Chapter 1
Introduction

SCOTTISHPOWER RENEWABLES

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1.1 Executive Summary

1. The UK and Scottish governments have declared a climate emergency and set ambitious climate change targets with a net zero CO_2 target for 2045 in Scotland and an interim target of 75% reduction in emissions by 2030. ScottishPower Renewables (SPR) is helping to lead the fight against climate change by developing renewable energy projects such as this fully integrated renewable scheme known as Earraghail Renewable Energy Development (proposed Development).

2. 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, the first integrated energy utility in the UK to generate 100% green energy, is already investing a total of £10bn over five years - £6 million every working day, to power a greener future for everyone living and working in the UK.

3. 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. Securing our position at the forefront of the renewable energy industry, ScottishPower Renewables now has over 40 operational windfarm sites producing over 2,800 MW, including Whitelee, the largest onshore windfarm in the UK and our offshore windfarm East Anglia ONE.

4. The proposed Development is located between the village of Tarbert, to the north east, and the village of Skipness, to the south, situated within the northern part of the Kintyre Peninsula in Argyll & Bute. It would comprise up to 13 wind turbines, ground mounted solar arrays and supporting on-site infrastructure. It would have a generating capacity in excess of 50 MW. A battery energy storage system (BESS) would also be installed. The nearest turbines are located approximately 5.7 km south of the village of Tarbert and 3 km north of the village of Skipness.

5. SPR intends to submit an application for the proposed Development under Section 36 of the 1989 Electricity Act. To inform the application, SPR has undertaken an Environmental Impact Assessment (EIA) and produced its findings in this EIA Report. The EIA Report informs readers of the nature of the proposed Development, and likely significant environmental effects and measures proposed to protect the environment, during site preparation, construction, and operation.

6. The EIA Report has been prepared by RSK Environment Limited (RSK) with assistance from the following organisations:

   - Stephenson Halliday (Renewable Energy and Planning Policy, Landscape and Visual Impact Assessment);
   - Hayes McKenzie (Noise);
   - Avian Ecology (Ecology and Ornithology);
   - Cyrrus Ltd (Aviation); and
   - Pager Power (electro-magnetic interference and telecommunications; solar PV glint and glare)

7. The EIA Report is being made available to local communities for their review and comment as part of the application process for consent.

1.2 Introduction

8. ScottishPower Renewables (UK) Limited (SPR) is applying for consent to Scottish Ministers under Section 36 of the Electricity Act 1989 (as amended), seeking consent and deemed planning permission to construct and operate the proposed Earraghail Rene (hereinafter referred to as the proposed Development). This Environmental Impact Assessment (EIA) Report has been prepared in support of this application for consent.

9. This Chapter introduces the proposed Development and the need for the development, as well as providing an overview of the purpose of the EIA Report, its structure and the technical experts who prepared it. It also identifies where copies of this EIA Report can be viewed and obtained if required.

1.2.1 Need for Development

10. The UK and Scotland's current climate change ambitions are amongst the highest in Europe. The Scottish Government declared a climate emergency in May 2019.

11. The UK government set a net zero CO_2 emissions target by 2050 under The Climate Change Act 2008 (2050 Target Amendment) Order 2019. In Scotland, The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, which amended the Climate Change (Scotland) Act 2009, sets out a legally binding net zero target by 2045, with interim targets in 2020, 2030 and 2040 alongside annual targets. The Scottish Climate Change Plan (SCCP) (2020), includes a target of 50% of Scotland's energy needs across heat, transport and electricity demand to be met by renewable energy in 2032. The SCCP acknowledges that the goal for 100% of Scotland's electricity to be generated by renewables by 2020 has been met; however, if Scotland is to continue to decarbonise its energy usage and meet the 2032 target, then there will be increasing demand for electricity from renewable sources, and it is therefore important to accelerate growth in the renewable energy sector.

12. In light of the ambitious targets set by the UK and Scottish Government, the Argyll & Bute Council (A&BC) set out its climate change actions in the Renewable Energy Action Plan. The key actions detailed in the plan include:

- TC1: Ensure the grid is fit for purpose to meet renewable energy opportunities;
- BL2: Consider future renewables business accommodation and land requirements and feed into Local Development Plan preparation and any relevant national policies;
- ABRA 2: Support community benefits from renewables development and respond to future Scottish Government consultations;
- ABRA 4: Influence legislation and policy development to ensure delivery of overarching ABRA vision and to assist in securing a successful route to market;

13. ScottishPower Renewables (UK) Ltd (SPR) is leading the UK in the operation and development of renewable technologies and fully supports the fight against climate change, and therefore proposes to develop Earraghail Renewable Energy Development (proposed Development) within the northern part of the Kintyre Peninsula in Argyll & Bute. This would be a fully integrated renewable energy solution in direct response to meeting national and international climate change targets. The proposed Development would be able to regulate output and provide clean power to people's homes when they need it most and would provide a state of the art development for this area of the Kintyre Peninsula. As well as contributing to targets for Renewable Energy, the proposed Development would provide opportunities for community investment and create further economic benefits including employment opportunities, in the local area.

14. SPR has to date contributed more than £42 million in benefit funds to support initiatives and projects for those communities local to their onshore windfarm sites, with over £2 million of this going directly to Argyll & Bute communities. Further information on the need for and benefits of the proposed Development are provided in **Chapter 14** and the **Planning Statement** which accompanies this application.

1.3 The Applicant

15. Earraghail Renewable Energy Development is being proposed by SPR.

16. SPR 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 has committed to investing over £4m every working day between 2018 to 2022 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.

17. SPR 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.

18. With over 40 operational windfarms, ScottishPower Renewables manages all its sites through its world leading Control Centre at Whitelee Windfarm, near Glasgow.

19. This project is a result of SPR's partnership with Forestry and Land Scotland (FLS), where SPR was awarded exclusive rights to investigate the feasibility of onshore renewable energy projects within the National Forest Estate in the west of Scotland.

20. SPR is already well established in the west of Scotland and currently owns and operates 4 onshore windfarms in the Argyll and Bute region (Beinn an Tuirc 1 & 2, Cruach Mhor and Clachan Flats). SPR currently operate in excess of 1.7 gigawatts (GW) of windfarm generating capacity in Scotland.

1.4 EIA Project Team and Competency

21. This EIA has been led by RSK Environment Ltd (RSK), part of the RSK Group Ltd with assistance from specialist consultants.

22. RSK Group Ltd is a fully integrated, environmental, health, safety and engineering consultancy with over 20 years of experience in the assessment of environmental impacts associated with the development of renewable energy infrastructure. RSK is a founding member of the Institute of Environmental Management and Assessment's (IEMA) EIA Quality Mark scheme, which recognises and accredits organisations that meet the required high-quality standard of environmental impact assessment on a consistent basis.

23. Further information on RSK can be found on its corporate website at https://rskgroup.com/.

24. For this project, RSK were responsible for co-ordinating the production of the EIA Report and preparing the following technical discipline assessments:

- Hydrology, Hydrogeology, Geology and Soils;
- Archaeology and Cultural Heritage;
- Access, Traffic and Transport;
- Socio-Economics, Recreation and Tourism;
- Forestry; and
- Carbon Balance.

25. RSK were supported by a number of technical specialists from other organisations in support of specific technical assessments, as follows:

- Stephenson Halliday (Renewable Energy and Planning Policy, Landscape and Visual Impact Assessment);
- Hayes McKenzie (Noise);
- Avian Ecology (Ecology and Ornithology);
- Cyrrus Ltd (Aviation); and
- Page Power (electro-magnetic interference and telecommunications, solar PV glint and glare)

26. RSK confirms on behalf of SPR that the specialist organisations that have carried out the EIA and produced the EIA Report have the skills and relevant competency, expertise and qualifications to undertake an EIA for the proposed Development. The relevant expertise and qualifications of the experts involved in the preparation of this EIA Report are detailed in **Table 1.1**.

Table 1.1: EIA Team Competencies

Discipline	Specialist	Qualifications	Years of Experience
EIA Project Management Team			
EIA Project Manager	Joe Somerville, RSK	MA(Hons) MSc MCIfA FSA Scot PIEMA	14 years
EIA Project Director	Mike Kelly, RSK	BSc (Hons)	24 years
EIA Project Support	Giulia Arancio	BSc (Hons), MSc, PIEMA	5 years
EIA Project Support	Spyridonas Angeli	BSc (Hons), MSc	1 year
EIA Technical Specialists			
Renewable Energy and Planning Policy	Alison Sidgwick, Stephenson Halliday	BSoc Sc (Hons), MURP, RTPI	21 years

Discipline	Specialist	Qualifications	Years of Experience
Landscape and Visual Amenity	Kelly Anderson, Stephenson Halliday	BLA, CMLI	26 years
Ecology, Biodiversity and Ornithology	Dr Colin Bonnington Nicole Robinson, Avian Ecology Howard Fearn, Avian Ecology	DPhil MSc BSc (Hons) MCIEEM BSc (Hons), MSc, ACIEEM MSc, MCIEEM BSc, MSc	13 years 11 years 17 years
Hydrology, Hydrogeology, Geology and Soils	Catherine Isherwood, RSK	MA, MSci, MSc, PhD, ProfGradIMMM, CGeol, FGS	15 years
Archaeology and Cultural Heritage	Owen Raybould, RSK Headland Joe Somerville, RSK	BSc (Hons), MCIfA, AssocIHBC As above.	18 years 17 years
Access, Traffic and Transport	Jon Hassel, RSK Ian Wickett, RSK	BEng (Hons), MCIHT HNC Civil Engineering	28 years 25 years
Noise	Mike Craven, Hayes Mackenzie	BSc, MIOA	18 years
Forestry	Wayne Scurrah, ADAS	ND For. Assoc MICFor	31 years
Aviation	Simon McPherson, Cyrrus John Van Hoogstraten, Cyrrus	BEng BSc, MSc, MBCI, CBCP, SIIRSM	21 years 26 years
Socio-Economics, Recreation and land Use	Giulia Arancio, RSK	As above.	As above.
Carbon Balance	Danielle King, RSK	BA (Hons), LLM, PSC	6 years

1.5 Site Description

1.5.1 Site Description

27. The proposed Development is located within commercial forestry managed by FLS and is approximately 5.7 km south of Tarbert and 3 km north of Skipness, measured from the nearest turbine location, as shown on **Figure 1.1**.

28. The Site lies within the Argyll and Bute Council (A&BC) administrative area. The application boundary, centred on National Grid Reference (NGR) NR 88732 63637, covers the area shown on **Figure 1.2** (the Site) and an aerial photograph of the Site is presented in **Figure 1.3** showing topography, terrain and the current land use of the Site and surrounding area.

1.5.2 The Proposed Development

29. The proposed Development comprises up to 13 wind turbines, ground mounted solar arrays and a BESS, with associated infrastructure.

30. Each wind turbine would have a maximum overall height of up to 180 m to the tip of the blade in an upright position. It is expected that each wind turbine would have a rated capacity of around 6 megawatts (MW) giving a total installed capacity of around 78 MW, and certainly in excess of 50 MW. The proposed ground mounted solar arrays would also generate around 5MW, giving a total energy output for the proposed Development of around 83 MW or 230 to 280 GWh of electricity annually. This equates to the annual power consumed by approximately 45,307 average households in Scotland per year[1].

31. A BESS would also be installed, the final capacity of which will be dependent upon storage technology and economics at the time of procurement. However, it is anticipated that the BESS will have a capacity of around 25 MW of energy, providing a flexible balance of electricity and the delivery of the full potential of renewable energy to meet the demands of the national grid.

[1] Based on the Scottish Government Renewable electricity output and energy conversion calculators. Available at: https://www.gov.scot/publications/renewable-and-conversion-calculators/ [accessed 20th December 2021]

32. The proposed Development is described in further detail in **Chapter 3**.

1.6 Key Terms

33. To ensure clarity in the EIA, the following terms and descriptions presented in **Table 1.2** below are used.

Table 1.2: Key Terms and Descriptions

Term	Description
Proposed Development	The proposed Development refers to all components of the Earraghail Renewable Energy Development installation. The proposed Development, as assessed and reported in the EIA Report, comprises 14 wind turbines up to 180 m in height, with an installed capacity of around 84 MW, together with associated infrastructure. The proposed Development would also include ground mounted solar arrays with a maximum capacity of around 5 MW and a battery energy storage system (BESS) with a capacity of around 25 MW.
Site	The Site refers to the area defined by the application boundary within which the proposed Development lies.
Study area	The Site plus any additional area over which desk based or field assessments have been extended. The study area varies depending on the nature of the potential effects for each environmental parameter, as informed by professional guidance and best practice regarding EIA. The study area is therefore explained within the approach and methods section of the relevant chapters (**Chapters 7 to 15**).

1.7 Purpose of the EIA Report

34. EIA is a process for identifying the likely consequences on the existing biological, physical and human environment arising from development progression.

35. The process is undertaken to ensure that the environmental effects of certain types of development proposal are fully investigated, understood and taken account of in the consenting and authorisation process.

36. This EIA Report has been prepared in accordance with The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (the EIA Regulations). Additionally, as the proposed development is located within a commercial forest and would require some felling of trees, the assessment also considers the Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017.

37. Under the terms of the EIA Regulations, 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, meaning that an EIA will be required if it is deemed the development is likely to have significant effects on the environment by virtue of factors such as its nature, size and location. There are also provisions under the EIA Regulations that facilitate the definition of the scope of the EIA, in consultation with Stakeholders. Such provisions are not, however, mandatory. In light of comments received in the scoping responses and after subsequent design iterations, further consultation was arranged with key consultees to address concerns and agree on an appropriate assessment scope. This EIA Report takes into account all consultation responses. Further details on the Scoping approach are provided in **Chapter 6**.

38. This EIA Report is presented to the Scottish Ministers via the Energy Consents Unit (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. Its purpose is to present the

proposed Development and its predicted environmental effects in a concise, objective and non-promotional manner in order to provide the Scottish Ministers, Local Authority(ies), consultation bodies, interested bodies and the general public with sufficient information to assess its likely environmental effects. This EIA Report presents the findings of the EIA process by describing the proposed Development, and the current conditions at the Site and likely significant impacts which may result from the proposed Development. Where appropriate, mitigation is proposed, and any residual impacts are reported. Regulation 3 of the EIA Regulations prohibits 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.

1.8 Structure of the EIA Report

39. The EIA Report is presented in four volumes as follows:

- Volume 1: Non-Technical Summary (NTS)

40. The NTS describes in non-technical language the proposed Development and the likely effects it may have on people in the local area and the receiving environment. It also describes the measures that the Applicant proposes to use to avoid or reduce any potential negative effects that have been identified, including how environmental issues would be managed during and after construction.

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

The EIA Report presents the complete findings of the EIA and is the main document accompanying the application for consent.

The EIA Report written text is structured as follows:

- Chapter 1: Introduction;
- Chapter 2: Site Description and Design Evolution;
- Chapter 3: Proposed Development;
- Chapter 4: Climate Change, Renewable Energy and Planning Policy;
- Chapter 5: EIA Approach and Methodology;
- Chapter 6: Scoping and Consultation;
- Chapter 7: Landscape and Visual Impact Assessment;
- Chapter 8: Ecology;
- Chapter 9: Ornithology;
- Chapter 10: Hydrology, Hydrogeology, Geology and Soils;
- Chapter 11: Archaeology and Cultural Heritage;
- Chapter 12: Access, Traffic and Transport;
- Chapter 13: Noise;
- Chapter 14: Socio-economics, Recreation and Tourism;
- Chapter 15: Other Issues; and;
- Chapter 16: Schedule of Commitments.

- Volume 3: EIA Report Figures; and

Volume 3 contains all relevant Figures referred to throughout Volume 2 of the EIA Report.

- Volume 4: EIA Report Technical Appendices

41. The Technical Appendices referenced in each EIA Chapter are compiled separately in Volume 4. They are numbered sequentially for each Chapter that they are mentioned in.

1.9 Availability of the EIA Report

42. Due to COVID-19, the EIA Regulations have been temporarily modified and adjustments made as detailed in *The Electricity Works (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020,* which will be in force until 31st March 2022. The requirement for the EIA Report to be physically available for inspection by the public at a named place has been removed as part of these temporary modifications. Therefore, public viewing of the EIA Report will take place online, with an electronic copy of the EIA Report and other application documents being available at the links provided below:

43. SPR Website: https://www.scottishpowerrenewables.com/pages/earraghail_renewable_energy_development.aspx

44. ECU Website: https://www.energyconsents.scot/

45. Copies of the NTS and EIA Report (including figures and appendices) may be obtained from:

ScottishPower Renewables
9th Floor ScottishPower House
320 St Vincent Street
Glasgow
G2 5AD

Email: earraghailrenewableenergydevelopment@scottishpower.com

46. The Non-Technical Summary is available free of charge, and a limited number of hard copies of the EIA Report are available for £1000 per copy. The price of the hard copy reflects the costs of producing all of the Volumes as well as the Landscape and Visual photography and photomontages at the recommended size and quality in order to view them properly.

47. Alternatively, a DVD or USB memory stick containing PDF files of the EIA Report are available for £15 per DVD/USB. Specific sections of the EIA Report are also available on request at a proportionate cost. These PDF files can also be downloaded for free from the Earraghail project detailed above

48. In the interests of sustainability and in keeping with the renewable energy agenda, the paperless (DVD/USB) version is recommended.

1.9.1 Representations to the Application

49. Any representations to the application should be made directly to the Scottish Government via the ECU website at http://www.energyconsents.scot/register.aspx or by email to the Scottish Government, ECU mailbox at representations@gov.scot.

50. Representations can also be sent by post to:

Scottish Government
Energy Consents Unit
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

1.10 References

Climate Change Plan – the third report on policies and proposals 2018-2032: Scottish Government: 2018.

Environmental Analyst: UK Market Assessment Report 2019/20

Scottish Government Guidance on Energy Consents. Available at: https://www.gov.scot/policies/energy-infrastructure/energy-consents/ [accessed 4 November 2020]

Renewable electricity output and energy conversion calculators. Available at: https://www.gov.scot/publications/renewable-and-conversion-calculators/ [accessed 10 June 2021]

The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019

The Climate Change Act 2008 (2050 Target Amendment) Order 2019.

The Electricity Act 1989.

The Electricity (Applications for Consent) Regulations 1990

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

The Town and Country Planning (Scotland) Act 1997

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