

**Vale of Leven Wind Farm Limited** 

# Vale of Leven Wind Farm

Environmental Impact Assessment Report (Volume 1)

Chapter 3 – Environmental Impact Assessment Process

663510 - 3 (00)





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# 3 ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

#### 3.1 Introduction

3.1.1 This chapter will discuss the process and scope of this Environmental Impact Assessment Report (EIA Report), from the Scoping phase to the EIA Report. This chapter will also give an overview of the consultation undertaken by the applicant prior to submission.

## 3.2 Scoping

- 3.2.1 The Scoping Opinion of the Scottish Ministers. was issued by the ECU in June 2022
- 3.2.2 The following considerations were factored into the Scoping process:
  - The nature of the receiving environment and the type of operations associated with the Proposed Development are such that environmental effects could arise during construction, operation and decommissioning stages.
  - The need for early consultation and commencement of ecological and ornithological surveys, peat depth probing and noise monitoring to accommodate data collection within seasonal and programme constraints.
  - The local and national planning context, as well as relevant technically specific, planning and environmental policy and guidance.
  - The need for early consultation with NatureScot, Loch Lomond and the Trossachs National Park (LLTNP), Stirling Council and West Dunbartonshire Council on the selected preliminary viewpoints to minimise potential impact on sensitive landscape and visual receptors.
  - The requirement for early liaison with stakeholder and regulatory authorities (e.g., telecommunication link operators were consulted, as well as the West Dunbartonshire Council Environmental Health Officer) to provide input for the EIA and design development processes.
  - The potential to scope out the environmental factors of which the Proposed Development was assessed to have a negligible (adverse) and Not Significant effect (as listed in paragraph 3.2.5).

### Scope of the EIA Report

- 3.2.3 In general terms, the Scoping Opinion concluded that the following aspects were relevant for investigation in the EIA Report owing to the potential for significant environmental effects to arise:
  - Landscape and Visual Impact Assessment;
  - Ecology;
  - Ornithology;
  - Geology, Hydrogeology, Hydrology and Peat;
  - Traffic and Transportation:
  - Noise and Vibration;
  - Socio-economics, Land Use, Recreation and Tourism;
  - Aviation and Radar; and

• Other issues: including Infrastructure and Telecommunications, Shadow Flicker, Forestry and Climate Change Mitigation.

#### **Scoping Process**

- 3.2.4 The applicant initially conducted a detailed Scoping exercise in April 2022. The Scoping exercise involved a review of available environmental information related to the form and status of the existing environment; preliminary desk-based and site-based appraisals and surveys; and application of knowledge of the potential environmental implications of comparable schemes (based on direct past project experience and other published experience and guidance).
- 3.2.5 The outcomes of the Scoping exercise were collated in a Scoping Report, which accompanied a formal request for a Scoping opinion that was issued by the applicant to the ECU on 14<sup>th</sup> April 2022¹. This report identified the environmental aspects that the applicant proposed to address within the EIA for the Proposed Development. It discussed each aspect in terms of a brief summary of the environmental baseline for each (where practical), the relevant potential impacts and an overview of the proposed method of assessment for each. Where relevant, the technical areas were assessed in the context of industry guidance, best practice, and likely design of the Proposed Development.
- 3.2.6 The ECU issued its Scoping Opinion, available on the ECU website<sup>2</sup>, to the applicant on 23<sup>rd</sup> June 2022.
- 3.2.7 Following receipt of the Scoping Request, the ECU undertook consultation with statutory and non-statutory agencies consultees and other environmental bodies with knowledge of the Proposed Development site. The following bodies provided responses:
  - Argyll and Bute Council;
  - Balloch and Haldane Community Council;
  - Bonhill and Dalmonach Community Council;
  - BT;
  - Crown Estate Scotland;
  - Defence Infrastructure Organisation;
  - Fisheries Management Scotland;
  - Glasgow Airport;
  - Glasgow Prestwick Airport;
  - Historic Environment Scotland (HES);
  - John Muir Trust;
  - Joint Radio Company (JRC) Limited;
  - Kilmaronock Community Council;
  - Loch Lomond and the Trossachs National Park;
  - Met office:
  - Mountaineering Scotland;

<sup>&</sup>lt;sup>2</sup> Search 'ECU00003468' on the ECU website (<a href="https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00003468">https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00003468</a>) for the Vale of Leven Wind Farm Scoping Opinion

- NATS Safeguarding;
- NatureScot:
- Nuclear Safety Directorate;
- Renfrewshire Council;
- RSPB Scotland;
- Scottish Forestry;
- Scottish Water;
- ScotWays;
- SEPA:
- Stirling Council;
- Transport Scotland;
- Visit Scotland;
- West of Scotland Archaeology Service; and
- · West Dunbartonshire Council.
- 3.2.8 No responses were received from the following consultees:
  - British Horse Society;
  - Civil Aviation Authority Airspace;
  - Lomond Salmon Fisheries Trust;
  - Milton and Bowling Community Council;
  - Scottish Wild Land Group;
  - Scottish Wildlife Trust; and
  - Silverton and Overtoun Community Council.
- 3.2.9 The scope of the individual assessments has been reviewed regularly throughout the EIA Report preparation process to take account of responses from consultees, new published guidance and/or assessment methodologies, stakeholder feedback, new environmental information and design changes.
- 3.2.10 A summary of the consultation undertaken including a reference to consultee responses and the actions taken, an explanation of the methods of assessment adopted and the issues identified, as well as issues scoped out, are presented in **Chapters 5 to 14** of this EIA Report, which detail the findings in relation to the various environmental aspects considered.

#### Scoped Out of the EIA

3.2.11 The following environmental aspects were reviewed and have subsequently been scoped out of the EIA Report based on the limited potential for environmental effects to arise. No objections in relation to the proposed elements to be scoped out of the EIA were raised in the Scoping Opinion.

Air Quality

3.2.12 The main source of impact on air quality would be increased traffic flows on local roads during construction and emissions from construction activities. It is considered that air emissions associated with these activities would be transient and localised, and highly unlikely to have a significant effect on local air quality. Best practice measures would be

applied to construction, forming an integral part of the Construction Environmental Management Plan (CEMP). There would be no significant emissions to air during operation.

Population and Human Health

- 3.2.13 At scoping stage, it was proposed that population and human health could be covered through the findings of other assessments undertaken as part of the EIA process and so, no dedicated EIA chapter would be produced. Properly designed and maintained wind turbines are a safe technology. The Site design and built-in buffers from sensitive receptors would minimise any risk to human health resulting from the operation of the turbines. As risks associated with ice build-up and lightning strike are removed or reduced through inbuilt turbine mechanisms in modern machines, it was proposed that these be scoped out of the further assessment.
- 3.2.14 Limited interactions with human health are possible, and consideration was given to the findings of the following assessments in the EIA Report:
  - Ice build-up on turbine blades and risk of ice throw (Chapter 2);
  - Lightning Strike (Chapter 2);
  - Risk of turbine failure and consideration of inbuilt emergency procedures and best practice (Chapter 2);
  - Residential Amenity (Chapter 5);
  - Traffic and Transportation (Chapter 9);
  - Noise and Vibration (Chapter 11);
  - Aviation and Radar (Chapter 13);
  - Telecommunications (Chapter 14); and
  - Shadow Flicker (Chapter 14).

Vulnerability of the Proposed Development to Risks of Major Accidents and/or Disasters (including climate change)

3.2.15 None of the following climate trends identified in UKCP18³ would affect the Proposed Development: increased temperature, changes in the frequency, intensity and distribution of rainfall events, increased windstorms and sea level rise. Braking mechanisms on turbines allow them only to be operated under specific wind speeds and, given the elevated location of the Site, flooding would not pose a significant risk. Furthermore, the Proposed Development would not contribute to flooding elsewhere.

## 3.3 Consultation Overview

3.3.1 Consultation has been integral to the design and development of the Proposed Development, identification of existing environmental constraints and sensitivities, and identification and assessment of the likely environmental effects of the Proposed Development.

https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/research/ukcp/ukcp18\_headline\_finding\_s\_v4\_aug22.pdf, (accessed February 2023).

<sup>&</sup>lt;sup>3</sup> Met Office (2022), UK Climate Projections. Available at:

- 3.3.2 Consultation with statutory organisations, non-statutory organisations and the general public commenced on the 29<sup>th</sup> April 2022, following the publication of the Scoping Report, and has taken a number of forms, including:
  - stakeholder liaison;
  - public information events;
  - informal discussions; and
  - gatecheck report.

#### Stakeholder Liaison

3.3.3 As discussed in Section 3.2, consultation with statutory consultees and other organisations has been undertaken throughout all stages of the EIA Report preparation process to obtain environmental data, to discuss and agree the scope of individual environmental assessments and the adopted methods of assessment, and to develop appropriate environmental mitigation measures. EIA topic-specific consultation is summarised in each chapter of this EIA Report where relevant.

#### **Public Information Events**

- 3.3.4 The applicant has undertaken a multifaceted public consultation approach, including maintaining a project website<sup>4</sup> and project mailbox<sup>5</sup>, and attendance at community council ('CC') meetings. This was supplemented by three in-person public events held in October 2022.
- 3.3.5 Public consultation has been held at key stages in the development process to inform the general public and other interested parties of project updates and the emerging findings of the EIA, and to elicit comment and feedback on the Proposed Development. The applicant wrote to host and neighbouring Community Councils, local councillors, the local MSPs and MPs to introduce the project in March 2022 and to offer to meet and/or attend Community Council meetings. The applicant attended Community Council meetings in April 2022 (Balloch and Haldane CC) and September 2022 (Kilmaronock CC).
- 3.3.6 Three in-person consultation events were held in October 2022 in the closest residential settlements to the Proposed Development. The events took place as follows:
  - Kilmaronock Millennium Hall, Gartocharn: Tuesday 11<sup>th</sup> October 2022, 2pm 7pm
  - Balloch House Hotel, Balloch: Wednesday 12th October 2022, 2pm 7pm
  - Dalmonach Community Centre, Bonhill: Thursday 13<sup>th</sup> October 2022, 2pm 7pm
- 3.3.7 The consultation events included a number of information banners that outlined the project location, the development and environmental impact assessment process, the environmental surveys being undertaken, the community ownership and benefits of the project. The banners also included a Zone of Theoretical Visibility (ZTV), several key viewpoints and the next steps for the development process. The exhibition had 18 information boards in total, which were made available on the project website from the 11th October 2022.

<sup>&</sup>lt;sup>4</sup> Project Website: https://valeoflevenwindfarm.com/

<sup>&</sup>lt;sup>5</sup> Project Mailbox: info@valeoflevenwindfarm.com

- 3.3.8 The public consultation events also provided a 'fly-through' video of the Proposed Development site, as well as a number of A1 print outs of photomontages and wirelines. Attendees at the events could leave comments directly with the exhibition team or via a feedback form, which was also made available online. A deadline of 1<sup>st</sup> November 2022 was set to provide feedback and comments on the consultations, allowing residents and organisations time to respond following the exhibition events.
- 3.3.9 The events were publicised in various ways:
  - half page adverts in the Dumbarton Reporter on 4<sup>th</sup> and 11<sup>th</sup> October to give advance notice of the physical events and to outline that all information will be made available on the website;
  - invitation sent out by Royal Mail to over 24,000 homes and businesses within approximately 5 km of the site;
  - email summary and invitation to the host and neighbouring Community Councils to highlight the consultation events, sent to:
    - o Bonhill and Dalmonach CC:
    - Kilmaronock CC;
    - Balloch and Haldane CC:
    - Silverton and Overtoun CC; and
    - o Milton and Bowling CC.
  - email summary and invitation to councillors for Lomond Ward and Dumbarton Ward, the local MSP and MP to highlight the consultation events; and
  - posters/web posters.
- 3.3.10 Over the three public consultation events, 263 people attended and raised a number of issues and questions to the exhibition team, both directly to the exhibitors and via the written feedback forms. The project team received positive, neutral and negative comments and feedback on the plans. 400 separate users visited the project website from 11th October 1st November 2022 to view the exhibition material.
- 3.3.11 75 feedback forms were received, as well as 32 direct emails and several direct requests. Of the 75 feedback forms, when asked 'Do you support the proposed Vale of Leven Wind Farm?, more than two-thirds outlined support. 59% of responses said 'Yes' (52 people), 16% said 'No' (12 people) and 15% were 'Neutral' (11 people).
- 3.3.12 Further detail regarding the public exhibition events and the consultation requirements for the Proposed Development will be discussed in the Pre-Application Consultation (PAC) Report supplementary to the EIA.

#### Feedback

- 3.3.13 The applicant has responded to all email/feedback queries to the consultation (in line with GDPR requirements) and all comments made will be considered as part of the S36 Application. The applicant expects to host another event in Autumn 2023 to present the findings of the EIA and the application layout. The event will include a summary of the feedback obtained from the previous events and illustrate how this has been taken into account as part of the application.
- 3.3.14 A Pre-application Consultation (PAC) Report will be submitted with the S36 application and will describe the consultation requirements for the Proposed Development, the

consultation measures undertaken by the applicant, the feedback received and any resultant modifications to the Proposed Development.

#### Continued Engagement

- 3.3.15 The applicant provided a summary of the feedback from the October exhibitions to Community Councils, interested residents and elected representatives in December 2022 as well as uploading a copy to the Project Website.
- 3.3.16 The applicant attended the Bonhill and Dalmonach CC meeting (February 2023) and held a further consultation event in Bonhill at the Loch Lomond Rugby Club on 23 March 2023 following requests from residents for an additional event to take place.
- 3.3.17 Further engagement with local communities and the public will be undertaken after the application is submitted, with the intention of showcasing the final plans, to allow the public the opportunity to find out how to provide representations on the plans.

#### **Gatecheck Process**

- 3.3.18 As part of the Section 36 process, RSK prepared and submitted a Gatecheck Report for the Proposed Development to the ECU on 14<sup>th</sup> June 2023.
- 3.3.19 The Gatecheck Report described the design evolution of the Proposed Development since the issue of the Scoping Opinion including, where relevant, changes that have been made in response to consultation and community engagement. The document also set out the scope of the EIA Report in advance of the application being made.
- 3.3.20 Responses to the Gatecheck Report were received from the following stakeholders:
  - West Dunbartonshire Council (WDC); and
  - NatureScot.
- 3.3.21 The feedback received from the Gatecheck Report (Gatecheck 1) process has been addressed and incorporated in the EIA Report where relevant.
- 3.3.22 A second Gatecheck (Gatecheck 2) was also undertaken prior to submission. This involved consultation with the ECU to ensure that the correct process is followed in relation to the submission of application documentation (inc. Confidential Annexes) and that the S36 Application is advertised in line with the EIA Regulations.

#### **Aviation Lighting Consultation**

3.3.23 International civil aviation regulations and UK civil air law, all obstacles at or exceeding 150 m agl are required to have aviation warning lighting to mitigate effects on low flying civilian aircraft. This is based on the international civil aviation standard that the minimum height for aircraft flight, other than during takeoff and landing, is 150 m agl, and was confirmed via stakeholder engagement and consultation.

In response, a reduced lighting scheme has been designed, in accordance with the guidance in UK CS-ADR-DSN, that would identify the perimeter of the Proposed Development and the highest turbine within it. This will be submitted to the CAA for approval. Additional information on aviation lighting is included in **Chapter 13: Aviation.** 

#### 3.4 EIA

#### Legislation

- 3.4.1 Regulation 4 of the EIA Regulations states that the EIA must identify, describe and assess the direct and indirect significant effects of the Proposed Development on the following factors:
  - population and human health;
  - biodiversity;
  - land, soil, water, air and climate; and
  - material assets, cultural heritage and the landscape
- 3.4.2 The findings of the EIA should be included in an EIA Report prepared by the developer. Regulation 5 sets out the content of an EIA Report. The EIA Report must identify, describe and assess the potential direct and indirect significant effects of the Proposed Development and the potential interactions between those factors. The description should detail 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 Proposed Development.
- 3.4.3 Schedule 4 of the EIA Regulations sets out the information that must be included in the EIA Report, including:
  - description of the Proposed Development, including in particular:
    - a description of the location of the development;
    - o a description of the physical characteristics of the whole development;
    - a description of the main characteristics of the operational phase of the development; and
    - an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases).
  - a description of the reasonable alternatives studied by the developer;
  - 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;
  - a description of the factors specified above likely to be significantly affected by the development;
  - a description of the likely significant effects of the development on the environment, resulting from:
    - the construction and existence of the development, including, where relevant, demolition works;
    - the use of natural resources, in particular land, soil, water and biodiversity;
    - the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances and the disposal and recovery of waste;
    - o the risks to human health, cultural heritage or the environment;
    - the cumulation of effects with other existing and/or approved development;

- the impact of the development on climate and the vulnerability of the development to climate change; and
- the technologies and the substances used.
- a description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment;
- a description of the mitigation measures envisaged to avoid, prevent, reduce and, if possible, offset any significant adverse effects on the environment and, where appropriate, of any monitoring arrangements;
- 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;
- a non-technical summary of the information covered by the points above; and
- a reference list detailing the sources used for the descriptions and assessments in the EIA report

#### **EIA Delivery**

3.4.4 Insofar as practical, a common approach has been adopted in the undertaking and reporting of individual environmental assessments.

#### EIA Guidance

- 3.4.5 The EIA has been undertaken with regard to the following published best-practice guidance:
  - Planning Circular 1: The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations (Scotlish Government, 2017)<sup>67</sup>;
  - Planning Advice Note 1/2013: Environmental Impact Assessment (Scottish Government, 2013)8;
  - Web Based Guidance Onshore Wind Turbines (Scottish Government, 2014)9;
  - Guidelines for Environmental Impact Assessment (Institute for Environmental Management and Assessment (IEMA), 2004)<sup>10</sup>;
  - A handbook on environmental impact assessment: Guidance for competent authorities, consultees and others involved in the Environmental Impact Assessment process in Scotland (NatureScot, 2018)<sup>11</sup>; and
  - Environmental Impact Assessment Guide to Shaping Quality Development (IEMA, 2016)<sup>12</sup>.

<sup>&</sup>lt;sup>6</sup> Note: there is no planning circular or PAN for the Electricity EIA Regulations, and the planning circular contains information which is generally applicable to all EIA developments.

<sup>&</sup>lt;sup>7</sup> Scottish Government (2017), Planning Circular 1/2017: The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017.

<sup>&</sup>lt;sup>8</sup> Scottish Government (2013), Planning Advice Note 1/2013: Environmental Impact Assessment.

<sup>&</sup>lt;sup>9</sup> Scottish Government (2014), Web Based Guidance Onshore wind turbines.

<sup>&</sup>lt;sup>10</sup> IEMA (2004), Guidelines for Environmental Impact Assessment.

<sup>&</sup>lt;sup>11</sup> NatureScot (2018), A handbook on environmental impact assessment: Guidance for competent authorities, consultees and others involved in the Environmental Impact Assessment process in Scotland V5.

<sup>&</sup>lt;sup>12</sup> IEMA (2016), Environmental Impact Assessment Guide to Shaping Quality Development.

#### Establishment of Baseline Environment

- 3.4.6 The EIA of scoped-in environmental aspects commenced with the identification and review of information relating to known, or the likely presence of, environmental receptors and resources within a defined study area, in order to determine their relative value, importance and/or sensitivity towards change.
- 3.4.7 Environmental resources were defined as those environmental aspects that support and are essential to natural or human systems. These include areas or elements of population, ecosystems, watercourses, air and climatic factors, landscape, and material assets.
- 3.4.8 Environmental receptors were defined as people (i.e., occupiers of dwellings and users of recreational areas, places of employment and community facilities) and elements within the environment (e.g. flora and fauna) that rely on environmental resources.
- 3.4.9 Desk-based data sources comprised consultation responses; published literature; databases, records and schedules relating to environmental designations; national, regional and local policy documentation; historic and current mapping; aerial photography; and data gathered from previous environmental studies.
- 3.4.10 Site surveys were undertaken to verify and consolidate information gathered during the desk-based review, and to evaluate the relationships between specific environmental interests and their wider environmental value.
- 3.4.11 Study area extents vary in accordance with the environmental aspect being considered. For some topics, a study area has been defined as being relatively localised to the Proposed Development, while for others it has extended outward to capture the surrounding road network, distant communities, and environmentally sensitive areas. The definition of each study area has been informed by a review of the relationship between the Proposed Development and the receiving environment, the outcomes of Scoping, and reference to thresholds stipulated in topic-specific EIA guidance.

#### Impact Prediction and Assessment

- 3.4.12 Impacts comprise identifiable changes to the baseline environment. These can be either beneficial (e.g. introduction of planting to screen visually detracting elements) or adverse (e.g. loss of an attractive environmental component), and can take the following forms:
  - direct [primary] (e.g. loss of habitat to accommodate the Proposed Development);
  - indirect [secondary] (e.g. pollution downstream arising from silt deposition during earthworks);
  - transboundary (e.g. impacts which affect Natura 2000 sites (sites designated under the Habitats Directive) outside of the UK in other EU Member States;
  - short-term/temporary (e.g. dust generated during construction);
  - medium-term (e.g. cutting back of planting which is subsequently allowed to regenerate);
  - long-term/permanent (e.g. improvement in air quality); and
  - cumulative (e.g. incremental changes caused by other past, present or reasonably foreseeable actions together with those associated with the proposed scheme, or where a receptor or resource is subject to a combination of individual impacts such as air pollution, noise and visual impact associated with the proposed scheme in isolation).

- 3.4.13 Impact assessments have been both quantitative and qualitative in nature, and based on comparisons between the environmental conditions immediately prior to the assumed construction of the Proposed Development and the predicted environmental conditions resulting from its implementation. Each technical chapter of the EIA Report describes the forecasting methods used in the EIA.
- 3.4.14 Impacts have been defined in accordance with accepted terminology and standardised methodologies to predict the magnitude of impact (or change) resulting from the Proposed Development.
- 3.4.15 Assessments have been undertaken for the year of construction and in the year when the Proposed Development would become operational. Some environmental aspects have required further assessment beyond the operational year to take account of factors such as predicted traffic growth or activities associated with decommissioning of the Proposed Development.
- 3.4.16 Where relevant, the assessments describe the expected significant effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters relevant to the proposed scheme. This includes consideration of effects resulting from future climate change and the vulnerability of the project to climate change.

#### Environmental Effects

- 3.4.17 Effects are defined as the consequence of impacts. They are formulated as a function of the receptor/resource value and sensitivity, and the predicted magnitude of impact.
- 3.4.18 Professional judgement, defined thresholds, established criteria and standards have been used to report the environmental effects of impacts, which can be referred to as either being prior to, or following establishment of, environmental mitigation.

#### Environmental Mitigation

- 3.4.19 Environmental mitigation measures have been developed to address potentially significant adverse environmental effects.
- 3.4.20 Mitigation can take the form of agreed measures incorporated into the evolving design of the Proposed Development (e.g., environmental treatments), standard measures (e.g., best practice construction management to control dust emissions) that are enforceable through planning conditions, and measures proposed in outline (e.g., off-site planting to provide visual screening to nearby residential dwellings) that may require further development and formal agreement to ensure their implementation.
- 3.4.21 The principles adopted in the identification and development of environmental mitigation for the Proposed Development are avoidance (wherever possible), reduction (where avoidance cannot be achieved) and compensation (where reduction is unachievable or would not achieve the required level of mitigation).

#### Significance of Environmental Effects

3.4.22 The significance of an environmental effect has been established by way of reference to the importance/value of affected resources; the number and sensitivity of affected

- receptors; impact magnitude, duration, frequency and extent of effect; and the reversibility of effect (or the extent to which the adverse effects can be effectively reduced).
- 3.4.23 The following generic significance criteria (**Table 4.1**) have been applied across the environmental aspects considered in this EIA Report to ensure identified environmental effects are assessed in a transparent and comparable manner, except where such criteria are not applicable due to other prevailing topic-specific guidance (e.g., ecological impact assessment) and/or established standards and thresholds (e.g., EU limit values for air emissions):

**Table 4.1: Generic Significance Criteria** 

Level of Effect	Description
Major	Very large or large change in environmental or socio-economic conditions. These effects, both adverse and beneficial, are likely to be important considerations at a national to regional level because they contribute to achieving national / regional objectives or are likely to result in exceedance of statutory objectives and/or breaches of legislation.
Moderate	Intermediate change in environmental or socio-economic conditions. These effects are likely to be important considerations at a regional and local level.
Minor	Small change in environmental or socio-economic conditions. These effects may be raised as local issues but are unlikely to be of importance in the decision-making process.
Negligible	No discernible change in environmental or socio-economic conditions (i.e., variation within normal bounds or below measurable levels). An effect that is likely to have a negligible or neutral influence, irrespective of other effects.

- 3.4.24 Only major and moderate effects are considered to be significant effects in terms of the EIA Regulations. Significance assumes only embedded and standard construction mitigation measures are in place, these being the environmental mitigation measures for which delivery and implementation can be secured.
- 3.4.25 The identified likely significant effects of the Proposed Development are considered by the Scottish Ministers in the decision-making process when determining the S36 application.

# 3.5 Assessment Reporting

- 3.5.1 Each individual assessment follows a comparable format to ensure consistency in reporting the existing environmental conditions and the potential effects on them arising from implementation of the Proposed Development. Technical assessments in **Chapters** 5 14 will include the following sections:
  - **Introduction:** introduces the assessment topic under consideration;
  - **Scope and Methodology:** identifies and describes the scope of the assessment, the methods and criteria adopted, relevant guidance followed, and any assessment limitations, assumptions or difficulties encountered;

- Consultation Undertaken: summarises the stakeholder engagement including dialogue with statutory consultees and with other stakeholders and where relevant the influence on the EIA;
- Statutory and Planning Context: outlines statutes, guidance, policies and plans relevant to the environmental interests forming the focus of the assessment;
- **Existing Environment:** describes the features and characteristics associated with the baseline environment;
- Predicted Impacts: reports the predicted impacts, including cumulative impacts, on the baseline environment during the construction, operational and decommissioning phases;
- **Mitigation:** details all measures that have been incorporated into the design of the project and/or agreed as deliverable, including proposed monitoring where applicable; and
- Summary of Residual Effects summarises the nature and significance of residual environmental effects that are predicted to remain, post-implementation of mitigation measures.

# 3.6 Assessment Assumptions, Difficulties and Uncertainties

- 3.6.1 The EIA Report has been compiled using the environmental information made available to the EIA team by the applicant and members of their project team; it has also been assembled using other readily available and publicly accessible material, including existing literature and studies, as well as personal communication with local experts. To the best of RSK's knowledge, the information used as a basis for the assessment is accurate and up to date. The team is not aware of any limitations of the underlying information or of any constraints that would materially affect the evaluations.
- 3.6.2 RSK has also carried out its own site visits, surveys and investigations, at or in the vicinity of the Site to provide more information for the assessments and to fill data gaps. This has resulted in a more complete and up to date set of baseline data to use as the basis for the impact assessment. Although the data have been collected over a period, RSK is of the opinion that the data is relevant and valid at the time of reporting. It should be noted that the surveys and investigations are conducted on a sampling basis, which places a limit on the certainty of the data set.
- 3.6.3 This EIA Report has been based on the best available information at the time of publication. However, further information may become available during the detailed design phase that would be used to inform the project if relevant.
- 3.6.4 Assumptions adopted in the evaluation of impacts in each chapter are reported in each of the relevant sections. However, these assumptions are often implicit and rely on expert judgement. Any assumptions and known technical deficiencies have been documented.
- 3.6.5 The preparation of this EIA Report has been undertaken during the initial design phase of the project and, therefore, some of the technical aspects of the construction and operation have yet to be determined. Where an alternative option could be adopted which is likely to cause additional impacts, these are discussed within the relevant sections. In addition, the EIA has taken a precautionary approach to adopt conservatism in the assumptions made and any scenarios assumed, so that a reasonable 'worst case' scenario was assessed. Therefore, inherent uncertainties are accounted for and

subsequent modifications to the project during the detailed design phase are less likely to fall outside of the assumed envelope of the assessment parameters.

#### 3.7 References

IEMA (2004), Guidelines for Environmental Impact Assessment.

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