

4 Approach to EIA

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4 Approach to EIA

4.1 Executive Summary

4.1.1 This chapter of the EIA Report sets out the broad approach taken to produce the EIA for the Proposed Development. It also includes details of the consultation undertaken.

4.2 Introduction

4.2.1 The EIA process assists The Highland Council (THC) in their determination of the application by identifying where significant environmental effects (beneficial or adverse) are predicted. This assessment has been completed in conjunction with consultation with statutory consultees, interested parties and the general public.

4.2.2 The structure of the EIA Report follows the requirements of Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended) (Scottish Government, 2017), and other relevant good practice guidance. The EIA Report comprises two main components, a Non-Technical Summary (NTS) and the main EIA Report text, figures and technical appendices.

4.2.3 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;
- mitigation measures;
- enhancement; and
- the assumptions made, limitations encountered and uncertainty.

4.2.4 This chapter is linked to the following appendices:

- Appendix 4.1: EIA Scoping Report (February 2018)
- Appendix 4.2: THC EIA Scoping Opinion (April 2018)
- Appendix 4.3: Cross-reference of the EIA Scoping Opinion in the EIA Report;
- Appendix 4.4: Additional EIA Consultation Responses;
- Appendix 4.5: Pre-Application Report;
- Appendix 4.6: Shadow Flicker;
- Appendix 4.7: Disasters and Accidents; and
- Appendix 4.8: Proposal of Application Notice (August 2020).

4.3 Legislation, Policy and Guidelines

4.3.1 During the EIA, a number of legislative and best practice documents have informed the process.

4.3.2 The Proposed Development comprises 'EIA Development' as defined in the EIA Regulations on the basis that it falls within Schedule 2 to the EIA Regulations and is a development likely to have significant effects on the environment by virtue of factors such as its nature, size or location. Specifically it is an installation for the harnessing of wind power for energy production (wind farm)

which involves more than 2 turbines the height of which exceeds 15 m. The criteria for considering whether a Schedule 2 development requires the preparation of an EIA is set out in Schedule 3 of the EIA Regulations, and the Applicant has accepted that an EIA is required. Regulation 4 of the EIA Regulations details the EIA process while Regulation 5 and Schedule 4 of the EIA Regulations provides details of the information to be included within the EIA Report.

4.3.3 In addition to the EIA Regulations the Government Regulations and best practice guidance which have been followed to undertake the EIA include those referred to below:

- The Town and Country Planning Act (Scotland) 1997;
- The Town and Country Planning (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020;
- Scottish Planning Policy (Scottish Government, 2014);
- Planning Circular 1/2017 Environmental Impact Assessment Regulations (Scottish Government, 2017c);
- Guidelines for Environmental Impact Assessment, Institute of Environmental Management and Assessment (IEMA, 2006);
- Good Practice during Wind Farm Construction Version 4 (Scottish Natural Heritage (SNH), Scottish Environment Protection Agency (SEPA), Scottish Renewables, Forestry Commission Scotland (FCS), Historic Environment Scotland (HES), Marine Scotland Science (MSS), 2019);
- A Handbook on Environmental Impact Assessment Version 5 (SNH, 2018); and
- Assessing the Cumulative Impact of Onshore Wind Energy Developments, (Scottish Natural Heritage, 2012).

4.4 The EIA Process

Overall EIA Process

4.4.1 For the EIA process to be as effective and robust as possible it should be used as an iterative process throughout the design stage, rather than a single assessment performed once the design is finalised.

4.4.2 The findings of the EIA are presented in this EIA Report, which has been prepared in accordance with the EIA Regulations.

4.4.3 The approach followed in undertaking the EIA is presented in this chapter and the detailed methodology adopted for each technical study is provided within the respective EIA Report technical chapters (Chapters 6 to 16).

Screening

4.4.4 Screening is the process by which it is determined whether an EIA should be conducted for the Proposed Development.

4.4.5 A formal screening opinion has not been sought from THC, since the Applicant accepted that an EIA is required.

Scoping

4.4.6 The EIA scoping process is undertaken to identify potentially significant environmental impacts that should be considered when assessing the potential effects of the Proposed Development. An EIA Scoping Opinion may be obtained from the Planning Authority which would set out the matters that should be considered through the EIA.

- 4.4.7 The Applicant, via their agent, requested an EIA Scoping Opinion from THC in February 2018, through the submission of an EIA Scoping Report (refer to Appendix 4.1), as prepared by the EIA Team. This EIA Scoping Report contained details of the site baseline, the Proposed Development, the environmental impacts which would be assessed in the EIA, and the assessment methodologies that would be used.
- 4.4.8 THC Scoping Opinion was issued on the 1st of March 2018.
- 4.4.9 The EIA Report has been based on the 2018 Scoping Opinion that has been received (refer to Appendix 4.2 and Appendix 4.3).

Consultation

- 4.4.10 Throughout the EIA process the Applicant has undertaken consultation with statutory consultees (e.g. NatureScot, Scottish Environment Protection Agency (SEPA), Historic Environment Scotland (HES)) and non-statutory consultees (e.g. telecommunication operators, ScotWays, local residents) to collate baseline information, agreed survey/assessment methodology where appropriate and to provide updates on the progress of the application. This consultation has been undertaken formally through EIA screening and scoping processes, through the THC pre-application consultation process, or informally through direct liaison with consultees (refer to Appendices 4.2, 4.4 and 4.5, and section 4.7 of this chapter).

EIA

- 4.4.11 EIA is the systematic process of compiling, assessing and presenting all the significant environmental effects of a proposed development. The assessment is used 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 incorporation of appropriate mitigation measures into both the design of the scheme and the way in which it is constructed.
- 4.4.12 The main steps in the EIA assessment process for the Proposed Development have been:
- Baseline surveys (where appropriate and where possible) to provide information on the existing environmental character of the proposed site and the surrounding area.
 - Consideration given to the possible interactions between the Proposed Development and existing and predicted future site conditions and the environment. These interactions or effects are assessed using stated criteria based on accepted guidance and best practice.
 - Using the outline design parameters for the Proposed Development, prediction of the likely environmental effects, including direct effects and any indirect, secondary, short, medium and long-term, permanent and temporary, beneficial and adverse effects.
 - Identification of mitigation measures designed to avoid, reduce or offset adverse effects as well as enhancement measures that could result in beneficial effects. Assessment of alterations to the design and the reassessment of previously proposed mitigation to establish suitable mitigation for the Proposed Development.
 - 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 effect 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 of the EIA in this EIA Report.
- 4.4.13 The EIA process is iterative, such that the findings have informed the design evolution of the Proposed Development.

Assessment of Effects

- 4.4.14 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 is defined as the likely change to the characteristics / nature of the receiving environment as a result of the Proposed Development (e.g. noise from turbines), whereas the 'effect' relates to the significance of the impact upon a receptor (e.g. a significant residual noise effects on residential properties). These terms have been adopted throughout this EIA to present a consistent approach to the assessment and evaluation of effects and their significance.
- 4.4.15 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). However, this terminology should be considered interchangeable with 'magnitude of impact'.
- 4.4.16 Within the EIA Report, the assessment of effects for each environmental topic takes into account the environmental impacts of construction, operational and decommissioning phases (where relevant) of the Proposed Development and the environmental impacts should the Proposed Development not be consented (the 'do-nothing' scenario).
- 4.4.17 In order to determine whether or not the potential effects of the Proposed 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.
- 4.4.18 Effects considered to be significant, prior to mitigation but following the implementation of best practice, are identified within the EIA Report. The significance attributed to the resultant effect is informed by professional judgement on the sensitivity of the affected receptor(s) and the nature and magnitude of the predicted changes/impacts. For example, a major adverse change/impact on a feature or site of low importance will have an effect of lesser significance than the same impact on a feature or site of high importance. Table 4.1 below is used as a guide to the relationship between the sensitivity of the identified receptor and the anticipated magnitude of an impact/change. Professional judgement is however equally important in establishing the suitability of this guiding 'formula' to the assessment of the significance of each individual effect.

Table 4.1 - Guide to the Inter-Relationship between Magnitude of Impact and Sensitivity of Receptor

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

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

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

4.4.20 Using professional judgement and with reference to the Guidelines for Environmental Impact Assessment (IEMA, 2004), the majority of assessments within this EIA Report consider effects of moderate, moderate to major and major to be significant, while those of minor to negligible significance to be non-significant. If there are deviations from this these will be clearly stated within the individual technical chapters (for example some chapters simply identified effect or no effect).

4.4.21 Summary tables that outline the predicted effects associated with an environmental issue, the appropriate mitigation measures required to address these effects and subsequent overall residual effects are provided at the end of each technical chapter of the EIA Report. Distinction has also been made between direct and indirect, short and long term, permanent and temporary, beneficial and adverse effects where applicable.

Cumulative Effects

4.4.22 Paragraph 5 of Schedule 4 of The EIA Regulations sets out the matters that must 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*”.

4.4.23 Cumulative effects are those which result from incremental changes caused by past, present or reasonably foreseeable future actions and developments resulting from the introduction of the Proposed Development. These cumulative effects cover the combined effect of individual impacts from the Proposed Development and combined impacts of the Proposed Development with other developments, as noted within the guidance provided by NatureScot (formerly SNH) in the document “Assessing the Cumulative Impact of Onshore Wind Energy Developments” (2012). Developments considered in addition to the Proposed Development are existing and other proposals, covering all developments, including other wind farms (SNH, 2012).

4.4.24 As noted in Chapter 3 of this EIA Report, the extensive list of cumulative developments has been discussed and agreed with NatureScot and THC. Further detailed discussion on the approach to cumulative assessment is presented in each technical assessment chapter as relevant.

Mitigation and Monitoring Measures

- 4.4.25 The EIA Regulations require the EIA to present a description of the measures proposed to avoid, reduce and, if possible, offset significant adverse effects. Wherever reasonably practicable, mitigation measures are proposed for each significant environmental effect predicted, and can take various forms including:
- changes to the Proposed Development design;
 - physical measures applied on site; and
 - measures to control particular aspects of the construction or operation of the Proposed Development.
- 4.4.26 Where none of the above are deemed practicable, the detailed Proposed Development design will be required to include measures to offset any significant adverse effects. Monitoring measures are designed to examine the mitigation measures to ensure that they have the desired outcomes.
- 4.4.27 Mitigation measures and monitoring requirements are presented as commitments in order to ensure a level of certainty as to the environmental effects of the Proposed Development. There are various ways in which a level of certainty can be ensured, including the use of planning conditions. The Applicant and its contractors; by the imposition of conditions or entering into of planning obligations; will be committed to implementing all mitigation measures and monitoring requirements identified in this EIA Report.
- 4.4.28 A schedule of all the mitigation measures and monitoring requirements proposed in this EIA Report is presented in Chapter 17.

Enhancement

- 4.4.29 Where opportunities for environmental enhancement are proposed, these have been included in the summary of environmental commitments reported at the end of each Technical Chapter, and in Chapter 17.

4.5 Scope of the EIA

Technical Scope

- 4.5.1 The technical scope of the assessment will cover all the impacts agreed through the EIA Scoping process as outlined above, and further consultation (refer to Appendix 4.1-4.5). As agreed with the planning authority; the following technical areas have been scoped out of the EIA:

Health and Safety

- 4.5.2 No significant health and safety effects have been identified with respect to construction and operation of the Proposed Development, which would not be appropriately mitigated through good practice in construction and adherence to relevant legislation and guidance, as noted in Sections 3.5 and 3.6 of this EIA Report. Infrastructure including roads and properties have been appropriately buffered and are sufficiently separated from the proposed turbine locations to mitigate potential health and safety risks. Consequently, further assessment of health and safety effects has been scoped out of the EIA.

Services

- 4.5.3 There is one communication link operated by Airwave which crosses the north-eastern corner of the site. Potential impacts upon this link are discussed in Chapter 15 – Telecommunications.
- 4.5.4 An overhead line runs parallel to the southern boundary of the site. Following consent, the Applicant will liaise with the service provider to ensure the protection of the overhead line throughout construction. Any other above and underground services close to the site boundary, including water, electrical and gas infrastructure, will be identified through a standard pre-construction utilities

survey to avoid disruption. Further assessment of effects on utilities has therefore been scoped out of the EIA.

Shadow Flicker

- 4.5.5 In consultation with THC, shadow flicker has been scoped out of the assessment due to the lack of receptors within the shadow flicker study area. Full details of this are provided in Appendix 4.6.

Accidents and Disasters

- 4.5.6 An assessment of accidents and disasters has been scoped out as detailed in Appendix 4.7.

Air Quality

- 4.5.7 The EIA Scoping Opinion requested that the EIA consider existing air quality.
- 4.5.8 The Proposed Development is not within an Air Quality Management Area (AQMA) and the closest AQMA is in Inverness. The Local Authority Quality Management Annual Progress Report 2019 (THC, 2019) does not identify any relevant locations outside the Inverness AQMA with potential or actual exceedances.
- 4.5.9 The Proposed Development does not exceed the Institute of Air Quality Management (IAQM) Land Use Planning and Development Control: Planning for Air Quality's (IAQM, 2017) criteria for requiring an air quality assessment (more than 500 light duty vehicles Annual Average Daily Traffic (AADT) or 100 heavy duty vehicle AADT).
- 4.5.10 Although fugitive emissions of airborne particulate matter (dust) may be created during construction of the Proposed Development these would be controlled through legislation (e.g. Pollution Act) and standard best practice (e.g. as outlined by Institute of Air Quality Management Guidance on the Assessment of Dust from Demolition and Construction (IAQM, 2016)) which would be detailed in the Construction Environmental Management Plan (CEMP) (refer to Appendix 3.3). In accordance with the guidance, no impacts are anticipated following the implementation of the mitigation, thus no assessment is required and no significant effects are anticipated.
- 4.5.11 Therefore, assessment of air quality has been scoped out of the EIA.

Sunlight

- 4.5.12 The EIA Scoping Opinion requested that the EIA address qualities of the local environment, including sunlight. The Applicant presumes that EIA Scoping Opinion refers to potential reflection of sunlight from the turbine blades. Turbine suppliers use a matt finish for turbine blades which minimises reflection of sunlight. In addition, blades are convex, thus any reflected light is dispersed rather than reflected in a single direction, thereby reducing glint and glare.
- 4.5.13 Therefore, assessment of sunlight has been scoped out of the EIA.

Spatial Scope

- 4.5.14 The spatial scope of the EIA, in other words the geographical coverage of the assessment undertaken, has taken account of a number of factors, in particular:
- the extent of the Proposed Development (refer to Figure 1.2);
 - 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 proposed physical works.
- 4.5.15 Within each technical chapter the spatial scope with regards to the study area of the specific chapter is identified.

Temporal Scope

- 4.5.16 The baseline years used for the assessment of environmental effects is 2013-2020, as these are the years in which the assessment work was undertaken.
- 4.5.17 For the purposes of the EIA, construction is assumed to commence in 2022 and is expected to last for a period of up to 12 months. For construction effects, the assessment also 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.
- 4.5.18 The Applicant is seeking planning permission for a 30 year period. Following this period, the Proposed Development will be decommissioned over a period of six months. Should the Applicant wish to extend the lifespan of the Proposed Development a new application will need to be submitted and consented.

4.6 EIA Report

- 4.6.1 The EIA Regulations 4 and 5 and Schedule 4 sets out the information required to be included within the EIA Report, as summarised in Table 4.2.

Table 4.2 – Information Required 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 Development during construction and operation (refer to Chapters 6 -16).
	(3) The factors are— (a) population and human health; (b) 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(2); (c) land, soil, water, air and climate; and (d) material assets, cultural heritage and the landscape	The receptors potentially affected by the Proposed Development are detailed within each of the technical chapters. Effects on population and human health are assessed in relation to traffic, noise and shadow flicker. Biodiversity is covered in the ecology and ornithology chapters. Impacts on the water environment are covered in the hydrology, hydrogeology and geology chapter. Material assets are addressed through the assessment of cultural

EIA Regulations	Required Information (EIA Regulations)	Relevant Reference within this EIA Report
	(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.	heritage effects and other chapters as appropriate. Appendix 4.7 assesses the vulnerability of the Proposed Development to major accidents and disasters.
Regulation 5	(2) An EIA report is a report prepared in accordance with this regulation by the developer which includes (at least)— (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.	Chapter 3 of the EIA Report contains a description of the Proposed Development. Chapters 6 - 16 of the EIA Report contains a description of the likely significant effects and the measures envisaged in order to avoid, prevent, reduce or offset significant adverse effects. Chapter 2 contains a description of the reasonable alternative's studies by the Applicant. A Non-Technical Summary has been included with the application.

EIA Regulations	Required Information (EIA Regulations)	Relevant Reference within this EIA Report
	<p>(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 environment, taking into account current knowledge and methods of assessment.</p>	<p>The EIA and EIA Report is based on the EIA scoping opinion.</p>
	<p>(5) In order to ensure the completeness and quality of the EIA report—</p> <p>(a) the developer must ensure that the EIA report is prepared by competent experts; and</p> <p>(b) the EIA report must be accompanied by a statement from the developer outlining the relevant expertise or qualifications of such experts.</p>	<p>Chapter 1 contains details of the expertise and qualifications of the competent experts.</p>
<p>Schedule 4</p>	<p>1. A description of the development, including in particular:</p> <p>(a) a description of the location of the development;</p> <p>(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;</p> <p>(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 water, land, soil and biodiversity) used;</p> <p>(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</p>	<p>The Proposed Development is described in Chapter 3 of the EIA Report, including consideration of anticipated construction methods and the operation of the Proposed Development.</p> <p>The land use requirements during construction and operational phases are also described in Chapter 3.</p> <p>Expected residues and emissions are addressed, where relevant, in the appropriate technical chapters of this EIA Report.</p>

EIA Regulations	Required Information (EIA Regulations)	Relevant Reference within this EIA Report
	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 Development and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.	Chapter 2 of the EIA Report describes the design iteration process and details how the Proposed Development site was chosen, and the environmental constraints taken into consideration.
	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 assessed with reasonable effort on the basis of the availability of relevant information and scientific knowledge.	A description of the existing (baseline) environment is provided within each technical chapter.
	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.	<p>The receptors potentially affected by the Proposed Development are detailed within each of the technical chapters.</p> <p>Effects on population and human health are assessed in relation to traffic, noise and shadow flicker.</p> <p>Biodiversity is covered in the ecology and ornithology chapters.</p> <p>Impacts on the water environment are covered in the hydrology, hydrogeology and geology chapter.</p> <p>Material assets are addressed through the assessment of cultural heritage effects and other chapters as appropriate.</p>

EIA Regulations	Required Information (EIA Regulations)	Relevant Reference within this EIA Report
	<p>5. A description of the likely significant effects of the development on the environment resulting from, inter alia:</p> <p>(a) the construction and existence of the development, including, where relevant, demolition works;</p> <p>(b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;</p> <p>(c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste;</p> <p>(d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters);</p> <p>(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;</p> <p>(f) the impact of the development on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the development to climate change;</p> <p>(g) the technologies and the substances used.</p> <p>The description of the likely significant effects on the factors specified in regulation 4(3) 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</p>	<p>The predicted significant effects of the Proposed Development are reported after best-practice mitigation measures have been applied to an identified effect, in each of the technical chapters of the EIA Report. Effects have been predicted in relation to the construction, operation and decommissioning phases of the Proposed Development, including the nature of these effects and their duration.</p> <p>The overall approach and methods used in the assessment of environmental impacts are discussed in Section 4.4 of this EIA Report. Prediction methods are discussed in detail within each relevant technical chapter of the EIA Report.</p>

EIA Regulations	Required Information (EIA Regulations)	Relevant Reference within this EIA Report
	<p>environmental protection objectives established at Union or Member State level which are relevant to the development including in particular those established under Council Directive 92/43/EEC3 and Directive 2009/147/EC.</p>	
	<p>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.</p>	<p>An overview of the methodology of the assessment is provided within Chapter 4 while the individual technical chapters provide details of each technical assessment.</p>
	<p>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, prevented, reduced or offset, and should cover both the construction and operational phases</p>	<p>The overall approach to mitigation is discussed in Section 4.4 of this EIA Report. Specific mitigation measures are reported in each relevant technical section of the EIA Report and in the Draft Scheme of Mitigation presented in Chapter 17.</p>
	<p>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 legislation of the European Union such as Directive 2012/18/EU of the European Parliament and of the Council or Council Directive 2009/71/Euratom or relevant assessments may be used for this purpose provided that the requirements of this Directive are met. Where</p>	<p>The predicted significant effects of the Proposed Development are reported after relevant mitigation measures have been applied to an identified impact, in each of the technical chapters of the EIA Report</p>

EIA Regulations	Required Information (EIA Regulations)	Relevant Reference within this EIA Report
	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.	
	9. A Non-technical summary of the information provided under points 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.

4.6.2 The EIA Report is split into five volumes, with the NTS forming a separate document. Volume 1 of this EIA Report contains the introductory, concluding and technical chapters. Volume 2 contains the figures that accompany the chapters. Volume 3 contains the landscape and visual figures and visualisations. Volume 4 contains supporting information and appendices for each of these technical chapters, and additional studies that have been prepared to inform the relevant assessments as reported in the EIA Report. Volume 5 contains confidential technical appendices (refer to Chapter 1 for further details).

4.6.3 The EIA Report is accompanied by a Non-Technical Summary of the EIA Report.

4.7 Consultation

4.7.1 Consultation is a key component of the EIA process. Consultation with statutory and non-statutory consultees has been undertaken by the Applicant since the feasibility stages of the Proposed Development.

4.7.2 The Applicant has continually engaged with consultees through both formal consultation (such as the request for an EIA Scoping Opinion and pre-application meeting with THC), and informally through meetings, calls and emails. Details of the additional consultation undertaken outwith EIA scoping and the pre-application meeting with consultees can be found in Appendix 4.4 and within each technical chapter.

4.7.3 The Applicant has also consulted with the general public throughout the design of the Proposed Development. The Applicant submitted a Proposal of Application Notice (PAN) in August 2020 (refer to Appendix 4.8). In line with good practice for the consenting stage of major development projects as set out within the Planning Circular 3/2013 'Development Management Procedures', a programme of pre-application community engagement has been undertaken by the Applicant.

4.7.4 A standalone Pre-Application Consultation (PAC) Report has been prepared which provides details of the various meetings, correspondence, virtual public exhibitions, leaflet drops and other discussions which have taken place with the Lairg & District Community Council and residents closest to the Proposed Development site. The Report also summaries the consultee consultation undertaken as part of the EIA.

4.7.5 The Applicant is grateful to local residents and Community Council representatives for their input into the pre-application community engagement process and for their participation in a number of the meetings, discussions and consultation events.

- 4.7.6 Community engagement in 2020 has been undertaken in-line with The Town and Country Planning (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020 (Scottish Government, 2020).
- 4.7.7 The scope of the EIA and the design of the Proposed Development has been influenced by all consultation where appropriate.

4.8 Consideration of Alternatives

- 4.8.1 EIA legislation requires the consideration of alternatives and an indication of the reasons for selecting the site, except, as noted in Planning Advice Note (PAN) 58, where limited by constraints of commercial confidentiality.
- 4.8.2 The Proposed Development site has been demonstrated to be a viable and a productive site for wind energy generation.
- 4.8.3 The Applicant considered a number of alternative layouts and different scales of turbine for the Proposed Development, to arrive at the design for which consent is sought. A full description of the site identification and design iteration process is given in Chapter 2.

4.9 Assumptions and Limitations

- 4.9.1 The EIA process helps enable informed decision-making based on the best available information about the environmental implications 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 development following completion of the EIA report, and/or limitations of the prediction processes. As a result of this, we have assessed the likely worst-case scenario where there is the potential for variation in the assessment. In this case, the actual predicted effect can only be less than that considered in the EIA.
- 4.9.2 We have made the following assumptions during the EIA process for the Proposed Development, as described below:
- The principal land uses adjacent to the site remain unchanged during the course of the Proposed Development's lifetime (with the exception of proposed and consented wind energy projects which are discussed as part of cumulative impact assessments described in each technical chapter).
 - Information provided by third parties, including publicly available information and databases are correct at the time of submission.
 - The Proposed Development construction has been developed based on professional judgement and outline design works, assuming the most likely methods of construction, plant, access routes and working areas etc. The final choice on construction methods will be developed by the contractors and set out in a Construction Environmental Management Plan (CEMP), which will be based on the assessment findings and mitigation recommendations set out in this EIAR.
- 4.9.3 Specific assumptions and limitations with regards to the individual technical disciplines, are detailed within each chapter.
- 4.9.4 This EIA has assessed the design which includes turbine layout F and infrastructure layout 4 as described in Chapter 2. For the purpose of the EIA, it has been assumed that the Proposed Development turbines will have a maximum height to blade tip of 135 m.

4.10 Summary

- 4.10.1 This chapter has detailed the methodology used to conduct the EIA and produce the EIA Report for the Proposed Development. An overview of the relevant legislation and guidance documents has been provided with the main legislative document being The Town and Country (Environmental

Impact Assessment) (Scotland) Regulations 2017 (as amended). Following this, the EIA process and the scope of the assessment are detailed. General assumptions, limitations and uncertainties are also stated.

4.11 References

IAQM (2016). *Guidance on the Assessment of Dust from Demolition and Construction*. Available at: <https://iaqm.co.uk/text/guidance/construction-dust-2014.pdf>

IAQM (2017). *Land Use Planning and Development Control: Planning for Air Quality*. Available at: <http://www.iaqm.co.uk/text/guidance/air-quality-planning-guidance.pdf>

IEMA (2006). *Guidelines for Environmental Impact Assessment*, Institute of Environmental Management and Assessment.

Scottish Executive (1997). *The Town and Country Planning Act (Scotland) 1997*. Available at: <https://www.legislation.gov.uk/ukpga/1997/8/contents>

Scottish Government (2013). *Planning Advice Note (PAN) 1/2013 Environmental Impact Assessment*. Available at: <https://www.gov.scot/publications/planning-advice-note-1-2013-environmental-impact-assessment/>

Scottish Government (2014). *Scottish Planning Policy*. Available at: <https://www.gov.scot/publications/scottish-planning-policy/>

Scottish Government (2017a). *The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017*. Available at: <http://www.legislation.gov.uk/ssi/2017/102/contents/made>

Scottish Government (2017b). *The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended), Planning Circular 1/2017*. Available at: <https://www.gov.scot/publications/planning-circular-1-2017-environmental-impact-assessment-regulations-2017/>

Scottish Government (2017c). *Planning Circular 1/2017 Environmental Impact Assessment Regulation*. Available at: <https://www.gov.scot/publications/planning-circular-1-2017-environmental-impact-assessment-regulations-2017/>

Scottish Government (2020). *The Town and Country Planning (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulation 2020*. Available at: <https://www.legislation.gov.uk/ssi/2020/124/made>

Scottish Natural Heritage (2012) *Assessing the Cumulative Impact of Onshore Wind Energy Developments*. Available at: <https://www.nature.scot/sites/default/files/2017-09/A675503%20-%20Assessing%20the%20cumulative%20impact%20of%20onshore%20wind%20energy%20developments.pdf>

SNH (2018). *A Handbook on Environmental Impact Assessment Version 5*. Available at: <https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20Assessment%20Handbook%20V5.pdf>

SNH, SEPA, Scottish Renewables, FCS, HES, MSS (2019) *Good Practice during Wind Farm Construction Version 4*. Available at: <https://www.nature.scot/guidance-good-practice-during-wind-farm-construction>

THC (2019). *LAQM Annual Progress Report 2019*. Available at: https://www.highland.gov.uk/downloads/file/21105/2019_air_quality_report