

6 EIA Methodology, Scoping and Consultation

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6. EIA Methodology, Scoping and Consultation

6.1. Introduction

- 6.1.1. This Chapter of the Environmental Impact Assessment (EIA) Report sets out the approach that has been followed in undertaking the EIA for the Proposed Varied Development.
- 6.1.2. The EIA process aims to assist Scottish Ministers in their determination of the application by identifying and assessing the likely significant effects of the Proposed Varied Development on the environment. The assessment has been carried out in consultation with statutory consultees, interested parties and the general public.
- 6.1.3. The structure of the EIA Report follows the requirements of *The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017* and relevant good practice guidance. The EIA Report comprises a Non-Technical Summary (NTS), the main EIA Report text, accompanying figures and technical appendices.
- 6.1.4. This Chapter is structured as follows:
- overview of the relevant legislation, policy and guidance;
 - an outline of the EIA process utilised;
 - the scope of the assessment completed;
 - details of the assessment of potential effects;
 - the consultation undertaken; and
 - the assumptions, likely limitations and uncertainty.
- 6.1.5. This Chapter is supported by the following appendices:
- **Appendix 6.1** – Shepherd's Rig Wind Farm Section 36C EIA Scoping Report;
 - **Appendix 6.2** – Shepherd's Rig Wind Farm Section 36C EIA Scoping Opinion;
 - **Appendix 6.3** – Shepherd's Rig Wind Farm Section 36C Gatecheck 1 Report;
 - **Appendix 6.4** – Shepherds' Rig Wind Farm Section 36C Updated Gatecheck 1 Report; and
 - **Appendix 6.5** – Further Consultation.

6.2. Legislation, Policy and Guidelines

- 6.2.1. The Consented Development gained Section 36 and deemed planning permission from Scottish Ministers in August 2023. An application to vary this consent for the Proposed

Varied Development has been submitted to the Scottish Ministers through the Energy Consent Unit (ECU) under Section 36C of the Electricity Act 1989 (as amended).

- 6.2.2. The European Commission Directive 2011/92/EU, amended in 2014 by Directive 2014/52/EU, requires that certain projects, both public and private, must be assessed with regards to their impacts on the environment. This is currently implemented in respect of Section 36C consents by *The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ('the EIA Regulations')*.
- 6.2.3. Regulation 28(1) of the EIA Regulations requires that an EIA must be considered for variation applications related to EIA development. In terms of paragraph (1) of Regulation 28, the EIA Regulations shall generally apply in relation to a variation application. The content, process and structure of the EIA Report follow the criteria listed within the EIA Regulations.
- 6.2.4. The Proposed Varied Development is considered to fall within Schedule 2 of the EIA Regulations and has the potential to have some significant environmental effects. The criteria for considering whether a Schedule 2 development requires the preparation of an EIA are set out in Schedule 3 of the EIA Regulations. The Applicant has voluntarily accepted that an EIA is required to be undertaken. The information provided within this EIA Report has been prepared in accordance with the Directive and the EIA Regulations.
- 6.2.5. The information provided within this EIA Report and its process and structure follow the criteria listed within the EIA Regulations, with specific regard to the requirements of Regulation 4(2) and (3) to identify, describe and assess the likely direct and indirect significant effects of the Proposed Varied Development on the factors specified in paragraph (3) of Regulation 4:
- *"Population and human health;*
 - *Biodiversity, and in particular species and habitats protected under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora(a) and Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds(b);*
 - *Land, soil, water, air and climate; and*
 - *Material assets, cultural heritage and the landscape."*
- 6.2.6. The information required to enable the Scottish Ministers to have regard to such matters is included in the EIA Report.
- 6.2.7. Regulation 28 of the EIA Regulations requires that this EIA Report includes a description of *"the main respects in which the developer considers that the likely significant effects on the environment of the proposed varied development would differ from those described in any EIA report or environmental statement, as the case may be, that was prepared in connection with the relevant section 36 consent."*

- 6.2.8. Additionally, the Scottish Government Guidance on Section 36C applications (Scottish Government, 2019) states that, *"In respect to the environmental issues affected by the proposed variation, the EIA should present the likely significant effects on the environment of the 'proposed varied development' (i.e., the development which would be authorised if varied as requested in a variation application)."*
- 6.2.9. The likely significant effects of the Proposed Varied Development (as a whole) are identified, described, and assessed in the EIA Report. The EIA Report then considers the impacts of the proposed variations and how those impacts differ from those previously identified for the Consented Development.
- 6.2.10. In addition to the above, a number of legislative and best practice documents have informed the preparation of the EIA Report. The regulations and best practice of core relevance to the EIA process and which have been taken into account in undertaking this assessment are as follows:
- National Planning Framework 4 (NPF4) (Scottish Government, 2023);
 - Planning Advice Note 1/2013: Environmental Impact Assessment (Scottish Government, 2013);
 - Planning Circular 1/2017: Environmental Impact Assessment regulations (Scottish Government, 2017);
 - Good Practice During Wind Farm Construction 4th Edition (NatureScot et al., 2024);
 - Assessing the Cumulative Impact of Onshore Wind Energy Developments (NatureScot, 2021);
 - Siting and Designing Wind Farms in the Landscape Version 3a (SNH [now NatureScot], 2017); and
 - Environmental Impact Assessment Handbook Version 5 (SNH [now NatureScot], 2018).
- 6.2.11. Additional topic-specific legislation, policy and guidance documents are noted within the technical assessment chapters of this EIA Report (**Chapters 7 to 18**).

6.3. Legal Framework for the Preparation of the EIA Report

Overall EIA Report Preparation Process

- 6.3.1. For the EIA process to be as effective as possible it is approached as an iterative process throughout the design stage, rather than a single assessment performed once the design is finalised. When used as an iterative process, the findings of the EIA can be incorporated within the design of the proposal to provide an optimum design with regard to the Applicant's requirements and the environment.
- 6.3.2. The EIA Report has been prepared with reference to baseline information collected and presented for the Consented Development, subject to updates where this was considered

proportionate and necessary. Where appropriate, previous environmental information listed below has been taken into account in the preparation of the EIA Report:

- Shepherds' Rig Wind Farm EIA Report (Infinergy, 2018) which contains the Written Statement (Volume 1), associated figures (Volume 2), landscape and cultural heritage visualisations (Volume 3) and appendices (Volume 4);
- Shepherds' Rig Additional Environmental Information (AEI) Report I (Infinergy, 2019) which presented further design and assessment work for an amended layout, reducing the total number of turbines for the Consented Development from 19 to 17 (the consented layout); and
- Shepherds' Rig Additional Environmental Information (AEI) Report II (Infinergy, 2021) produced in 2021 for the Public Inquiry. This provided an assessment of offsite roadworks associated with the Consented Development and a cumulative assessment of the Lorg Grid Connection. An updated landscape and visual cumulative assessment was also provided.

6.3.3. The description of likely significant effects of the Proposed Varied Development on the environment (as a whole) along with a description of the main aspects in which these effects differ from those identified for the Consented Development, are presented in this EIA Report, which has been prepared in accordance with the EIA Regulations.

6.3.4. Each technical chapter of this EIA Report outlines whether new significant effects or changes in the intensity of existing effects associated with the Consented Development are anticipated. The broad approach which has been followed is presented in this Chapter and an overview of the methodology adopted for each technical study is provided within the respective technical chapters (**Chapters 7 to 18**).

Screening and Scoping

6.3.5. Screening is the process by which it is determined whether or not an EIA should be conducted for a proposed development. As set out above, the Proposed Varied Development falls within Schedule 2 of the EIA Regulations. Schedule 3 of the EIA Regulations sets out criteria that should be considered in determining whether a Schedule 2 development is likely to have significant environmental effects and hence require a formal EIA.

6.3.6. The Applicant recognised that the Proposed Varied Development would have the potential to have significant environmental effects, and therefore, an EIA would be required. Therefore, rather than undertaking a formal EIA screening process, the Applicant voluntarily elected to undertake an EIA.

6.3.7. The EIA Scoping process is undertaken to identify the potentially significant environmental issues which should be considered when assessing the potential effects of the Proposed Varied Development, and those effects that are not likely to be significant (which can be 'scoped out'). An EIA Scoping Opinion may be obtained from the consenting authority, which sets out the matters that should be considered through the EIA.

- 6.3.8. An EIA Scoping Opinion was requested from the Scottish Government ECU in July 2024 through the submission of an EIA Scoping Report (**Appendix 6.1**). This EIA Scoping Report contained details of the site's baseline conditions and an indication of the characteristics of the Proposed Varied Development. It also proposed which environmental topics would be assessed in the EIA, and the assessment methodologies that would be used.
- 6.3.9. The ECU consulted with statutory and non-statutory consultees before providing an EIA Scoping Opinion in November 2024. This information has informed the preparation of the Proposed Varied Development's EIA Report. This EIA Report is based on the Scoping Opinion received as included in **Appendix 6.2**.
- 6.3.10. A summary of how the Scoping responses received would be addressed in this EIA Report was provided to the ECU within an EIA Gatecheck Report in January 2025 (refer to **Appendix 6.3**). Following the submission of the Gatecheck Report, a number of changes were made to the design of the Proposed Varied Development. Therefore, in consultation with the ECU, an updated EIA Gatecheck Report (**Appendix 6.4**) was submitted to the ECU in April 2026 to provide consultees with information on these changes.
- 6.3.11. Direct consultation has also been undertaken with consultees, to confirm and agree the approach and scope of technical surveys and assessments on a topic by topic basis. Details of relevant consultations are included in each technical chapter as appropriate and compiled as **Appendix 6.5**.

6.4. The EIA Report Preparation Process

- 6.4.1. The preparation of the EIA Report requires the systematic process of compiling, assessing, presenting and mitigating all the likely significant environmental effects of a proposed development. The assessment that is included in the EIA Report is designed to inform the decision-making process by way of setting out the likely environmental profile of a project. Identification of potentially significant adverse environmental effects then leads to the design and incorporation of appropriate mitigation measures into both the design of the scheme and the way in which it is constructed.
- 6.4.2. The main steps in the assessment process that are included in the EIA Report for the Proposed Varied Development have been:
- Baseline surveys (where appropriate) to provide updated information on the existing environmental character of the Proposed Varied Development site and the surrounding area.
 - Consideration of the possible interactions between the Proposed Varied Development and the existing and predicted future site conditions. These interactions or effects are assessed using criteria based on accepted guidance and best practice.
 - Using the outline design parameters for the Proposed Varied Development, prediction of the environmental effects, including direct, indirect, cumulative, short, medium and long-term, permanent and temporary, beneficial and adverse effects.

- Using findings as an iterative process to incorporate within the design evolution of the proposal to provide an optimum design with regard to the environment and renewable energy generation.
- Identification of mitigation measures designed to avoid, reduce or offset adverse effects and enhance beneficial effects.
- Assessment of the significance of any residual effects after mitigation, in relation to the sensitivity of the feature impacted upon and the magnitude of the impact predicted, in line with the methodology identified below.
- Identification of any uncertainties inherent in the methods used, the predictions made, and the conclusions drawn during the course of the assessment process.
- Reporting of the results and describing with an assessment of the likely significant effects of the Proposed Varied Development in this EIA Report; and
- Comparing the environmental effects between the Consented Development and the Proposed Varied Development.

Assessment of Effects

- 6.4.3. Throughout the assessment, a distinction has been made between the term 'impact' and 'effect'. The EIA Regulations refer to the requirement to report the significance of 'effects'. An impact has been defined as the physical change of the characteristics of the receiving environment as a result of the Proposed Varied Development (e.g. noise from turbines). The level of impact together with the sensitivity of the receiving environment are considered and a judgment as the overall level of effect is made. For the purposes of the EIA Report an effect is found either to be significant or not significant. These terms have been adopted throughout this EIA Report to present a consistent approach to the assessment and evaluation of effects and their significance.
- 6.4.4. The exception to this is the Landscape and Visual Impact Assessment which classifies the level of physical and perceptual change to the receiving environment as the 'magnitude of change' in line with the recommendations of the Guidelines for Landscape and Visual Impact Assessment third edition (GLVIA3) (Landscape Institute & IEMA [now ISEP], 2013). However, this terminology should be considered interchangeable with 'magnitude of impact' and should be regarded as having the same meaning.
- 6.4.5. Within this EIA Report, the assessment of effects for each environmental topic takes into account the environmental impacts of the construction, operational and decommissioning phases of the Proposed Varied Development, the cumulative impacts with other wind farm developments; and how the environmental baseline is expected to evolve in the absence of the Proposed Varied Development (the do-nothing scenario). It is considered that in the 'do-nothing' scenario, the consent for the Consented Development would remain unchanged and be implemented by the Applicant. A comparison of the environmental effects between the Consented Development and the Proposed Varied Development are set out in each technical chapter.

6.4.6. In order to determine whether or not the potential effects of the Proposed Varied Development are likely to be 'significant' a number of criteria are used. These significance criteria vary between topics but generally include:

- international, national and local designations or standards;
- relationship with planning policy;
- sensitivity of the receiving environment;
- magnitude of impact;
- reversibility and duration of the effect; and
- inter-relationship between effects.

6.4.7. Effects that are considered to be significant are identified within the EIA Report. The significance of the resultant effect is informed by professional judgement as to the importance or sensitivity of the affected receptor(s) and the nature and magnitude of the predicted changes. For example, a high magnitude of impact on a low sensitivity receptor will have an effect of lesser significance than the same impact on a high sensitivity receptor. **Table 6.1** is used as a guide to demonstrate the relationship between the sensitivity of the identified receptor and the anticipated magnitude of an impact. Professional judgement is, however, equally important in verifying the suitability of this guiding 'formula' to the assessment of the significance of each individual effect. Therefore, the table may change between technical assessments (**Chapters 7 to 18**).

Table 6.1 – Guide to the Inter-Relationship between Magnitude of Impact and Sensitivity Receptor

		Sensitivity of Receptor / Receiving Environment to Change			
		High	Medium	Low	Negligible
Magnitude of Impact	High	Major	Moderate to Major	Minor to Moderate	Negligible
	Medium	Moderate to Major	Moderate	Minor	Negligible
	Low	Minor to Moderate	Minor	Negligible to Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

6.4.8. The following terms are used in the EIA Report, unless otherwise stated, to determine the level of effects predicted to occur:

- **major** beneficial or adverse effect – where the Proposed Varied Development would result in a large improvement (or deterioration) to the existing environment;

- **moderate** beneficial or adverse effect – where the Proposed Varied Development would result in a medium improvement (or deterioration) to the existing environment;
- **minor** beneficial or adverse effect – where the Proposed Varied Development would result in a small improvement (or deterioration) to the existing environment; and
- **negligible** – where the Proposed Varied Development would result in no discernible improvement (or deterioration) to the existing environment.

6.4.9. Using professional judgement and with reference to relevant guidance, the majority of the assessments within this EIA Report consider effects of moderate or greater significance to be significant in EIA Regulation terms, with those of moderate significance or less to be non-significant. If there are deviations from this these will be clearly stated within the individual technical chapters and assessments.

6.4.10. The EIA will highlight any new significant effects introduced as a result of the Proposed Varied Development, as well as any change in intensity of existing effects presented for the Consented Development to a significant level.

6.4.11. Summary tables are provided at the end of each technical chapter of the EIA Report (**Chapters 7 to 18**) that outline:

- the predicted effects associated with an environmental issue;
- the appropriate mitigation measures required to address these effects;
- the subsequent overall residual effects; and
- any change to the assessment conclusions for the Consented Development.

6.4.12. Distinction has also been made between direct and indirect, short and long term, permanent and temporary effects. These are considered as relevant to findings of major/moderate/ minor/ negligible effects as part of the exercise of professional judgement.

Cumulative Effects

6.4.13. Part 5 of Schedule 4 of the EIA Regulations sets out the matters that require to be incorporated within EIA Reports. The EIA Regulations state that EIA Reports should include an assessment of “*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*”.

6.4.14. Cumulative effects are those which result from incremental changes caused by past, present or reasonably foreseeable future actions resulting from the introduction of the Proposed Varied Development. These cumulative effects cover the combined effect of individual impacts from the Proposed Varied Development and combined impacts of several developments, as noted within the guidance document ‘Assessing the Cumulative Impact of Onshore Wind Energy Developments’ (NatureScot, 2021). Developments considered in addition to the Proposed Varied Development are existing and other

proposals, covering all major developments, including other wind farms, and the proposed Lorg Wind Farm 132 kV grid connection (refer to **Chapter 2: Site Description**).

- 6.4.15. The cumulative context of the site has changed since the assessments in support of the Consented Development were completed, and an updated review of cumulative developments has been undertaken for the Proposed Varied Development. The key cumulative wind farm developments considered are shown within **Figure 8.20**. However, the nature, scale, and distance from the Proposed Varied Development of other developments considered, are specific to each technical assessment topic and how cumulative effects may arise in relation to that topic. Therefore, not all of the cumulative wind farm developments shown in **Figure 8.20** have been considered in each technical assessment. Each technical assessment chapter (**Chapters 7 to 18**) contains more information on the other developments considered in the topic-specific cumulative assessments, with the associated rationale.

Residual Effects

- 6.4.16. Residual effects of the Proposed Varied Development are those effects that remain after implementation of the identified mitigation and enhancement measures.
- 6.4.17. Considering the proposed mitigation and enhancement measures, the predicted effects will be re-evaluated to determine the residual impacts. Each technical assessment identifies the residual effects and evaluates whether they are significant in terms of the EIA Regulations.
- 6.4.18. A summary of overall residual effects is provided in **Chapter 20**.

6.5. Scope of the EIA Report

Technical Scope

- 6.5.1. The technical scope of the assessment will cover all the impacts mentioned in **Table 6.3** below, with the following exceptions relating to technical topics where these have been scoped out of the EIA, as agreed with consultees through the EIA Scoping process (refer to the Scoping Opinion included as **Appendix 6.2**).

Socio Economics, Recreation and Tourism

- 6.5.2. As outlined in the Scoping Report, socio-economic, tourism and recreation analysis of onshore wind farms over the last decade have found no adverse effects assessed as significant in terms of the EIA Regulations. This includes the analysis of the Consented Development, which found no significant adverse effects. There is no reason to expect significant effects for the Proposed Varied Development.
- 6.5.3. Nonetheless, it is acknowledged that NPF4 has introduced the requirement for energy developers to demonstrate how their projects will maximise net economic impacts, and it is recognised that socio-economic and tourism issues will be of interest to stakeholders and local authorities. As such, a standalone Economic Impact Report has been submitted with the application which does not form part of the EIA Report.

Telecommunications

- 6.5.4. Consultation has been undertaken with the telecommunication link operators, shown in **Appendix 6.5** and as no impacts were identified through this consultation process, telecommunication impacts are scoped out of further assessment. Further consultation has been undertaken to confirm the conclusion of no anticipated effects, based on the final turbine layout for the Proposed Varied Development. A summary of the consultation responses is outlined in **Table 6.2**.

Table 6.2 - Telecommunications Consultation

Consultee	Consultation Response
Airwaves (May 2024)	The Proposed Varied Development will not present a problem to Airwave Microwave Radio Links or Tetra Radio Network Coverage in the region. Airwave has no objection to the wind farm development at Shepherds' Rig.
Arqiva (February 2026)	The Proposed Varied Development will not cause any interference with Arqiva's network. The nearest Arqiva asset is located approximately 17 km from the Proposed Varied Development.
Atkins Global (February 2026)	Confirmation that the Proposed Varied Development will not cause any interference with Atkin's network
BT (March 2026)	BT acknowledges that the Proposed Varied Development should not cause interference with its current and presently planned radio network.
EE (February 2026)	The Proposed Varied Development has no infringement issues with the EE/3UK mobile microwave network.
Joint Radio Company (JRC) (February 2026)	The Proposed Varied Development is cleared with respect to radio link infrastructure operated by the local energy networks. JRC does not foresee any potential problems based on known interference scenarios.
Met Office (March 2026)	Confirmation the Proposed Varied Development will not cause any interference with any potential fixed wireless links or scanning telemetry links.
Vodafone (March 2026)	Confirmation that the Proposed Varied Development will not cause any interference with Vodafone's network.

Utilities

- 6.5.5. Scottish Water and Scottish Power Energy Networks (SPEN) were previously consulted in regard to the Consented Development. No assets were identified within the site or deemed to be impacted by the Consented Development, and this conclusion is considered to remain applicable for the Proposed Varied Development.
- 6.5.6. Any underground services, including water, electrical and gas infrastructure, will be identified through a standard pre-construction utilities survey so as to avoid disruption. Further assessment of effects on utilities has therefore been scoped out of the EIA.

Air Quality

- 6.5.7. Local air quality during construction (dust and vehicle emissions) will be appropriately controlled through good practice in construction as outlined in **Chapter 4: Description of the Proposed Varied Development** of this EIA Report. This will also be set out in a Construction Environmental Management Plan (CEMP). An outline CEMP is provided in **Appendix 4.1**. These effects are therefore not considered likely to be significant and assessment of effects on local air quality during construction has been scoped out of the EIA. No significant atmospheric emissions are likely to arise as a result of the operation of the Proposed Varied Development, and assessment of effects on local air quality during operation has therefore also been scoped out.

Major Accidents and Disasters

- 6.5.8. The Proposed Varied Development is not located within an area with a history of natural disasters such as extreme weather events, and the construction and operation of the Proposed Varied Development would be managed within the requirements of a number of health and safety regulations. It is considered there is a minimal risk of major accidents and / or disasters occurring as a result of the Proposed Varied Development and this has therefore been scoped out of further assessment within the EIA.

Health and Safety, Human Health and Population

- 6.5.9. Health and Safety risks were considered as part of the EIA for the Consented Development, where it was assessed that the overall risk of health and safety is considered negligible and not significant in terms of the EIA Regulations. It is not considered that the Proposed Varied Development would cause any additional health and safety risks over that already deemed negligible.
- 6.5.10. No significant health and safety effects have been identified with respect to construction and operation of the Proposed Varied Development, which would not be appropriately mitigated through good practice during construction and adherence to relevant legislation and guidance. Infrastructure including roads and properties have been appropriately buffered and are sufficiently separated from the proposed turbine locations to limit any potential health and safety concerns. Therefore, further assessment of health and safety effects has been scoped out of the EIA.

Spatial Scope

- 6.5.11. The spatial scope of the EIA, i.e., the geographical coverage of the assessment undertaken, has taken account of a number of factors, in particular:
- the extent of the Proposed Varied Development, as defined by the planning application boundary (refer to **Figure 1.1**);
 - the nature of the baseline environment, sensitive receptors and the likely impacts that could arise; and
 - the distance over which predicted effects are likely to remain significant and, in particular, the existence of pathways which could result in the transfer of effects to a wider geographical area than the extent of the proposed physical works.

Temporal Scope

- 6.5.12. The baseline years used for the assessment of environmental effects are 2023 to 2026, as this is the period in which the baseline environmental surveys were undertaken. Where appropriate and valid, reference has been made to data gathered in support of the Consented Development's application, agreed with relevant consultees.
- 6.5.13. For the purposes of the EIA, construction is expected to last for 21 months. Consent is being sought for an operational lifespan of 40 years from the date of commissioning the turbines. For the purposes of the EIA, it is assumed that the Proposed Varied Development will be decommissioned unless further consents to extend operational life are sought.
- 6.5.14. For construction effects, the assessment takes into account the time of day that works are likely to be undertaken, for example if any night-time working is required to minimise disruption to road users.

Existing Planning Conditions

- 6.5.15. The Consented Development was granted Section 36 consent and deemed planning permission from Scottish Ministers in August 2023 following Public Inquiry. Annex 2 of the Shepherds' Rig Wind Farm (the Consented Development) Decision Letter outlines the 37 conditions attached to the deemed planning permission.
- 6.5.16. These conditions will be referenced and discussed where relevant within the relevant technical chapters of this EIA Report.

6.6. EIA Report

- 6.6.1. Regulations 4 and 5 and Schedule 4 of the EIA Regulations specifies the 'information for inclusion in Environmental Impact Assessment Reports'. **Table 6.3** below details where the information has been provided within the EIA Report.

Table 6.3 – Information Included in the EIA Report

EIA Regulations	Required Information (EIA Regulations)	Relevant Reference within this EIA Report
Regulation 4	(2) The environmental impact assessment must identify, describe and assess in an appropriate manner, in light of the circumstances relating to the proposed development, the direct and indirect significant effects of the proposed development (including, where the proposed development will have operational effects, such operational effects) on the factors specified in paragraph (3) and the interaction between those factors.	The EIA Report includes an assessment of the direct and indirect effects of the Proposed Varied Development during construction and operation (refer to Chapters 7 to 18).
	(3) The factors are— -population and human health; -biodiversity, and in particular species and habitats protected under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (1) and Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds, -land, soil, water, air and climate; and -material assets, cultural heritage and the landscape.	The receptors potentially affected by the Proposed Varied Development are detailed within each of the technical chapters. Effects on population and human health are assessed in relation to visual impacts (Chapter 8), traffic (Chapter 15), private water supplies (Chapter 13), noise (Chapter 14) and shadow flicker (Chapter 17). Matters relating to socioeconomics, recreation, tourism are addressed in the standalone Economic Impact Report. Biodiversity impacts and enhancement is covered in the ecology and ornithology chapters (Chapters 9 and 10).

EIA Regulations	Required Information (EIA Regulations)	Relevant Reference within this EIA Report
		Impacts on soils and water are covered in the Hydrology and Hydrogeology chapter (Chapter 13). Detailed assessment of air quality has been scoped out as discussed in Section 6.5.7 Climate effects, including consideration of carbon savings, are assessed as reported in Chapter 18. Material assets are addressed through the assessment of cultural heritage effects (Chapter 11) and other chapters as appropriate. Landscape effects are covered in Chapter 8.
	(4) The effects to be identified, described and assessed under paragraph (2) include the expected effects deriving from the vulnerability of the development to risks, so far as relevant to the development, of major accidents and disasters.	An assessment of major accidents and/or disasters has been scoped out as detailed in Section 6.5.8 .
Regulation 5	(2) An EIA report is a report prepared in accordance with this regulation by the developer which includes (at least)— a) description of the development comprising information on the site, design, size and other relevant features of the development;	Chapter 4 of the EIA Report contains a description of the Proposed Varied Development. Chapters 7 to 18 of the EIA Report contain a description of the likely significant effects, and the measures envisaged in order to avoid, prevent, reduce or offset significant adverse effects.

EIA Regulations	Required Information (EIA Regulations)	Relevant Reference within this EIA Report
	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 subparagraphs (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.	Chapter 3 contains a description of the reasonable alternatives studied by the Applicant. A Non-Technical Summary has been included with the application.
	(3) Where a scoping opinion (or scoping direction) is issued, the EIA report must be based on that scoping opinion (or scoping direction, as the case may be), and include the information that may reasonably be required for reaching a reasoned conclusion on the significant effects of the development on the	This EIA Report is based on the Scoping Opinion (Appendix 6.2). Where changes to the scope of any surveys or assessments were considered to be reasonable, this was discussed and agreed with the relevant technical consultees. Details of relevant consultations are included in each technical chapter.

EIA Regulations	Required Information (EIA Regulations)	Relevant Reference within this EIA Report
	environment, taking into account current knowledge and methods of assessment.	
	(5) In order to ensure the completeness and quality of the EIA report— the developer/applicant must ensure that the EIA report is prepared by competent experts; and the EIA report must be accompanied by a statement from the developer/applicant outlining the relevant expertise or qualifications of such experts.	Chapter 1 contains details of the expertise and qualifications of the competent experts.
Schedule 4	1. A 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 (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including	The Proposed Varied Development is described in Chapter 4 of the EIA Report, including consideration of anticipated construction methods and the operation of the Proposed Varied Development. The land use requirements during construction and operational phases are also described in Chapter 4. Expected residues and emissions are addressed, where relevant, in the appropriate technical chapters of this EIA Report.

EIA Regulations	Required Information (EIA Regulations)	Relevant Reference within this EIA Report
	water, land, soil and biodiversity) used; d) an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases	
	2. A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.	Chapter 3 of the EIA Report describes the design iteration process and details how the Proposed Varied Development site was chosen, and the environmental constraints taken into consideration in determining the final layout which is the subject of the Application.
	3. A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.	A description of the existing environment and how it is expected to evolve in the absence of the Proposed Varied Development is provided within each technical chapter.

EIA Regulations	Required Information (EIA Regulations)	Relevant Reference within this EIA Report
	4. A description of the factors specified in regulation 4(3) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.	The receptors potentially affected by the Proposed Varied Development are detailed within each of the technical chapters. Effects on population and human health are assessed in relation to visual impacts (Chapter 8), traffic (Chapter 15), private water supplies (Chapter 13) and noise (Chapter 14). Matters relating to socioeconomics, recreation, tourism are addressed in the standalone Economic Impact Report. Biodiversity impacts and enhancement is covered in the ecology and ornithology chapters (Chapters 9 and 10). Impacts on soils and water are covered in the Hydrology and Hydrogeology chapter (Chapter 13). Material assets are addressed through the assessment of cultural heritage effects (Chapter 11) and other chapters as appropriate. Landscape effects are covered in Chapter 8.
	5. A description of the likely significant effects of the development on the environment resulting from, inter alia: a) the construction and existence of the	The predicted significant effects of the Proposed Varied Development are reported after relevant mitigation measures have been applied to an identified effect, in each of the

EIA Regulations	Required Information (EIA Regulations)	Relevant Reference within this EIA Report
	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 projects, 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 project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change; g) the technologies and the substances used. The description of the likely significant effects on the factors specified in regulation 4(3)	technical chapters of the EIA Report. Effects have been predicted in relation to both the construction / decommissioning and operational phases of the Proposed Varied Development, including the nature of these effects and their duration. The overall approach and methods used in the assessment of environmental impacts are discussed within this chapter of this EIA Report. Prediction methods are discussed in detail within each relevant technical chapter of the EIA Report. Cumulative effects are assessed for each technical topic as reported in the respective technical chapters. Climate effects, including consideration of greenhouse gas emissions and savings from the Proposed Varied Development are discussed in Chapter 18.

EIA Regulations	Required Information (EIA Regulations)	Relevant Reference within this EIA Report
	should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project, including in particular those established under Council Directive 92/43/EEC3 and Directive 2009/147/EC.	
	6. A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.	An overview of the methodology of the assessment is provided within this chapter while the individual technical chapters provide details of each technical assessment (Chapters 7 to 18) .
	7. A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided,	Specific mitigation measures and where appropriate monitoring arrangements are reported in each relevant technical section of the EIA Report and in the schedule of committed mitigation measures presented in Chapter 19 .

EIA Regulations	Required Information (EIA Regulations)	Relevant Reference within this EIA Report
	prevented, reduced or offset, and should cover both the construction and operational phases.	
	8. A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to EU legislation such as Directive 2012/18/EU(3) of the European Parliament and of the Council or Council Directive 2009/71/Euratom(4) or UK environmental assessments may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this 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 and proposed response to such emergencies.	An assessment of major accidents and/or disasters has been scoped out as detailed in Section 6.5.8.
	9. A non-technical summary of the information provided under paragraphs 1 to 8.	A Non-Technical Summary is presented as a stand-alone document.
	10. A reference list detailing the sources used for the descriptions and assessments included in the EIA report.	References are provided at the end of each chapter of the EIA Report.

6.7. Consultation

Regulatory Consultation

- 6.7.1. Consultation is a key component of the EIA process. In order to inform the EIA, there has been ongoing consultation with statutory consultees, engagement through correspondence and meetings, as required. This consultation has built upon that already undertaken for the Consented Development.
- 6.7.2. A range of consultation activities have been conducted throughout the EIA process to engage with both statutory and non-statutory consultees as well as stakeholders potentially affected by the Proposed Varied Development. The consultation has included the following key stages:
- Pre-application call with Dumfries and Galloway Council (DGC) in May 2024 to introduce the Proposed Varied Development;
 - Pre-application consultation with the Energy Consents Unit (ECU) to discuss the proposed variations and agree the suitability of a Section 36C application;
 - EIA Scoping (Scoping Report submitted June 2024);
 - EIA Gatecheck (Gatecheck Report submitted in January 2025, with an updated Gatecheck Report submitted in April 2026);
 - Written consultation with Dumfries and Galloway Council, Historic Environment Scotland (HES), the Royal Society for the Protection of Birds (RSPB) and NATS Safeguarding (NATS) during the iterative design process (May 2024 to January 2026); and
 - Online meetings with the Scottish Environment Protection Agency (SEPA) (May 2026), Dumfries and Galloway Council (December 2025), HES (November 2024) and NATS (September 2024) at various points in the Proposed Varied Development's timeline.

Pre-Scoping

- 6.7.3. Consultation commenced prior to the Scoping stage to inform the Local Authority that the Applicant would be seeking to vary consent for Shepherds' Rig Wind Farm (the Consented Development) and would shortly be submitting a request for a Scoping Opinion. This pre-application call sought to introduce the Proposed Varied Development and seek Dumfries and Galloway Council's views on the potential environmental sensitivities associated with the proposed variations.
- 6.7.4. Similarly, pre-application consultation was also undertaken with HES prior to the submission of a Scoping Report which outlined the proposed variations and requested feedback on the turbine layout presented in the Scoping Report.

Scoping

- 6.7.5. The Scoping process aimed to identify key environmental issues early on, determine which aspects of the proposal might cause significant environmental effects, and pinpoint issues that could be excluded from the assessment. A Scoping Report was submitted to the ECU in July 2024 (**Appendix 6.1**) and a Scoping Opinion was received in November 2024 (**Appendix 6.2**). This process established the necessary work for preparing the EIA Report.

Post Scoping

- 6.7.6. Following receipt of the Scoping Opinion, the Applicant prepared and submitted a Gatecheck Report to the ECU in January 2025. This report provides an overview of the issues raised by the consultees during the Scoping process and provided commentary on how these issues would be addressed within the EIA Report. The Gatecheck Report is provided as **Appendix 6.3**.
- 6.7.7. Given the time that had passed since the Gatecheck Report submission, the Applicant submitted an updated Gatecheck 1 Report to the ECU in April 2026 (**Appendix 6.4**) to provide consultees with a consolidated update on the status of the Proposed Varied Development, including information on further design iteration and consultation undertaken. This consultation included a further meeting with DGC in December 2025 and written correspondence with HES in January 2026 to provide an update on the Proposed Varied Development and to invite comment on the proposed scope of forthcoming EIA works and design changes.
- 6.7.8. Consultation with organisations who were contacted either directly by the Applicant or by the ECU through the formal EIA process, is described as appropriate in each technical chapter of this EIA Report and included within **Appendix 6.5**. Further information about public consultation is outlined below.

Public Consultation

- 6.7.9. The Applicant contacted the community councils and a number of individuals local to the Proposed Varied Development site in advance of progressing to the scoping stage to seek their opinion on the Proposed Varied Development and advise that the EIA progress was once again being initiated.
- 6.7.10. Community open days were held in September 2024, March 2025 and March 2026 which provided an introduction to, and update on, the Proposed Varied Development and highlighted some of the main issues being considered. A Zone of Theoretical Visibility and a number of photomontages from key local viewpoints were included in the exhibition material, as well as a detailed overview of the variations being proposed and how the Proposed Varied Development would differ from the Consented Development. Members of the project team were on hand to answer any questions.
- 6.7.11. The Applicant has been engaged in dialogue with the local community council and residents since the Shepherds' Rig Wind Farm project was originally launched in 2013. Community consultation is at the centre of the Applicant's approach to development, not

only in the pre-application stage, but also throughout the life of the project. This is delivered through direct (either in-person or virtual) contact with local community councils, an online consultation website (www.shepherdsrigwindfarm.co.uk), a freephone telephone number (0800 980 4299), dedicated project email address (info@shepherdsrigwindfarm.co.uk), newsletters, Community Open Days (or virtual events) and advertisements/editorial in local newspapers.

- 6.7.12. A stand-alone Pre-Application Consultation (PAC) Report has been prepared which gives details of the correspondence, online and in-person public consultation and other discussions which have taken place with the communities closest to the Proposed Varied Development site. The PAC Report also details findings of that work and illustrates the ways in which community engagement has helped identify potential issues arising from the emerging development proposal, and where appropriate, shape the final proposal which is now the subject of an application for Section 36C consent.
- 6.7.13. The Applicant is grateful to residents and local representatives for their input into the pre-application community engagement process and for their participation in the discussions.

6.8. Consideration of Alternatives

- 6.8.1. Paragraph 5(2)(d) and Schedule 4 of the EIA Regulations requires the consideration of alternatives and an indication of the reasons for selecting the site, except where limited by constraints of commercial confidentiality.
- 6.8.2. The Applicant considered a number of design iterations over a five-year period before reaching the finalised design of the Consented Development. The process of site selection and design evolution for the Consented Development was outlined in Chapter 3 of the EIA Report (November 2018) and Chapter 3 of the AEI Report (December 2019). The site boundary for the Proposed Varied Development remains the same as the Consented Development and the content of these chapters remain valid.
- 6.8.3. The Applicant considered a number of alternative layouts for the Proposed Varied Development, to arrive at the design for which consent is sought. A full description of the iterative design process is provided in **Chapter 3: Alternatives and Scheme Evolution** of this EIA Report, and the rationale behind the proposed variations presented in **Chapter 1: Introduction**.

6.9. Assumptions, Limitations and Uncertainty

- 6.9.1. The EIA process is designed to provide sufficient environmental information to enable informed decision making based on the best available information about the potential environmental effects of a proposed development. However, there will always be some uncertainty inherent in the scale and nature of the predicted environmental effects as a result of the level of detailed information available at the time of assessment, the potential for minor alterations to the Proposed Varied Development following completion of the EIA Report and/or the limitations of the prediction processes.
- 6.9.2. A number of assumptions were made during the EIA process and are detailed below:

- The principal land uses adjacent to the site remain unchanged during the course of the Proposed Varied Development's lifetime.
- Current operational, consented and under construction wind energy projects are included within the assessment of cumulative effects for each technical aspect.
- Information provided by third parties (including publicly available information and databases) is correct at time of submission.

6.9.3. Further to this, more specific assumptions have been made with regard to the individual technical aspects and are detailed within each technical chapter.

6.9.4. The main limitation to the assessment has been that while the baseline conditions have been assumed to be accurate at the time of surveying, due to the dynamic nature of the environment, these conditions may change during site preparation, construction and operation.

6.9.5. There is also the potential for a degree of necessary flexibility as certain aspects of the Proposed Varied Development may be subject to change until a detailed design has been finalised. The maximum design envelope has been considered to ensure a robust assessment and any design flexibility will not exceed these. This flexibility can come in the forms of:

- turbine selection;
- foundation and infrastructure design; and
- micro-siting of the turbines and associated infrastructure which may be required due to investigation findings or implementation of mitigation measures.

6.9.6. Any limitations to the EIA are summarised in each technical chapter, where relevant, together with the means proposed to mitigate these.

6.9.7. Information on the construction of the Proposed Varied Development has been developed by the project team based on professional judgement and outline design works, on the most likely methods of construction, plant, access routes and working areas etc. for the purposes of the EIA. The final choice of optimum construction methods will rest with the Contractor and may differ from those used in this assessment, with any such uncertainty stated in the EIA Report. Any changes to these methods will remain within the maximum design envelope.

6.10. Summary

6.10.1. This Chapter has detailed the methodology used to prepare the EIA Report for the Proposed Varied Development. An overview of the relevant legislation and guidance documents has been provided with the main legislative document being *The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended)*. The Chapter has provided an explanation of the EIA Report preparation process, the

consultation undertaken, and how the scope of the assessment has been agreed. General assumptions, limitations and uncertainties are also stated.

References

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Abbreviations

Abbreviations	Definition
AEI	Additional Environmental Information
CEMP	Construction Environmental Management Plan
DGC	Dumfries and Galloway Council
ECU	Energy Consents Unit
EIA	Environmental Impact Assessment
GIS	Geographical Information System
GLVIA3	Guidelines for Landscape and Visual Impact Assessment Third Edition
HES	Historic Environment Scotland
NPF4	National Planning Framework 4
NATS	NATS Safeguarding
NTS	Non-Technical Summary
PAC	Pre-Application Consultation
SEPA	Scottish Environment Protection Agency
SPEN	Scottish Power Energy Networks