south-west. The site is centred on British National Grid (BNG) Easting: 257880, Northing: 914516.

1.2.7 One watercourse, Feith Osdail, flows from north-east to south-west through the southern area of the site before joining the River Tirry, approximately 150m from the south-western site boundary.

1.2.8 The nearest properties to the site boundary are a single residence known as Dalmichy, located 891m to the south and a row of four dwellings known as Blairbuie, located 1.2 km to the west.

1.2.9 The access to the site would be directly from the A836.

1.2.10 The wider area around the site is a mixture of commercial forestry and agricultural land, with scattered residential properties and settlements. There are six operational and/or consented wind farms within 20km of the Proposed Development site, with the closest being over 10km from the Proposed Development.

The Proposed Development

- 1.2.11 The Proposed Development would consist of up to four wind turbines, associated transformers and switchgear at each turbine as well as an energy storage system. The overall capacity of the Proposed Development would be approximately 22.8 MW¹. A number of ancillary elements are also proposed:
- turbine foundations & crane hard-standings;
 - two new site entrances off the A836 (one permanent and one temporary);
 - temporary and permanent access tracks;
 - watercourse crossings;
 - a network of underground cables;
 - switching station and control building;
 - temporary construction compound, storage area and car park;
 - two temporary access compounds;
 - three temporary borrow pit search areas; and
 - a permanent 10m meteorological mast.
- 1.2.12 The word ‘permanent’ in the above description refers to the infrastructure being in situ for the lifetime of the Proposed Development and which will be decommissioned on cessation of operation.
- 1.2.13 The proposed site layout is shown in Figure 1.2.
- 1.2.14 The proposed locations of the turbines have been identified 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 (Proposed Development).
- 1.2.15 Whilst the location of the infrastructure described above has 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 50m 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 pre-construction surveys identify unsuitable ground conditions or environmental constraints that could be avoided by relocating the turbine. No micro-siting will be undertaken that results in an increase in the significance of adverse effects. It is proposed that the micro-siting of all infrastructure will be subject to an appropriately worded planning condition.
- 1.2.16 During its operation, the Proposed Development is likely to generate approximately 1,175,284MWh of electricity over its lifetime (30 years), saving 17,629 t CO_{2e} per year compared to fossil fuel mix electricity production.
- 1.2.17 The Scottish Government’s Carbon Calculator determines the volume of carbon released during the construction of a wind farm, through the manufacturing of the infrastructure, disturbance to peat and felling of woodland. This calculator has determined that the average “pay-back period” for the Proposed Development would be approximately 1.9 years (compared to fossil fuel mix electricity), following which the Proposed Development would be carbon saving. Refer to Appendix 3.3 for details of the inputs and outputs of the Carbon Calculator.

1 22.8MW is target capacity. Actual installed capacity may be greater or less dependent on turbine model and energy storage system selection but will not be greater than 50MW.

1.3 The Applicant

- 1.3.1 The Applicant is a joint venture between REG Windpower Limited (“REG”) and Falck Renewables Wind Limited (“Falck Renewables”).
- 1.3.2 Since 2005, the team at REG has been dedicated to developing a variety of renewable energy projects to help in the shift to a zero-carbon future. REG is based in the UK and has, to date, developed over 1 GW of wind, solar and bio-fuel projects primarily in the UK, but also in the past in Poland and Canada. Today, over 40 projects developed by REG are built and in operation.
- 1.3.3 Falck Renewables and its affiliated companies (“Falck Group”) are an experienced worldwide player in the development, construction, purchase and management of wind and solar power projects at all stages of their development. Falck Group has a proven track record of successfully developing, constructing and operating wind projects across Europe. Falck Group owns a wind and solar portfolio of 1,123 MW in operation with over 400 MW of onshore wind operational in the UK across 12 sites, ten of which are in Scotland and two of which are in THC area.
- 1.3.4 The Applicant has been fully committed to engaging with the community since the outset of the project in 2014, liaising with the community council and local residents, and ensuring that any changes to accommodate local concerns are incorporated where possible. All of REG’s projects are developed with a strong commitment to local communities to ensure that local amenities are protected where possible, adverse environmental effects are minimised and positive enhancement is provided where appropriate, and local employment opportunities and community benefit funds are provided to maximise local benefits.

1.4 Purpose of the EIA Report

- 1.4.1 ITP Energised (ITPE) was appointed by the Applicant to undertake an Environmental Impact Assessment (EIA) of the Proposed Development in accordance with The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (the “EIA Regulations”). The EIA process is the systematic process of identifying, predicting and evaluating the environmental impacts of a proposed development. The EIA process reported in this EIA Report identifies the methodologies used to assess the 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 avoid, prevent, reduce and, if at all possible, offset likely significant adverse environmental impacts. An assessment of residual effects, those expected to remain following implementation of mitigation measures, is also presented.
- 1.4.2 The main findings and conclusions of this EIA Report are summarised in a Non-Technical Summary (NTS), as required by the EIA Regulations. The NTS, provided as a stand-alone document, summarises the key findings of the EIA in an easily accessible, non-technical language format, ensuring everyone with an interest in the project, can understand and access information regarding the Proposed Development’s predicted environmental effects.
- 1.4.3 This EIA Report and NTS accompany the application for consent, being submitted to THC.

1.5 Structure of the EIA Report

- 1.5.1 The EIA Report is split into five volumes, with the NTS forming a separate document. Volume 1 of this EIA Report is structured as follows:
- Chapter 1 provides an introduction to the Applicant, the Proposed Development and the EIA;
 - Chapter 2 provides a description of the design iteration process, detailing how the Proposed Development evolved through the course of the assessment process, as well as detailing the process for eliminating alternative development options;

- Chapter 3 provides a description of the existing site, details of the Proposed Development, an explanation of the construction, operation, maintenance and decommissioning process, and the need for the development along with carbon considerations;
 - Chapter 4 sets out the EIA methodology and process, including the scope of the process, justification for topics scoped out of the EIA, and details of the Public Consultation process;
 - Chapter 5 sets out the planning and energy policy context;
 - Chapter 6 assesses the potential and residual effects on landscape and visual amenity;
 - Chapter 7 assesses the potential and residual effects on ornithology;
 - Chapter 8 assesses the potential and residual effects on ecology and nature conservation;
 - Chapter 9 assesses the potential and residual effects on peat, hydrology, hydrogeology and geology;
 - Chapter 10 assesses the potential and residual effects on noise;
 - Chapter 11 assesses the potential and residual effects on cultural heritage;
 - Chapter 12 assesses the potential and residual effects on traffic and transport;
 - Chapter 13 assesses the potential and residual effects on socio-economics, tourism and recreation;
 - Chapter 14 assesses the potential and residual effects on aviation and radar;
 - Chapter 15 assesses the potential and residual effects on telecommunications;
 - Chapter 16 assesses the potential and residual effects on forestry;
 - Chapter 17 is the Schedule of Environmental Commitments, which summarises all the mitigation measures presented in this EIA Report; and
 - Chapter 18 provides summary tables of all predicted residual effects.
- 1.5.2 Volume 2 contains the non-landscape and visual figures that inform the EIA Report.
- 1.5.3 Volume 3 contains the landscape and visual figures, and visualisations.
- 1.5.4 Volume 4 contains supporting information and appendices for each of the technical chapters, and additional studies that have been prepared to inform the relevant assessments as reported in the EIA Report.
- 1.5.5 Volume 5 contains confidential technical appendices.
- 1.5.6 Additional supporting documents which form part of the application submission include a Planning Statement, a Pre-Application Consultation (PAC) Report and a Design and Access Statement (DAS).

1.6 EIA Project Team

- 1.6.1 The Applicant can confirm that assessment work was undertaken by the ITPE Environmental Team supported by external consultants as shown in Table 1.1 below. The EIA project team has the appropriate level of experience, skills and expertise, and are therefore competent to carry out the assessment work.

Table 1.1 – EIA Team

Person	Role	Expertise
Rebecca Todd (ITPE)	EIA Project Manager Author of Chapters 1 (Introduction), 2 (Design Iteration), 3 (Proposed Development), 4 (Approach to EIA), 15 (Telecommunications), 17 (Draft Scheme of Mitigation) and 18. (Summary of Effects)	BSc (Hons), PIEMA Over 12 years’ experience leading and undertaking EIAs across a range of sectors, including Scottish wind farms.
Simon Herriot (Savills)	Town Planning consultant Author of Chapter 5 (Planning & Energy Policy) and the Planning Statement.	BSc (Hons), MRTPI Over 20 years’ experience of public and private sector planning, with a particular focus on the renewable energy sector. Simon has contributed to and managed a large number of EIAs for Scottish renewable energy projects and has given evidence at numerous wind farm public inquiries.
James Welch (OPEN)	LVIA Project Director Author of Chapter 6 (Landscape and Visual Impact Assessment)	BA Hons, Fellow of the Landscape Institute. 33 years’ experience as qualified landscape architect, specialising in L&V assessment. Involved in wind energy evaluation since 1995. Expert Witness at 90 Public Inquiries/ Appeals.
Adam Fitchet (Ramboll)	Ornithology and Ecology Lead. Author of Chapter 7 (Ornithology) and Chapter 8 (Ecology).	BSc (Hons), MCIEEM Sixteen years’ experience of professional ecological consultancy including approximately 35 wind farm projects in Scotland, Africa, the Middle East and Central America.
Jenny Hazzard (ITPE)	Geology and Hydrology Lead. Author of Chapter 9 (Geology, Peat, Hydrology and Hydrogeology).	BSc (Hons) Geological Engineering, MSc Engineering Geology, PIEMA 20 years’ experience in environmental consultancy with a focus on the geo-environment. Has completed numerous hydrology/geology/hydrogeology assessments for onshore wind projects located in Scotland, including peat

Person	Role	Expertise
		surveys, peat slide risk assessments and peat management plans.
Alasdair Baxter (ITPE)	Noise Lead. Author of Chapter 10 (Noise).	MSc, PGDip, BSc (Hons) Dunelm, MIOA Over 18 years' experience of providing noise and vibration assessments and EIA technical chapters for major infrastructure schemes, including onshore and offshore wind farms throughout the UK.
George Mudie (CFA)	Cultural Heritage Lead. Author of Chapter 11 (Cultural Heritage).	MA (Hons), MCIfA Over 18 years full-time experience of producing Cultural Heritage EIAs for renewable energy developments, and for other industrial and commercial developments across the UK.
Gordon Buchan (Pell Frischmann)	Transport Lead. Author of Chapter 12 (Traffic and Transport).	BEng (Hons), MSc, CMILT, MCIHT Over 24 years' experience in undertaking transport assessment and impact review studies for a wide variety of projects including wind farm and energy generation and distribution projects in the UK, Ireland and Northern Europe.
Paul Darnborough (ITPE)	Socio-economic, Tourism and Recreation Lead. Author of Chapter 13 (Socio-economic, Tourism and Recreation).	BSc (Hons), MSc, Chartered Environmentalist, MIEMA Over 20 years' experience leading and undertaking EIAs for a range of sectors, including Scottish wind farms.
Commander John Taylor Royal Navy (Ret) (WPAC)	Aviation Lead. Author of Chapter 14 (Aviation).	Over 30 years' experience in Aviation Traffic Control (ATC) and senior roles in military regulation. 14 years' experience in the interaction of wind farms and aviation, including assessment of over 2000 sites and being an expert witness at over 20 inquiries in England and Scotland.
Norman O'Neill (RTS Forestry)	Forestry Lead.	BSc (For), MICFor, CEnv

Person	Role	Expertise
	Author of Chapter 16 (Forestry).	20 years' experience in the production of forestry associated EIA chapters for a combination of utility projects including wind farms and overhead power lines.

1.7 Availability of the EIA Report

If you would like a copy of the EIA Report, please email Kirsty O'Brien at INVICTA PA, quoting "Strath Tirry Wind Farm" in the subject header.

Email: kirsty.obrien@invictapa.co.uk

- 1.7.1 Hard copies of the Non-Technical Summary (NTS) are available for £20 (including printing and postage) from the Applicant, a hard copy of the EIA Report Volumes 1, 2, 3 and 4 are available for £1,800 (including printing and postage). In addition, all documents are available as a PDF (for screen viewing only) on a USB for £20.00 (including postage).
- 1.7.2 Due to the COVID-19 Pandemic and in-line with The Town and Country Planning (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020 (Scottish Government, 2020), no physical copies are available for public viewing at the point of submission.

1.8 Representations to the Application

- 1.8.1 Any representations to the application should be made by email, directly to The Highland Council at:

Email: epanning@highland.gov.uk

1.9 References

Scottish Government (1997). *Town and Country Planning (Scotland) Act 1997*. Available at:
<http://www.legislation.gov.uk/ukpga/1997/8/contents>

Scottish Government (2017). *Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended)*. Available at:
<http://www.legislation.gov.uk/ssi/2017/102/contents/made>

Scottish Government (2019). *Climate Change Action*. Available at:
<https://www.gov.scot/news/climate-change-action-1/>

Scottish Government (2020). *The Town and Country (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020*. Available at:
<https://www.legislation.gov.uk/ssi/2020/124/made>

UK Government (2018). *European Union (Withdrawal) Act 2018*. Available at:
<http://www.legislation.gov.uk/ukpga/2018/16/contents/enacted>