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INTRODUCTION

1.1 Kirkton Wind Farm Limited (the applicant) proposes to install and operate up to 11 wind turbines with associated infrastructure (the proposed development) on land (the site) approximately 2.1km south of the settlement of Melvich, Sutherland (**Figure 1.1**). The site application boundary is shown in **Figure 1.2** (which includes two abnormal load turning areas outwith the main site area which form part of the proposed development). The proposed development would be located within The Highland Council (THC) area, centred on National Grid Reference (NGR) NC 87999, 59788 and would be known as Kirkton Energy Park. The proposed development would have a generating capacity in the region of 52.8MW and also include 20MW of battery storage. Kirkton Wind Farm Limited is part of a joint venture between Wind2 and companies managed by Octopus Energy Generation.

1.2 The proposed development is being progressed with a shared ownership opportunity for communities in the local area, which are being offered the opportunity to acquire up to a 10% share of the proposed development. This would be explored in depth with the existing local development trusts should the proposed development receive consent.

1.3 For the purposes of the Environmental Impact Assessment (EIA), the height of the proposed turbines has been assessed as 149.9m to blade tip in an upright position. It is expected that each turbine would be rated as approximately 4.8MW, giving a total installed capacity in the region of 52.8MW.

1.4 The proposed development would produce an average of approximately 184,280 Megawatt hours (MWh) of electricity annually (based on a site derived capacity factor of 39.8%). This equates to the power consumed by approximately 49,167 average UK households[1], which would be well above the energy requirements of the 3,622 homes in North, West and Central Sutherland[2]. This equates to an annual reduction in CO_2 emissions of approximately 79,609 tonnes, when compared to the amount of CO_2 emitted by fossil fuels to produce the same amount of electricity.

1.5 As the proposed development would have a generating capacity in excess of 50MW, Kirkton Wind Farm Limited are submitting an application under Section 36 of the Electricity Act 1989, with the applicant also seeking a direction that planning permission is deemed to be granted in terms of Section 57(2) of the Town and Country Planning (Scotland) Act 1997.

1.6 The project has a contract with National Grid to connect to the transmission network operated by SSEN Transmission in October 2027. The connection point would be approximately 1.6km to the east of the site, at the Connagill Substation. The precise grid connection route would be subject to a separate application, which would require consent under Section 37 of the Electricity Act 1989, which is the subject of a separate consenting process to this planning application. The Section 37 application would be progressed by the transmission network operator.

[1] Calculated using the most recent statistics from the Department of Business, Energy and Industrial Strategy (BEIS) showing that annual UK average domestic household consumption in 2020 was 3,748kWh

[2] Statistics.Gov.Scot 2020

PURPOSE OF THE EIA REPORT

1.7 This EIA Report has been prepared in accordance with The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, hereinafter referred to as the EIA Regulations 2017. Additionally, as the proposed development is partially located within a commercial forestry plantation and would require felling of trees, the EIA has also been prepared in accordance with the Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017.

1.8 Where a development falls within one of the descriptions in Schedule 2 of the EIA Regulations 2017 and is considered likely to have significant effects on the environment then an EIA is required to be submitted with the application for consent. The proposed development falls within Schedule 2 as *"a generating station, the construction of which (or operation of which) will require a section 36 consent but which is not a Schedule 1 development."* It is considered that the proposed development meets the criteria necessary for an EIA to be required.

1.9 This EIA Report presents the findings of the EIA process by describing the proposed development, the current condition and future baseline condition at the site, and the likely impacts which may result from the construction, operation and decommissioning of the proposed development. Where appropriate, mitigation is proposed, and any residual impacts are reported.

THE APPLICANT

1.10 The applicant is Kirkton Wind Farm Limited, which is part of a joint venture between Wind2 Limited (Wind2) and companies managed by Octopus Energy Generation.

1.11 The founders of Wind2, together with the Wind2 team, have a substantial track record in the successful development of onshore wind throughout the UK being responsible for the delivery of approximately 1 GW of renewable energy through their involvement with RDC Partners and West Coast Energy, sold to ENGIE in 2014. Wind2 is working on the development of a number of subsidy free renewable energy projects, is committed to investing in the Highlands, has personnel based in the Highlands with an office located on the Black Isle, as well as offices in Perth, Edinburgh and North Wales.

1.12 Octopus Energy Generation are one of Europe's largest investors in renewables, operating £4billion of green energy generation across seven countries. Octopus Energy Generation operate solar and wind projects across the UK with the closest project to Kirkton being the 108MW Beinneun Wind Farm near to Fort Augustus.

EIA PROJECT TEAM AND COMPETENCY

1.13 This EIA has been led by SLR with assistance from other specialist technical and environmental consultants.

1.14 SLR is one of the UK's fastest growing multi-disciplinary environmental consultancies. Within the energy sector, SLR provides a wide range of planning, environmental and technical services relating to the design and development of wind farms and other renewable energy projects. The company

becomes involved in all aspects of facility development, from initial concept design, through planning and permitting to the detailed design, construction management and closure stages.

1.15 SLR is a registered Environmental Impact Assessor, Member of the Institute of Environmental Management and Assessment (IEMA) and holder of the IEMA EIA Quality Mark. The company has significant experience in the preparation of planning applications and undertaking EIA for a wide variety of projects, including renewable energy, minerals, waste and infrastructure developments.

1.16 Further information on SLR Consulting Limited can be found on its corporate website at www.slrconsulting.com.

1.17 For this project, SLR is responsible for the following technical disciplines:

- EIA and planning;
- Landscape and visual amenity;
- Hydrology, hydrogeology and soils;
- Cultural heritage and Archaeology;
- Noise;
- Site access, traffic and transport;
- Socio-economics and land use;
- Other environmental issues (e.g. shadow flicker and telecommunications); and
- GIS.

1.18 SLR is supported on ecology and ornithology by Atmos Consulting. Further additional support has also been provided on forestry, aviation and abnormal loads transportation related matters by Bidwells, Wind Business and Pell Frischmann respectively.

1.19 SLR confirms that the technical experts that have carried out the EIA and produced the EIA Report have the skills and relevant competency, expertise and qualifications to undertake the EIA for the proposed development. **Table 1-1** demonstrates the relevant competency for each technical discipline covered in this EIA Report.

Table 1-1: EIA Team Competency

Discipline	Specialist Assessor	Qualifications	Years of Experience
Renewable Energy and Planning Policy	SLR: - Michael Fenny - Alastair Smith	 MA(Hons), MSc, MRTPI BSc (Hons), MSc, LRTPI	 15 years 4.5 years
Landscape and Visual	SLR:		

Discipline	Specialist Assessor	Qualifications	Years of Experience
Amenity	- Simon Myers - Lindsey Guthrie	MLPM (Hons), AMLI MA (Hons), MPhil, CMLI	22 years 36 years
Ecology	Atmos: - Greg Fullerton - James Wilson	 BSc (Hons), Ph.D, MRSB, C. Biol, MCIEEM MSc IT, BSc (Hons), CIEEM	 27 years 20 years
Ornithology	Atmos: - Mark Doherty - James Wilson - Jenny Bell	 BSc (Hons) MSc IT, BSc (Hons), CIEEM BSc (Hons)	 10 years 20 years 26 years
Hydrology, Hydrogeology and Soils	SLR: - Gordon Robb - Adrian Cowe - Colin Duncan - David Nisbet	 BSc (Hons), MSc, MBA, FCIWEM, C.WEM BSc (Hons), MSc BSc (Hons), MSc, FGS BSc (Hons), FGS	 28 years 7 years 38 years 9 years
Cultural Heritage and Archaeology	SLR: - Charlotte Dawson - Beth Gray	 BSc, MSc, MCIfA MA (Hons), ACIfA	 16 years 6 years
Noise	SLR: - Richard Carter - David Gerard	 CEng, BEng (Hons), MIOA BSc, AMIOA	 17 years 9 years
Traffic and Transport	SLR: - Joanna Read - Lauren Long Pell Frischmann: - Gordon Buchan	 BSc, MSC BSc, (Hons) BEng (Hons), MSc, FCIHT, MCILT	 18 years 3 years 25 years
Socio-Economics and Land Use	SLR: - Anne Dugdale Development Economics: - Steve Lucas	 BSc, MA, FIQ, MRTPI BSc, MSc	 33 years 31 years
Infrastructure, Telecommunications and Broadcast Services	SLR: - Alastair Smith	 BSc (Hons), MSc, LRTPI	 4.5 years
Shadow Flicker	SLR:		

Discipline	Specialist Assessor	Qualifications	Years of Experience
	- Tim Doggett	BSc, MSc	14 years
Forestry	Bidwells: - Denis Torley	MA (Hons), MICFor	19 Years
Aviation	Wind Business: - Ian Fletcher	B.Eng	24 years
Carbon Emissions	SLR: - Colin Duncan	BSc (Hons), MSc, FGS	38 years
GIS	SLR: - Lauren McConnachie - Anne Altringham - Jon Salter	BSc, MSc BSc, MSc BSc	11 years 10 years 7 years

STRUCTURE OF THE EIA REPORT

1.20 The EIA Report is presented in four volumes as follows:

- Volume 1: Non-Technical Summary (NTS);

  The NTS provides a non-technical overview of the EIA Report and is intended for review by the general public. It includes a description of the proposed development and a summary of the predicted environmental effects.

- Volume 2: Environmental Impact Assessment Report (EIA Report);

  The EIA Report as structured as follows:

  - Chapter 1: Introduction;
  - Chapter 2: Site Description and Design Evolution;
  - Chapter 3: Description of Development;
  - Chapter 4: Renewable Energy and Planning Policy;
  - Chapter 5: Environmental Impact Assessment;
  - Chapter 6: Scoping and Consultation;
  - Chapter 7: Landscape and Visual;
  - Chapter 8: Ecology;
  - Chapter 9: Ornithology;
  - Chapter 10: Hydrology, Hydrogeology, Geology and Soils;
  - Chapter 11: Cultural Heritage and Archaeology;
  - Chapter 12: Site Access, Traffic and Transport;
  - Chapter 13: Noise;
  - Chapter 14: Socio-economics and Land Use;

- Chapter 15: Other Issues; and
- Chapter 16: Schedule of Commitments.

- Volume 3: EIA Report Figures;

  The EIA Report Figures are separated out into six sub-volumes as follows:

  - Volume 3a: Figures to support Chapters 1-7 of the EIA;
  - Volume 3bi: Proposed development visualisations (NatureScot) – viewpoints 1-10;
  - Volume 3bii: Proposed development visualisations (NatureScot) – viewpoints 11-19 & A-D;
  - Volume 3ci: Proposed development visualisations (THC) – viewpoints 1-10;
  - Volume 3cii: Proposed development visualisations (THC) – viewpoints 11-19 & A-D; and
  - Volume 3d: Figures to support Chapters 8-16 of the EIA.

- Volume 4a-b: EIA Report Technical Appendices.

1.21 The technical appendices that are referred to in each Chapter of the EIA Report are compiled separately in Volume 4a-b. They are numbered sequentially for each of the Chapters in which they are principally referred to.

PUBLICITY OF THE EIA REPORT

1.22 The EIA Report will be publicised in accordance with Part 5 of the 2017 Regulations and the Electricity (Applications for Consent) Regulations 1990 (as amended).

1.23 A notice will be published as follows:

- on the project website: www.kirktonwindfarm.co.uk;
- in the Edinburgh Gazette;
- in The Scotsman; and
- in the Northern Times.

1.24 In addition to the statutory requirements for publicising the EIA Report, the applicant has advised the following local Community Councils of the EIA Report being available:

- Melvich Community Council;
- Caithness West Community Council; and
- Strathy and Armadale Community Council.

1.25 Hard copies of the EIA Report can be viewed at the following locations during their opening hours:

- The Highland Council Wick Office, Caithness House, Market Square, Wick, KW1 4AB; and

- Thurso Library, Davidson's Lane, Thurso, KW14 7AF.

1.26 A copy of the EIA Report Volumes will be made available for download from the project website at:

- www.kirktonwindfarm.co.uk.

1.27 Paper copies of the NTS are available free of charge from:

SLR Consulting Limited
Office 4.04,
Clockwise Offices,
Savoy Tower,
77 Renfrew St,
Glasgow,
G2 3BZT

Tel: 07718 482283

1.28 Paper copies of the EIA Report may be purchased by arrangement from the above address for £1,200 per copy, or £15 per disk/USB memory stick copy. The price of the paper copy reflects the cost of producing all of the Landscape and Visual photographs at the recommended size. As such, a CD/USB memory stick version is recommended.

REFERENCES

The Electricity Act 1989.

The Electricity (Applications for Consent) Regulations 1990 (as amended).

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017.

Town and Country Planning (Scotland) Act 1997 as amended.

National Records of Scotland (2011). Scotland's Census Data. Available at: http://www.scotlandscensus.gov.uk/ods-web/area.html [Accessed on 11 February 2022].

RenewableUK (2022). Wind Energy Statistics Explained. Available at: https://www.renewableuk.com/page/UKWEDExplained [Accessed on 07 March 2022].