

Harestanes West Windfarm

Environmental Impact Assessment Report

Volume 2

Chapter 5: EIA Process and Methodology

December 2024



Table of Contents

Abbreviations		2
5.	EIA Process and Methodology	3
5.1.	Executive Summary	3
5.2.	Introduction	3
5.3.	Requirement for EIA	3
5.4.	Determining the Scope of the EIA Report	4
5.5.	Requirement for the EIA Regulations	5
5.5.1.	Legislation	8
5.6.	EIA and the Design Process	9
5.7.	Approach and Methods	9
5.7.1.	Introduction	9
5.7.2.	Baseline Conditions	10
5.7.3.	Consultation	10
5.7.4.	Assessment of Effects	11
5.7.5.	Magnitude of Change (Impact)	11
5.7.6.	Sensitivity of Receptors	11
5.7.7.	Mitigation	11
5.7.8.	Monitoring	12
5.7.9.	Statement of Significance	12
5.7.10.	Consideration of In-Combination and Cumulative Effects	13
5.7.11.	Consideration of Transboundary Effects	14
5.7.12.	Assumptions, Limitations and Technical Difficulties	14
References		



Abbreviations

EIA	Environmental Impact Assessment
IEMA	Institute of Environmental Management and Assessment
NTS	Non-Technical Summary
PAC	Pre-Application Consultation
PAN	Planning Advice Note
PIEs	Public Information Events



5. EIA Process and Methodology

5.1. Executive Summary

- 1. The proposed Development is classed as a Schedule 2 development under the Electricity Works (Environmental Impact Assessment (EIA)) (Scotland) Regulations 2017 (the 'EIA Regulations'). ScottishPower Renewables (hereafter 'the Applicant') concluded that the proposed Development is considered likely to have significant effects on the environment the proposed Development, and that therefore it must undergo the process of EIA and an EIA Report must be submitted with the application. The Applicant commissioned and submitted an EIA Scoping request to the Energy Consents Unit, which was validated on 16th March 2023 (ECU Ref: ECU00004778). The ECU issued its EIA Scoping Opinion on 3rd November 2023.
- 2. Potential environmental effects have been assessed to identify any that may be significant in the context of the EIA Regulations. The environmental factors addressed within the EIA Report are as follows:
- Landscape and Visual Impact Assessment (Chapter 7);
- Ecology and Biodiversity (Chapter 8);
- Ornithology (Chapter 9);
- Hydrology, Hydrogeology, Geology and Soils (Chapter 10);
- Archaeology and Cultural Heritage (Chapter 11);
- Access, Traffic and Transport (Chapter 12);
- Noise (Chapter 13); and
- Other Issues (Chapter 14).
- 3. Mitigation is proposed where possible to prevent, reduce or offset significant effects. The general approach to how this is done is presented in this **Chapter 15**.
- 4. In accordance with the EIA Regulations, the assessment has also considered 'cumulative effects'. By definition these are effects that result from incremental changes caused by past, present or reasonably foreseeable actions together with the proposed Development.

5.2. Introduction

5. This Chapter sets out an overview of the requirements of The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (the 'EIA Regulations'). It then outlines the broad approach and methodology undertaken to assess the proposed Development in accordance with the EIA Regulations. Finally, it sets out the assumptions that have been made in undertaking the EIA for the proposed Development.

5.3. Requirement for EIA

6. Schedule 1 of the EIA Regulations lists those developments for which an EIA is mandatory, whilst Schedule 2 describes projects for which the need for EIA is judged by Scottish



Ministers on a case-by-case basis. The proposed Development falls within Schedule 2, paragraph (a) of the EIA Regulations as it 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".

- 7. Schedule 3 of the EIA Regulations lists the 'selection criteria' which must be taken into account by Scottish Ministers in determining whether a Schedule 2 development is an EIA development. These selection criteria relate to the nature, scale and location of the proposed Development and consequently whether the project is likely to have significant effects on the environment.
- 8. For those developments listed under Schedule 2, the requirements for an EIA can be determined via a screening request made to Scottish Ministers. In this case, a screening request was not sought since it was considered that the proposed Development would be of a size and nature that may have potential significant effects. The Applicant also recognises that the EIA process can play an important role in developing the design of renewable energy developments to minimise adverse environmental effects and maximise positive benefits. The Applicant has therefore concluded that an EIA is required for the proposed Development.
- 9. Once the Applicant had determined that an EIA was required for the proposed Development, it commissioned a consultancy ITPEnergised to coordinate an EIA Scoping process. This was received by the Energy Consents Unit on 16th March 2023 (ECU Ref: ECU00004778^I). The ECU issued its EIA Scoping Opinion on 3rd November 2023.
- 10. Whilst it is considered that the proposed Development has the potential for significant environmental effects, and that effects can be both positive and adverse, it should be noted that this does not mean that significant effect is the ultimate conclusion of the EIA. The EIA process promotes the identification of potential adverse effects and either building in appropriate embedded mitigation into the design of the proposal or the incorporation of mitigation measures into the construction and/or operation of proposals to avoid, reduce and, if possible, remedy any significant adverse effects or further enhance positive effects.
- **11.** The EIA Regulations prohibit the Scottish Ministers from granting permission for EIA development unless they have taken the environmental information provided into consideration.
- 12. This EIA Report has been prepared in order to be taken into consideration by the Scottish Ministers in the determination of an application under Section 36 of the Electricity Act 1989 Act for the proposed Development.

5.4. Determining the Scope of the EIA Report

- 13. The purpose of Scoping is to:
- obtain baseline information regarding existing environmental site conditions;

¹ <u>https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00004778</u> [Accessed September 2024]



- establish key environmental issues and identify potential effects to be considered during the EIA;
- identify those issues which are likely to require more detailed study and those which can be justifiably excluded from further assessment;
- provide a means of confirming the most appropriate methods of assessment; and
- ensure that statutory consultees and other bodies with a particular interest in the environment such as community councils are informed of the proposal and provided with an opportunity to make an input at an early stage in the EIA process.
- 14. The scope of the EIA Report has been established by undertaking a Scoping study for the proposed Development, in March 2023. The scoping process allowed all parties involved in the EIA process to agree on key environmental issues relevant to a development, and to agree on the methodology used to assess and identify likely significant environmental effects. Furthermore, the EIA Scoping Opinion consultation responses and the findings of the EIA process have been used to inform the final design of the proposed Development, and the assessment of its predicted environmental effects is based upon it.
- 15. Further details on the scoping process undertaken for this EIA is provided in **Chapter 6** of this EIA Report.

5.5. Requirement for the EIA Regulations

- 16. The EIA Regulations require a description of the likely significant effects on the following factors:
- population and human health;
- biodiversity;
- land, soil, water, air and climate; and
- material assets, cultural heritage and the landscape.
- 17. The EIA Report must identify, describe and assess the potential direct and indirect significant effects of the proposed Development and the potential interactions between those factors. The Regulations also require identification, description and assessment of the expected effects deriving from the vulnerability of the development to risks, so far as relevant to the development, of major accidents and disasters.
- 18. The EIA Report must include:
- a. a description of the development comprising information on the site, design, size and other relevant features of the development;
- b. a description of the likely significant effects of the development on the environment;
- c. a description of the features of the development and any measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;
- d. a description of the reasonable alternatives studied by the developer, which are relevant to the development and its specific characteristics, and an indication of the main reasons



for the option chosen, taking into account the effects of the development on the environment;

- e. a non-technical summary of the information referred to in sub-paragraphs (a) to (d); and
- f. any other information specified in schedule 4 relevant to the specific characteristics of the development and to the environmental features likely to be affected.
- 19. Schedule 4 of the EIA Regulations sets out the information that must be included in the EIA Report, summarised in **Table 5.1**. This also identifies where the corresponding information can be found in the EIA Report.

Table 5.1 EIA Report Information

Required Information	Relevant Section in EIA Report
 Description of the development, including in particular: (a) a description of the location of the development(b) a description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases;(c) a description of the main characteristics of the operational phase of the development for instance, energy demand and energy used, nature and quality of the materials and natural resources (including water, land, soil and biodiversity) used;(d) an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases. 	A description of the location of the proposed Development is presented in Chapter 2 . A description of the proposed Development and all its characteristics during the construction and operation phase is presented in Chapter 3 . The predicted individual emissions and residues of the proposed Development are reported in Chapters 7 to 15 .
2. A description of the reasonable alternatives studied by the developer, which are relevant to the proposed Development and its special characteristics, and an indication of the main reasons for this choice, taking into account a comparison of the environmental effects.	The reasonable alternatives considered are covered under Chapter 2 .
3. A description of the relevant aspects of the current state of the environment (the "baseline scenario") and an outline of the likely evolution thereof without implementation of the project as far as natural changes from the baseline scenario can be assessment with reasonable effort on the basis of the availability of relevant information and scientific knowledge	This description is included in the baseline section of each technical Chapter in this EIA Report (Chapters 7 to 15), where relevant.
4. A description of the factors specified in item 3 above likely to be significantly affected by the development: population, human health biodiversity, land, soil, water, air, climate, material assets, cultural heritage, including the architectural and archaeological aspects, and landscape.	Effects on population and human health are discussed in relation to visual/residential amenity impacts in Chapter 7 , traffic impacts in Chapter 12 , noise impacts in Chapter 13 , air quality impacts, shadow flicker impacts, telecommunications impacts and aviation and radar impacts in Chapter 14 .



	Renewables
Required Information	Relevant Section in EIA Report
	Effects on biodiversity are discussed in Chapter 8. Effects on land and soil are discussed in Chapter 10, and Chapter 14 . Effects on water are discussed in Chapter 10. Effects on climate are discussed in relation to carbon balance in Chapter 14 . Effects on material assets and archaeological aspects are discussed in Chapter 11 . Effects on landscape are discussed in Chapter 1 .
 5. A description of the likely significant effects of the development on the environment, resulting from: (a) the construction and existence of the development, including, where relevant, demolition works; (b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources; (c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances and the disposal and recovery of waste; (d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters); (e) the cumulation of effects with other existing and/or approved development, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources; (f) the impact of the development on climate and the vulnerability of the development to climate change; and (g) the technologies and the substance used; The description of the likely significant effects should cover the direct effects and any indirect, secondary, cumulative, transboundary, short, medium and long-term, permanent and temporary, positive and negative effects of the 	The predicted significant effects of the proposed Development are reported as residual effects after relevant mitigation measures in each of the technical Chapters of this EIA Report (Chapters 7 to 14). The methods used to predict significant effects are explained in this Chapter and each individual Chapter as relevant. Effects have been predicted in relation to the project's construction and permanent use of the land. The operation and nature of these effects and their duration are reported.
6. A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.	Assumptions and limitations in the EIA process are reported as required in the relevant technical Chapters. A description of the methodology and evidence used to assess significant effects are reported in the technical Chapters of this EIA Report (Chapters 7 to 14). and technical appendices (Volume 4).
7. A description of the measures envisaged to avoid, prevent, reduce and if possible offset any significant adverse effects on the environment and, where appropriate, of any	The overall approach to mitigation is discussed in this Chapter. Specific mitigation measures are reported in each relevant technical Chapter



Required Information	Relevant Section in EIA Report
monitoring arrangements. That description should explain the extent to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.	(Chapters 7 to 14) and are summarised in Chapter 15 .
8. A description of the expected significant adverse effects of the proposed Development on the environment deriving from the vulnerability of the Proposed Development to risks of major accidents and/or disasters which are relevant to the project concerned. Where appropriate, the description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for the proposed response to such emergencies.	The proposed Development is not located in an area of natural disasters, such as extreme weather events and the construction of the operation of the proposed Development would be managed within the requirements of a number of health and safety regulations including the Construction (Design and Management) Regulations 2015. Nonetheless, Chapter 14 considers the risk to Human Health as a result of such events. The issue of peat slide and flood risk are considered in Chapter 10 .
9. A non-technical summary of the information provided under points 1 to 8.	A Non-Technical Summary (NTS) is presented as Volume 1 of this EIA Report.
10. A reference list detailing the sources used for the descriptions and assessments in the EIA report.	Reference lists are provided in each Chapter

5.5.1. Legislation

- **20.** EIA has been completed in accordance with the latest regulations and advice on best practice, including the following:
- The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended);
- The Electricity Works (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020;
- Scottish Government Guidance on Energy Consents;
- Scottish Government Web Based Guidance Onshore wind turbines (first published in February 2011 and last updated in May 2014);
- Scottish Government Planning Advice Note (PAN) 1/2013 Environmental Impact Assessment (2013);
- Scottish Government Planning Circular 1/2017 Guidance on The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017;
- Institute of Environmental Management and Assessment (IEMA) (2004) Guidelines for Environmental Impact Assessment;
- Scottish Natural Heritage (2018) A Handbook on Environmental Impact Assessment: Guidance for Competent Authorities, Consultees and others involved in the Environmental Impact Assessment Process in Scotland (5th Edition); and



• NatureScot (2024) pre-application guidance for onshore wind farms.

5.6. EIA and the Design Process

21. The EIA is treated as an iterative process, rather than a one-off, post design environmental appraisal. This has allowed the findings from the EIA to be fed into the design process to avoid, reduce and where possible, mitigate environmental effects. Where potentially adverse environmental effects were identified through preliminary investigations as part of feasibility work, or later in the detailed EIA, consideration was given as to how the project design could be modified to design out adverse environmental effects, (i.e. embedded mitigation), or where this was not possible, to identify appropriate mitigation. This process is explained further in **Chapter 2**; and in the subsequent technical Chapters (**Chapters 7** to 14).

5.7. Approach and Methods

5.7.1. Introduction

- 22. The assessments that have been undertaken as part of the EIA have been based upon the Site and relevant study areas. The Site is the area contained within the redline Application Boundary shown on Figure 1.2.
- 23. The EIA Regulations require a description of the likely significant effects on the factors specified in Section 4 of this Chapter. Any such effects are identified in the relevant technical Chapters (Chapters 7 to 14).
- 24. Full details of the assessment methodology used in assessing impacts for each environmental aspect in this EIA Report are provided in each chapter (**Chapters 7** to 14). In general terms, assessment criteria have been used to determine the significance of environmental effects. Significance is generally determined through a combination of the sensitivity of a receptor to an effect and the magnitude of the change. This process is outlined as follows:
- identification of baseline conditions of the Site and its environs, including the sensitivity of receptors which may be affected by changes in the baseline conditions;
- consideration of the magnitude of potential changes in the environmental baseline (i.e. the impact);
- assessment of the significance of effect taking into account sensitivity of receptors and magnitude of effect;
- identification of appropriate mitigation measures; and
- assessment of significance of residual effects taking account of any mitigation measures.
- 25. Where significant environmental impacts are predicted in the EIA process, then the EIA Report provides measures which would be employed to eliminate or ameliorate the impact to acceptable levels. Mitigation measures can be in the form of changes to operational practice, or changes/additions to the design. EIA also considers positive changes or enhancements as a result of the proposed Development.



26. The above approach does not apply to all disciplines addressed in the EIA Report, and alternative approaches are described and justified in the relevant technical Chapters where applicable. In most cases these differences are based on guidance from technical discipline industry bodies and institutions.

5.7.2. Baseline Conditions

- 27. A central principle of the EIA is to determine the baseline environmental conditions prevailing at the Site. These help to determine the sensitivity of receptors and form the benchmark against which predicted changes resultant from the proposed Development are assessed to determine the magnitude of any impact. The baseline conditions have been determined by numerous methods, including desktop studies, site surveys, use of analytical models, consultation and the acquisition of data from third parties. As the majority of the Site is commercial coniferous forestry plantation, consideration of the manner in which the Site changes through forestry activities (e.g. planting, forestry management, harvesting and re-planting) has also been considered within the assessments in the technical chapters where relevant.
- 28. The assessment of each environmental parameter was undertaken in comparison to baseline conditions. This describes the existing and forecasted, assuming no development, environmental conditions at the Site (and in the wider area as pertinent to the particular environmental parameter).
- 29. The sensitivity of the baseline conditions has been defined according to the relative sensitivity of existing environmental features on or in the vicinity of the Site, or by the sensitivity of receptors which would potentially be affected by the proposed Development. Criteria for the determination of sensitivity or importance have been established based on prescribed guidance, legislation, statutory designation and/or professional judgement. The criteria for each environmental parameter are outlined in the EIA Report according to the technical subject area.
- **30.** Relevant windfarms that are under construction, operational and consented are considered part of the baseline for the purposes of this EIA Report, unless specifically stated otherwise within relevant topic Chapters.

5.7.3. Consultation

- 31. Consultation has formed an integral part of the EIA process and both the EIA team and the Applicant have contacted numerous statutory and non-statutory consultees to determine their views on the proposed Development, collected baseline information and refined survey and assessment methodologies. Replies received in response to Scoping are detailed within the relevant technical Chapters of this EIA Report and summarised in Chapter 6, and in the topic specific Chapters of this EIA Report.
- **32.** Engagement with the local community was undertaken through Public Information Events (PIEs) held over in June 2023 and early September 2024. Further details on this can be found in **Chapter 6** and in the Pre-Application Consultation (PAC) Report submitted as part of the application for consent for the proposed Development.



5.7.4. Assessment of Effects

- **33.** Effects are defined as the consequence of impacts. They are formulated as a function of the receptor/resource value and sensitivity and the predicted magnitude of impact.
- 34. The assessment of potential effects, using a range of appropriate methodologies specific to each technical discipline, takes into account the construction and operation of the proposed Development in relation to the Site and environs. Numerical or quantitative methods of assessment are used to predict values that can be compared against published thresholds and indicative criteria contained in relevant guidance and standards.
- **35.** Not all technical subject areas are capable of being assessed numerically or quantitatively, and thus qualitative assessments are used in certain cases. Such assessments rely on previous experience of similar projects, environments, professional judgement of experienced and qualified professionals and accord with industry guidance where possible as detailed in **Chapter 1**.

5.7.5. Magnitude of Change (Impact)

- **36.** The magnitude of change or impact on environmental baseline conditions is identified through detailed consideration of the proposed Development, taking due cognisance of any legislative or policy standards or guidelines, and / or the following factors:
- The nature of the change to which the environment would be affected e.g. whether the quality is enhanced or impaired;
- the scale or degree of change from the baseline situation;
- whether the impact is temporary or permanent, indirect or direct, short term, medium term or long term;
- any in-combination effects; and
- potential cumulative effects.
- **37.** In some cases, the likelihood of impact occurrence may also be relevant, and where this is a determining feature of the assessment this has been clearly stated.

5.7.6. Sensitivity of Receptors

38. The sensitivity criterion is a composite of sensitivity (e.g. 'high', 'medium', or 'low'), which reflects its capacity to accommodate change and recover if affected, and importance (e.g. 'international', 'national', 'regional' or 'authority area') of the receptor. Both functions have been assessed based on prescribed guidance, legislation, statutory designation and/or professional judgement. The sensitivity criterion for each environmental parameter is provided in the relevant Chapter of this EIA Report.

5.7.7. Mitigation

39. Mitigation is considered as an integral part of the overall design strategy for the proposed Development, including 'embedded' mitigation (e.g. altering and refining the design of the proposed Development to reduce landscape and visual impact, watercourse crossings or



avoid sensitive species and habitats) rather than relying solely on 'add-on' measures to prevent, rectify or reduce significant environmental effects.

- 40. The Applicant adopts an iterative approach whereby mitigation is assessed and considered at all stages of the project. The final design of the proposed Development has evolved over the project lifetime as demonstrated in **Chapter 2**, systematically being optimised during the EIA process in response to increasing knowledge of the Site and potential environmental effects.
- 41. Some of the measures described within **Chapters 7** to **14** of this EIA Report do not respond directly to likely significant adverse effects but have been included as good practice to reduce the level of adverse effects, or enhance the level of beneficial effects, of the proposed Development. Where relevant, these good practice and enhancement measures are described in the technical Chapters.
- **42.** Where significant environmental effects are predicted, this EIA Report provides measures which would be employed to eliminate or ameliorate the effect. Mitigation measures may include the adoption of alternatives and changes/additions to design management or operation to prevent, reduce or, where possible, offset any adverse significant effects.
- 43. In some cases, whilst mitigation of a specific significant effect may not be possible, it may be appropriate to provide other benefits such as replacement habitat for that which has been disturbed or lost due to the construction of the proposed Development. The adoption of such environmental compensation measures may be used to offset a significant effect and can be effective in reducing the level of adverse effect, or indeed achieving a positive effect, for the proposed Development as a whole.

5.7.8. Monitoring

44. Also incorporated, where appropriate, are monitoring measures to ensure that the proposed Development and any mitigation measures perform as required.

5.7.9. Statement of Significance

- **45.** Assessing the significance of effects is based on consideration of the magnitude of the change (impact) relative to the baseline conditions and the sensitivity of receptor.
- 46. The significance of an effect is derived from an analysis of:
- the sensitivity of the receiving environment or receptor to change, including its capacity to accommodate the kinds of changes the proposed Development may bring about;
- the amount and type of change, often referred to as magnitude of the potential impact which includes the timing, scale, size and duration of the impact;
- the likelihood of the impact occurring which may range from certainty to a remote possibility;
- the duration of the effect;
- the geographical extent of the effect; and
- the reversibility of the effect.



- **47.** There is no general definition of what constitutes significance. In EIA, the term 'significance' reflects both its literal meaning of 'importance' and its statistical meaning where there is an element of quantification. This combination of judgemental/subjective and quantifiable/objective tests has become the standard approach to understanding and applying the test of 'significance'.
- **48.** Significance assumes only incorporated and standard mitigation measures are in place, these being the measures for which delivery and implementation can be secured.
- **49.** The competent authority determining the application for consent considers the residual effects (i.e. the post-mitigation effects) as part of the decision-making process.
- 50. The level of effect that is adjudged to be 'Significant' is defined in each of the technical Chapters (Chapters 7 to 14). Any effects associated with the proposed Development are considered to be negative except where it is stated that they are positive.

5.7.10. Consideration of In-Combination and Cumulative Effects

- 51. In-combination effects are effects which may or may not interact with each other, but which could affect the same receptor or interest feature (i.e. a habitat or species for which a European Site is designated). For instance, bird species could be affected by disturbance from one proposal and habitat loss by another.
- 52. In accordance with the EIA Regulations, the assessment has considered 'cumulative effects' that might arise from the proposed Development in conjunction with other similar projects that are in development, i.e. projects that are not reported in the baseline but have a reasonable expectation of being developed ('reasonably foreseeable'). Likely cumulative effects have been defined for this EIA as the likely effects that the proposed Development may have in combination with other renewable energy developments in the local area which are at application stage, consented, under construction or operational.
- **53.** The extent to which the potential combined effects through that co-existence is considered, is described as appropriate throughout **Chapters 7** to **14** of this EIA Report.
- 54. The study area for considering cumulative effects is specific to each technical discipline and established in each technical Chapter. The technical discipline which considers the largest cumulative study area is Landscape and Visual, which has considered cumulative effects within approximately 15 km from the Site as detailed in **Table 5.2** below.
- 55. The cumulative cut-off date was 31st July 2024, to ensure that the cumulative assessment is as up-to-date as possible while permitting sufficient time for the cumulative assessment to be completed. The developments to be considered in the cumulative assessment were shared with the Energy Consents Unit in the Gatecheck Report on 21st August 2024). The ECU shared the Gatecheck Report with Historic Environment Scotland, NatureScot, Dumfries and Galloway Council and Scottish Environment Protection Agency (SEPA) on 4th September 2024.



Project Name	Turbine Height (m)	Number of Turbines	Status	Distance to Nearest Turbine (km)
Dalswinton Windfarm	110	15	operational	0.6
Harestanes Windfarm	125	68	operational	3.1
Minnygap Wind Farm	125	10	operational	6.7
Harestanes South Windfarm Extension	200	8	in planning	4.1
Daer Wind Farm	180	17	in planning	9.6
Rivox Wind Energy Hub	200-230	29	in planning	11.3

Table 5.2 Cumulative Renewable Energy Developments Within 15 km

5.7.11. Consideration of Transboundary Effects

56. In accordance with the EIA Regulations, the assessment has considered 'transboundary effects.' Regulation 29 of the EIA Regulations refers to development with significant transboundary effects as being "*Development in Scotland likely to have significant effects in an EEA State other than the United Kingdom*". The nature of the proposed Development and the location of the Site are such that significant transboundary effects are not predicted for the proposed Development.

5.7.12. Assumptions, Limitations and Technical Difficulties

- 57. The EIA Process is designed to enable good decision-making based on the best possible available information about the environmental implications of a proposed Development. A number of assumptions have been made during preparation of the EIA Report, which are set out here. Assumptions specific to certain environmental aspects are discussed in the relevant Chapters of the EIA Report. The following assumptions are noted:
- The EIA was undertaken and the resulting EIA Report has been compiled using the material made available to the EIA team by the Applicant and members of their project team, together with other readily available and publicly accessible material including existing literature and studies, as well as personal communication with local experts. To the best of our knowledge, the information used as a basis for the assessment is accurate and up to date. Any limitations of the underlying information or any constraints that would materially affect the evaluations are identified in the individual technical chapters (Chapters 7 to 14).
- SPR and its appointed EIA team have also carried out its own site visits, surveys and investigations at or in the vicinity of the Site to provide more information for the assessments and to fill data gaps. This has resulted in a more complete and up-to-date



set of baseline data to use as the basis for the impact assessment. Although the data have been collected over a period of time, it is considered that the data is relevant and valid at the time of reporting. It should be noted that the surveys and investigations are conducted on a sampling basis and this places a limit on the certainty of the data set.

- This EIA Report has been based on the best available information at the time of publication. However, further information may become available during the detailed design phase that will be used to inform the project if relevant.
- Assumptions adopted in the evaluation of impacts are reported in each of the relevant chapters. However, these assumptions are often implicit and rely on expert judgement. Any assumptions and known technical deficiencies have been documented.
- The EIA has been undertaken during the initial design phase of the project and therefore some of the technical aspects of the construction and operation have yet to be determined. Where an alternative option could cause additional impacts, these are discussed within the relevant sections. In addition, the EIA has taken a precautionary approach to adopt conservatism in the assumptions made and any scenarios assumed, so that a reasonable 'worst-case' scenario was assessed. Therefore, inherent uncertainties are accounted for and subsequent modifications to the project during the detailed design phase are less likely to fall outside of the assumed envelope of the assessment parameters.



References

Guidelines for Environmental Impact Assessment: IEMA: 2004.

NatureScot (2024) pre-application guidance for onshore wind farms. <u>https://www.nature.scot/doc/naturescot-pre-application-guidance-onshore-wind-farms</u> [Accessed November 2024].

Planning Advice Note (PAN) 1/2013 Environmental Impact Assessment: Scottish Government: 2013.

Scottish Government Guidance on Energy Consents. Available at: <u>https://www.gov.scot/policies/energy-infrastructure/energy-consents/</u> [Accessed 12 August 2024].

Scottish Planning Series Planning Circular 1/2017: Environmental Impact Assessment Regulations 2017, Guidance on The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017: Scottish Government: 2017.

ScottishPower Renewables. 2024. Harestanes West Windfarm: Gatecheck Report. Issued to ECU 21/08/2024. ECU Case Reference: ECU00004778/ https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00004778&T=0 [Accessed September 2024].

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

The Electricity Works (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020.

A Handbook on Environmental Impact Assessment: Guidance for Competent Authorities, Consultees and other involved in the Environmental Impact Assessment Process in Scotland (5th Edition): Scottish Natural Heritage: 2018.

Web Based Guidance Onshore wind turbines (first published in February 2011 and last updated in May 2014): Scottish Government: 2014.