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Chapter 1

Introduction

1.1 Introduction

1. ScottishPower Renewables (UK) Ltd (SPR) propose to install and operate a windfarm comprising 13 turbines with associated infrastructure (the proposed Development) on land (the Site) located approximately 3 km south west of Barrhill in South Ayrshire, centred on NGR NX 19194 80689, as shown on Figure 1.1. The proposed Development would be known as the Arecleoch Windfarm Extension. The application boundary covers the area shown on Figure 1.2. An aerial photograph of the Site is contained in Figure 1.3. This shows the terrain and land use of the Site and the immediately surrounding area.

2. The maximum height of the proposed turbines would be up to 200m to the tip of the blade in an upright position. It is expected that each wind turbine would be rated up to an approximate capacity of 5.6 megawatts (MW) giving a total installed capacity in the region of 72.8 MW. The proposed Development would produce between approximately 200 GWh and 230 GWh of electricity annually (based on an average capacity factor of between 31-36 % estimated for the Site based on a 5.6 MW turbine). This equates to the annual power consumed by approximately 53,000 average UK households¹ (depending on the actual turbines installed), which is more than the number of homes in South Ayrshire (based on National Records of Scotland 2016).

3. The majority of the Site is located within South Ayrshire Council (SAC). The entrance to the Site is within the Dumfries and Galloway Council (D&GC) area.

4. The proposed Development is described in further detail in Chapter 3.

5. The proposed application is an extension to a windfarm which was granted consent under Section 36 of the Electricity Act 1989 (the 1989 Act). It is the intention of SPR to submit an application under Section 36 the 1989 Act to extend the Site and the likely impacts which may result from the proposed Development. The results are presented in this document, which comprises the EIA Report.

1.3 Purpose of the EIA Report

6. This EIA Report has been prepared in accordance with The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017.

7. The proposed Development is “a generating station, the construction of which (or the operation of which) will require a Section 36 consent but which is not Schedule 1 development”. In this regard, the proposed development is of a type falling within Schedule 2 of the EIA Regulations 2000 and therefore requires to be screened as to whether or not it constitutes EIA development as envisaged by Regulation 8 of the EIA Regulations.

8. It was acknowledged at an early stage in the consideration of the proposed Development that given the nature, location and characteristics of the intended proposed Development that an EIA would be required. It was therefore not considered necessary to seek a screening opinion and this EIA Report is submitted voluntarily as required by Section 3.3.3 of the Scottish Government Energy Consents EIA Guidance (Scottish Government, 2000).

9. Additionally, as the proposed development is partially located within a commercial forestry plantation and would require felling of trees, the assessment also considers the Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017.

10. Regulation 3 of the EIA Regulations prohibits the Scottish Ministers from granting Section 36 consent for EIA development unless they have first taken the environmental information provided in the EIA Report into consideration.

11. This EIA Report is presented to the ECU in the determination of the application for consent under Section 36 of the 1989 Act and for deemed planning permission in terms of Section 57 of the Town and Country Planning (Scotland) Act 1997, as amended, for the proposed development.

12. This EIA Report presents the findings of the EIA process by describing the proposed Development, the current conditions at the Site and the likely impacts which may result from the proposed Development. Where appropriate, mitigation is proposed, and any residual impacts are reported.

1.4 The Applicant

13. The windfarm is being proposed by ScottishPower Renewables (UK) Ltd (SPR).

14. ScottishPower Renewables is part of the ScottishPower group of companies operating in the UK under the Iberdrola Group, one of the world’s largest integrated utility companies and a world leader in wind energy. ScottishPower now only produces 100 % green electricity – focusing on wind energy, smart grids and driving the change to a cleaner, electric future. The company is investing over £4m every working day in 2019 to make this happen and is committed to speeding up the transition to cleaner electric transport, improving air quality and over time, driving down bills to deliver a better future, quicker for everyone.

15. ScottishPower Renewables is at the forefront of the development of the renewables industry through pioneering ideas, forward thinking and outstanding innovation. Its ambitious growth plans include expansion of its existing onshore wind portfolio, investment in new large scale solar deployment and innovative grid storage systems including batteries. The company is also delivering the Iberdrola Group’s offshore windfarms in the Southern North Sea off East Anglia as part of an international pipeline of projects across Europe and the USA.

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 is 3,781kWh (RenewableUK, 2018).
1.5 EIA project team and competency

The EIA team is led by SLR with assistance from specialist consultants.

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 windfarms 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.

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.

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

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

- Hydrology, Hydrogeology, Geology and Soils;
- Archaeology and Cultural Heritage;
- Access, Traffic and Transport;
- Socio-Economics, Recreation and Land-Use.

SLR is supported by a number of technical specialists from other organisations:

- Optimised Environments Ltd (OPEN) (Landscape & Visual)*;
- Hoare Lea Acoustics (Noise);
- MacArthur Green (Peat & Ecology);
- Natural Research (Projects) Ltd. (Ornithology); and
- DGA Forestry (Forestry).

*The Landscape & Visual assessment of the proposed Development was commenced by SLR’s own technical specialists prior to OPEN taking over mid-way through the design evolution and assessment process.

SPR confirm that the specialist organisations, including SLR, that have carried out the EIA and produced the EIA Report have the skills and relevant competency, expertise and qualifications to undertake EIA for the proposed Development. Table 1.1 demonstrates the relevant competency for each technical discipline covered in this EIA Report.

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Specialist Assessor</th>
<th>Qualifications</th>
<th>Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable Energy and Planning Policy</td>
<td>Alison Sidgwick, SLR Consulting Ltd.</td>
<td>BSc (Hons), MSc, MBA, C.EM, CBIWEM</td>
<td>27 years</td>
</tr>
<tr>
<td>Landscape and Visual Amenity</td>
<td>Susie Playford, SLR Consulting Ltd.</td>
<td>BSc (Hons), MSc, PIEMA</td>
<td>12 years</td>
</tr>
<tr>
<td></td>
<td>James Welch, OPEN</td>
<td>BA Hons, FLI</td>
<td>32 years</td>
</tr>
<tr>
<td></td>
<td>Stuart Cargill, OPEN</td>
<td>BA Hons, MLA, MSc</td>
<td>13 years</td>
</tr>
<tr>
<td></td>
<td>Lindsey Guthrie, SLR Consulting Ltd.</td>
<td>MA Hons, MPhil, MSc</td>
<td>37 years</td>
</tr>
<tr>
<td>Ornithology</td>
<td>Fiona Leckie, NRP Ltd.</td>
<td>BSc (Hons)</td>
<td>26 years</td>
</tr>
<tr>
<td>Ecology</td>
<td>David MacArthur, MacArthur Green</td>
<td>BSc, MSc</td>
<td>20 years</td>
</tr>
<tr>
<td></td>
<td>Brian Henry, MacArthur</td>
<td>MA, MSc</td>
<td>20 years</td>
</tr>
</tbody>
</table>

Table 1.1: EIA team competencies

1.6 Structure of the EIA Report

The EIA Report is presented in four volumes as follows:

- Volume 1: Non-Technical Summary (NTS);
- Volume 2: Environmental Impact Assessment Report (EIA Report);
- Volume 3: Economic Assessment Report;

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.

The EIA Report written text is structured as follows:

- Chapter 1: Introduction;
1.7 Publicity of the EIA Report

1.7.1 Statutory requirements

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).

A notice will be published as follows:

- on the project website;
- in the Edinburgh Gazette;
- in The Herald;
- in the Galloway Gazette; and
- in the Ayrshire Post (which covers the area in which the proposed development would be located).

1.7.2 Voluntary publicity

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

- Colmonell and Lendalfoot Community Council;
- Barrhill Community Council;
- Pinwherry and Pinmore Community Council;
- Ballantrae Community Council;
- New Luce Community Council; and
- Cree Valley Community Council.

A hard copy of the EIA Report can be viewed at the following locations:

- Barrhill Memorial Hall, Main Street, Barrhill, KA26 0PP;
- Colmonell CE Centre, Main Street, Colmonell, KA26 0RY;
- Dumfries & Galloway Council HQ, Kirkbank House, English Street, Dumfries, DG1 2HS;
- Scottish Government Library, Victoria Quay, Edinburgh, EH6 6QQ; and
- South Ayrshire Council, Burns House, Burns Statue Square, Ayr, KA7 1UT.

1.8 References


The Electricity Act 1989.

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