# voltalia

# Chapter 4: EIA Methodology

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# 4 EIA METHODOLOGY

# 4.1 Introduction

- 4.1.1.1 An Environmental Impact Assessment (EIA) is a process aimed to ensure that permissions for particular types of developments are granted only after assessment of the likely significant environmental effects has been undertaken. The assessment must be carried out following consultation with statutory consultees, other interested bodies, and members of the public. This Chapter of the EIA Report (EIAR) describes the EIA process for the Proposed Development.
- 4.1.1.2 This EIAR builds upon the approach set out in the 2024 Scoping Report, and incorporates the feedback received from Consultees in the 2025 Scoping Opinion. Both of these documents are provided in **Volume 3**:
  - Technical Appendix 4.1: 2024 Scoping Report; and
  - Technical Appendix 4.2: 2025 Scoping Opinion (received January 2025).
- 4.1.1.3 Furthermore, a full list of authors of the EIAR and their competencies is provided in Volume 3: Technical Appendices as:
  - Technical Appendix 1.1: EIA Team

# 4.2 Assessment Methodology

- 4.2.1.1 The EIAR has been prepared following a systematic approach to EIA and project design. The process of distinguishing environmental effects is iterative and cyclical, running concurrently with the design process, whereby the design of the Proposed Development is refined to avoid or reduce potential adverse environmental effects using mitigation as necessary.
- 4.2.1.2 The EIA process follows several stages broadly in line with the following:
  - Site selection and feasibility;
  - Screening to determine if an EIA is required (unless an Applicant volunteers an EIA);
  - Pre-application consultation with statutory and non-statutory consultees;
  - Scoping to identify the parameters of the assessment issues on which the EIA should focus;
  - Baseline studies to establish the current environmental conditions at the Site;
  - Identification of potential environmental effects, including cumulative effects;
  - Mitigation to avoid or reduce the effects through iterative design process;
  - Assessment of residual effects;
  - Preparation of an EIAR;

- Submission of an EIAR;
- Consideration of application and environmental information by the Scottish Government (Scottish Ministers), the host local authority and other consultees;
- Determination of application; and
- Implementation and monitoring.
- 4.2.1.3 The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (the EIA Regulations) require that an EIAR should include a range of information including: a description of the development (Chapter 3: Development Description), a description of reasonable alternatives (Chapter 2: Site Design and Evolution), baseline information, a description of the likely significant effects of the development, and mitigation measures amongst other factors (Technical Chapters 6 15).
- 4.2.1.4 This EIAR has been prepared in accordance with the EIA Regulations and includes the required information.

# 4.3 Consultation

- 4.3.1.1 Consultation has formed an essential part of the EIA process. The EIA team and the Applicant have contacted a number of interested parties over the course of the process to determine their views on the Proposed Development and assessment methodology, and to collect baseline information. This engagement has principally been undertaken within the following key stages:
  - Pre-scoping procuring initial feedback on the Proposed Development and agreeing extent of consultation;
  - EIA Scoping outlining EIA methodology and documentation of key issues;
  - Technical Consultation gathering baseline information from relevant organisations and confirming survey methodologies out with the formal Scoping process; and
  - Public Consultation Informing site design including Public Exhibitions and communication with local communities and consideration of baseline information.

#### 4.3.2 Approach to EIA Consultation

4.3.2.1 Following initial feasibility and preliminary environmental surveys, consultation was commenced with the East Lothian Council and the ECU on the 4<sup>th</sup> of July 2024. The primary purpose was to introduce the Proposed Development and to agree the approach to scoping including agreement on the consultees to be contacted as part of the scoping exercise.

# 4.3.3 Scoping

4.3.3.1 The aim of the Scoping process is to identify key environmental issues at an early stage, to determine which elements of the Proposed Development are likely to cause significant environmental effects and identify issues that can be 'scoped out' of the assessment. This established the work and level of detail required for preparation of the EIAR.

- 4.3.3.2 The scoping request was submitted in August 2024 (validated November 2024) and was accompanied by an EIA Scoping Report describing the Proposed Development, the proposed EIA methodology, and the key issues to be addressed, which is provided as **Technical Appendix 4.1**. The Scoping Report was also sent to a range of consultees as agreed in advance with the ECU.
- 4.3.3.3 The Scoping Opinion was issued by the ECU and received in January 2025, a copy of which is included as **Technical Appendix 4.2**.
- 4.3.3.4 **Table 4.1** provides an overview of the issues raised by the consultees at the scoping stage. The details of the individual responses received during the EIA, including at the scoping stage, are set out in the relevant technical chapters **(Chapters 6-15)**. Where appropriate, reference is provided as to where the comments have been addressed within this EIAR.

#### TABLE 4.1SUMMARY OF SCOPING CONSULTATION

CONSULTEE	NO RESPONSE	NO COMMENTS	POLICY	CLIMATE	NOISE AND VIBRATION	GROUND CONDITIONS / HYDROGEOLOGY	HYDROLOGY / FLOODRISK / WATER RESOURCES	ECOLOGY/ ORNITHOLOGY	LANDSCAPE AND VISUAL	ARCHAEOLOGY / CULTURAL HERITAGE	SOCIOECONOMICS	TRAFFIC AND TRANSPORT / ACCESS	TELECOMMUNICATIONS	MISCELLANEOUS	CUMULATIVE EFFECTS	RELEVANT CHAPTER OF THE EIAR
Energy Consents Unit (ECU)					х	х	х	х	х							Chapter 8 – Ecology & Conservation Chapter 9 Water Resources & Flood Risk Chapter 10 – Geology & Soils
Scottish Environment Protection Agency (SEPA)						х	Х	Х								Chapter 6 – Landscape & Visual Chapter 7 – Archaeology & Cultural Heritage Chapter 8 – Ecology & Conservation Chapter 9 Water Resources & Flood Risk Chapter 10 – Geology & Soils Chapter 11 - Traffic & Transport
NatureScot								х	х						Х	Chapter 6 – Landscape & Visual Chapter 8 – Ecology & Conservation Chapter 10 – Geology & Soils

CONSULTEE	NO RESPONSE	NO COMMENTS	POLICY	CLIMATE	NOISE AND VIBRATION	GROUND CONDITIONS / HYDROGEOLOGY	HYDROLOGY / FLOODRISK / WATER RESOURCES	ECOLOGY/ ORNITHOLOGY	LANDSCAPE AND VISUAL	ARCHAEOLOGY / CULTURAL HERITAGE	SOCIDECONOMICS	TRAFFIC AND TRANSPORT / ACCESS	TELECOMMUNICATIONS	MISCELLANEOUS	CUMULATIVE EFFECTS	RELEVANT CHAPTER OF THE EIAR
Historic Environment Scotland (HES)									х	х						Chapter 6 – Landscape & Visual Chapter 7 – Archaeology & Cultural Heritage
Network Rail												Х		х		Chapter 11 Traffic & Transport
Office for Nuclear Regulation		Х														N/A
Scottish Forestry			Х					Х								Chapter 8 – Ecology & Conservation
Scottish Water							х									Chapter 9 – Water Resources & Flood Risk
ScotWays									х							Chapter 6 – Landscape & Visual
Transport Scotland												Х				Chapter 11 Traffic & Transport
East Lothian Council			Х	X	X	Х	Х	X	x			Х		Х	X	Chapter 5 – Policy & Legislative Context Chapter 6 – Landscape & Visual Chapter 7 – Archaeology & Cultural Heritage Chapter 8 – Ecology & Conservation Chapter 9 - Water Resources & Flood Risk Chapter 10 – Geology & Soils Chapter 11 - Traffic & Transport

CONSULTEE	NO RESPONSE	NO COMMENTS	POLICY	CLIMATE	NOISE AND VIBRATION	GROUND CONDITIONS / HYDROGEOLOGY	HYDROLOGY / FLOODRISK / WATER RESOURCES	ECOLOGY/ORNITHOLOGY	LANDSCAPE AND VISUAL	ARCHAEOLOGY / CULTURAL HERITAGE	SOCIOECONOMICS	TRAFFIC AND TRANSPORT / ACCESS	TELECOMMUNICATIONS	MISCELLANEOUS	CUMULATIVE EFFECTS	RELEVANT CHAPTER OF THE EIAR
East Lammermuir Community Council			X	X	X	x	X	x	x	x	X	X		X	X	Chapter 12 – Noise & Vibration Chapter 14 – Greenhouse Gas Chapter 6 – Landscape & Visual Chapter 7 – Archaeology & Cultural Heritage Chapter 8 – Ecology & Nature Conservation Chapter 9 Water Resources & Flood Risk Chapter 10 – Geology & Soils Chapter 11 Traffic & Transport Chapter 12 – Noise & Vibration Chapter 13 – Socio- economics Chapter 14 – Greenhouse Gas

### 4.3.4 Further Technical Consultation

4.3.4.1 A full account of all consultation undertaken with specific stakeholders can be found within the relevant technical chapters of this EIAR (**Chapters 6-15**). However, below is a summary of the main further technical consultation that has been undertaken as part of the EIA process following receipt of the scoping opinion.

#### **Historic Environment Scotland**

4.3.4.2 Further consultation was undertaken with Historic Environment Scotland (HES) via email between 26<sup>th</sup> of February 2025 and 4<sup>th</sup> of April 2025. This consultation was further to HES' Scoping response, to provide them with an updated list of visualisations and assets that would be considered in the EIAR assessment. Furthermore, the consultation letter dated 4<sup>th</sup> of April 2025 provided HES with an update on the design changes that have been implemented in an effort to limit the potential setting impacts to Scheduled Monuments.

#### East Lothian Council Planning Archaeologist

4.3.4.3 On the 12<sup>th</sup> of February 2025 a (virtual) meeting was held between ERM and the ELC Planning Archaeologist in which discussions over the survey effort required to support the EIAR and the Proposed Development should planning consent be granted. A further consultation letter was issued to ELC's Planning Archaeologist to inform them of design changes undertaken to limit setting impacts to Dunglass Garden and Designed Landscape and the Oldhamstocks Conservation Area. This letter also provided the list of visualisations that were requested by HES that would be included in the EIAR.

#### **Environmental Health Officer**

4.3.4.4 East Lothian Council's Environmental Health Officer (EHO) was consulted in January 2025 via email in order to discuss the proposed background noise monitoring locations and noise sensitive receptors. Confirmation was received from the EHO on the 8<sup>th</sup> of January 2025 that they were satisfied with the proposed approach to noise monitoring.

#### **SEPA**

4.3.4.5 Within their scoping response, SEPA made a request for further information regarding the potential presence of peat within the Site, including a request that phase 1 peat probing be undertaken. Further consultation was undertaken with SEPA in a letter dated the 4<sup>th</sup> of March 2025. Within this the findings of the UK Habitat Survey undertaken for the Site were presented, recording no habitats associated with National Vegetation Classification (NVC) communities that are indicative of potential peatlands. In a response dated the 16<sup>th</sup> of May 2025, SEPA confirmed that they were satisfied with this response and that they were content with peat being scoped out of the assessment.

#### 4.3.5 **Public Consultation**

4.3.5.1 Alongside the Statutory consultation process, the Applicant has undertaken an inclusive programme of engagement and consultation with key stakeholders and the local community.

#### 4.3.5.2 This has included the following correspondences and meetings:

- A virtual meeting was held with representative of the East Lammermuir Developments group (facilitated through East Lammermuir Community Council) on 16 July, 2024 to introduce the Proposed Development, timeline and planned public consultation activities.
- A pre-application meeting was held with the ECU on July 4, 2024. The purpose was to introduce the Proposed Development and agree on the approach to scoping, including agreeing on contacting consultees as part of the scoping exercise.
- Two meetings were held with representatives of Scottish Power Transmission (SPT) and representatives of the National Energy System Operator (NESO) on 9 July and 18 July 2024 to discuss grid connection agreements.
- A public consultation event was held on August 28, 2024 at Oldhamstocks Village Hall.
- The Applicant shared information in August 2024 and updates in October 2024 on the Proposed Development site boundary and plans for consultation events for inclusion on the East Lammermuir Energy Developments website.
- Virtual and in-person visits were held with local property and landowners in October 2024 to discuss survey activities and access to land, requests for site boundary updates and to discuss information provided at public consultation and questions raised. Further meetings were held in March 2025 to provide an update and answer questions ahead of the second consultation and drop-in event.
- A meeting was held with Paul McLennan, East Lothian MSP and Lyn Jardine, Dunbar and East Linton Councillor on November 8, 2024. The purpose was to provide an introduction to the Proposed Development, discuss feedback from the community, discuss ways to provide stakeholders with progress updates and access to information.
- A letter was posted on 17 January 2025 to 778 residents and businesses within the consultation zone to provide a progress update, signpost stakeholders to FAQs and share plans for further consultation and the second public drop in event.
- A meeting was held with Chris Bruce, Chair of East Lammermuir Community Council on 25 February, 2025. The purpose was to share an update on project progress and discuss the upcoming public drop in event and sharing changes with the local community. This included correspondence and exchange of information relating to local flood experiences.
- A public consultation event was held on March 13, 2025 at Oldhamstocks Village Hall.
- A meeting was held with Oldhamstocks Community Association (OCA) committee, Chair of East Lammermuir Community Council and guest attendee on 05 March, 2025. The purpose was for the Applicant to provide a presentation in response to key themes raised in response to the Scoping Report and wider questions such as financial viability. The meeting included actions taken by the Applicant to present information at the upcoming community drop in event.
- Ongoing meetings were held with Scottish Power Transmission and NESO to provide project updates.
- The Applicant contributed to the East Lammermuir Renewable Energy Development Stakeholder Session on 17 March, 2024. The purpose was to contribute to the groups coordination of renewable energy and associated infrastructure developments in East

Lammermuir and share plans for how the project seeks alignment with the East Lammermuir Local Place Plan.

# 4.4 Technical Assessments

4.4.1.1 Each of the technical assessments presented in **Chapters 6 to 15** of this EIAR follow systematic steps which are outlined in **Chapter 1** and further detailed below.

#### 4.4.2 Introduction

4.4.2.1 Each technical assessment sets out the relevant legislation, policy and guidance.

#### 4.4.3 Scope of Assessment and Methodology

- 4.4.3.1 The technical assessments set out the scope and methodology used to carry out the assessment of potential effects, including the criteria that are used to establish which effects are significant. The methodology seeks to ensure transparency in the assessment. Each technical assessment has the criteria set out for assessing significance. Where a level of significance is attributed to an effect, this is based on technical guidance and professional judgement, informed by consideration of the sensitivity of the receptor and the degree of the effect.
- 4.4.3.2 This section also sets out the scoping requirements and pre-application consultation responses that form the framework and scope of the specialist assessment work for the topic.

#### 4.4.4 **Baseline Conditions**

- 4.4.4.1 In order to evaluate the potential environmental effects, the existing environmental conditions were recorded through field and desktop research. Prior to the fieldwork studies, desktop studies were undertaken to gain a preliminary understanding of the study area. Where appropriate and required, site-specific baseline field surveys were undertaken by experienced professionals to provide an understanding of the current condition of the Site and the surrounding area.
- 4.4.4.2 This forms the baseline, alongside a prediction of these conditions into the future. Such predictions can involve a high number of variables and be subject to large uncertainties, and as a result, in some cases, the current baseline condition is assumed to remain unchanged throughout the timeframe of the Proposed Development, noting however that climate change will present a shift to generally warmer and wetter conditions, unless otherwise stated in the technical chapter.
- 4.4.4.3 The baseline has been used to assess the sensitivity of receptors within the study areas. Developments, including other energy generating infrastructure that is operational at the time of commencing the assessments are treated as being part of the existing baseline.
- 4.4.4.4 The approach to describing baseline conditions is set out in each relevant technical chapter. Baseline information is used to inform the layout of the Proposed Development. From baseline information, constraints were identified which were considered as part of the

design process. Further detail on the design process adopted for the Proposed Development is detailed in **Chapter 2: Site Design and Evolution,** and **Chapter 3: Development Description**.

#### 4.4.5 Assessment of Effects

- 4.4.5.1 The prediction of potential significant effects covers the three phases of the Proposed Development; construction, operation and decommissioning, as different environmental effects are likely to arise during each stage. The effects during construction and decommissioning are generally considered to be short term effects, and those arising as a result of the operation of the Proposed Development are generally considered to be long term effects. Each technical assessment considers the nature of effects and includes cumulative effects with other developments where appropriate.
- 4.4.5.2 Following identification of potential environmental effects, the baseline information is used to predict changes to existing conditions and conduct an assessment of these changes.
- 4.4.5.3 The significance of effects resulting from the Development is determined through a combination of the sensitivity of the receiving environment (the sensitivity) and the predicted degree of change (the magnitude of impact) from the baseline state.

#### **Sensitivity of Receptors**

- 4.4.5.4 Environmental sensitivity may be categorised by multiple factors, such as the presence of rare or endangered species, transformation of natural landscapes, soil quality and land-use etc. The initial assessment, consultation and scoping stages identified these factors along with the implications of the predicted changes. The sensitivity of a given receptor may be a combination of its value and its susceptibility to change.
- 4.4.5.5 The sensitivity classification of the receiving environment varies between the different technical areas of assessment e.g. landscape and visual, ecology, noise etc. **Table 4.2** details a general framework for determining the sensitivity of receptors, however, each technical assessment will specify their own appropriate sensitivity criteria that will be applied during the EIA and details will be provided in each technical chapter.

SENSITIVITY OF RECEPTOR	DEFINITION
Very High	The receptor has little or no ability to absorb change without fundamentally altering its present character, is of very high environmental value, or of international importance.
High	The receptor has low ability to absorb change without fundamentally altering its present character, is of high environmental value, or of national importance.
Medium	The receptor has moderate capacity to absorb change without significantly altering its present character, has some environmental value, or is of regional importance.

 TABLE 4.2
 FRAMEWORK FOR DETERMINING SENSITIVITY OF RECEPTORS

SENSITIVITY OF RECEPTOR	DEFINITION
Low	The receptor is tolerant of change without detriment to its character, is of low environmental value, or local importance.
Negligible	The receptor is resistant to change and is of little environmental value.

#### **Magnitude of Impact**

4.4.5.6 For the purposes of environmental assessment, the magnitude of an 'impact' is generally dependent on the degree to which the change affects the feature or asset, from a fundamental, permanent or irreversible change that changes the character of the feature or asset, to barely perceptible changes that may be reversible. Magnitude would also encompass the certainty of whether an impact would occur. General criteria for assessing the magnitude of an impact are presented in **Table 4.3**. Each technical assessment will apply their own appropriate magnitude of impact criteria during the EIA, with the details provided in the relevant EIA chapter.

MAGNITUDE OF IMPACT	DEFINITION
High	A fundamental change to the baseline condition of the asset, leading to total loss or major alteration of character.
Medium	A material, partial loss or alteration of character.
Low	A slight, detectable, alteration of the baseline condition of the asset.
Negligible	A barely distinguishable change from baseline conditions.

#### TABLE 4.3 FRAMEWORK FOR DETERMINING MAGNITUDE OF EFFECTS

#### **Significance of Effects**

4.4.5.7 The sensitivity of the asset and magnitude of the predicted impacts will be used as a guide, in addition to professional judgement, to assess the level of effects. **Table 4.4** summarises guideline criteria for assessing the significance of effects.

#### TABLE 4.4 FRAMEWORK FOR ASSESSMENT OF THE SIGNIFICANCE OF EFFECTS

MAGNITUDE OF EFFECT	SENSITIVITY OF RESOURCE OR RECEPTOR										
	VERY HIGH	нісн	MEDIUM	LOW	NEGLIGIBLE						
High	Major	Major	Moderate	Moderate	Minor						
Medium	Major	Moderate	Moderate	Minor	Negligible						
Low	Moderate	Moderate	Minor	Negligible	Negligible						
Negligible	Minor	Minor	Negligible	Negligible	Negligible						

- 4.4.5.8 Major or moderate effects are considered to be 'significant' in the context of the EIA Regulations and are shaded in light grey in **Table 4.4**. Zero magnitude impacts upon a receptor will result in no effect, regardless of sensitivity.
- 4.4.5.9 This EIAR generally follows the above principles in relation to the identification of significant effects; however, some technical assessments may adopt a variation from this process. The assessment criteria used to determine effects and whether they are significant are made explicit in each technical assessment chapter within this EIA.

#### 4.4.6 Cumulative Effects

- 4.4.6.1 In accordance with the EIA Regulations, the EIA will consider cumulative effects. These effects result from incremental changes caused by past, present, or reasonably foreseeable future actions in conjunction with the Proposed Development. Two types of cumulative effects will be assessed:
  - Type 1 effects: The combined impact of individual effects from the same development (e.g. noise, airborne dust, or traffic) on a single receptor. These are referred throughout this EIAR as in-combination effects, and are assessed in **Chapter 16: In-combination Effects**; and
  - Type 2 effects: The combined impact from the effects of several developments that may, on an individual basis be insignificant, but cumulatively may be significant. These cumulative effects are assessed within each technical chapter of this EIAR.
- 4.4.6.2 The extent of the cumulative assessment for each technical aspect has been determined during the Scoping process. This includes proposed energy developments and other forms of development as appropriate.
- 4.4.6.3 The cumulative assessment identifies impacts arising from the Proposed Development in conjunction with other relevant developments in the area. The Study Area for cumulative effects is 5 km. However, for some technical disciplines alternative Study Areas for cumulative effects are more appropriate. Where this is the case, this has been specified and defined in the relevant technical chapter of the EIAR.

- 4.4.6.4 A cut off window of 3-month prior to the date of this EIAR has been applied meaning that only developments in the planning system prior to this date are considered as part of the cumulative assessment.
- 4.4.6.5 The cumulative assessment considers developments that are in the planning system with sufficient information available in relation to their likely effects to make an informed cumulative assessment. For the purposes of this EIAR this includes developments that are at the scoping, application, or contested stage as well as developments that are under construction are considered as part of the cumulative assessment. Existing developments are assessed as part of the baseline, and therefore not considered as part of the cumulative assessment.
- 4.4.6.6 Other developments which may come forward in the future, but which do not currently have sufficient information available in relation to their likely effects to make an informed cumulative assessment (e.g. those within screening), are not considered in detail in this EIAR.
- 4.4.6.7 **Table 4.5** details the relevant cumulative developments have been identified following an initial search. **Figure 4.1** shows a map of these cumulative developments in relation to the Proposed Development. Where an individual technical discipline utilises a larger cumulative effects study area, any additional cumulative developments will be detailed in that chapter.

PLANNING REFERENCE AND NAME	PLANNING DESCRIPTION	DEVELOPMENT DESCRIPTION	DISTANCE FROM DEVELOPMENT	STAGE OF DEVELOPMENT
23/00616/PM Branxton Substation	Erection of 400KV substation and associated developments	Rebuild and upgrade to a new 400kV substation	Within 1 km	Planning permission approved
23/00162/PPM Branxton connection	Construct and operate electricity transmission infrastructure (substation or converter station) and associated development including buried cabling	Onshore electricity transmission infrastructure in the form of either a substation or converter station, and for associated development including underground electricity cables and landfall	Within 1 km	Planning permission approved
ECU00004659 - Branxton BESS	Battery Storage containers and associated infrastructure	BESS with a capacity exceeding 50 MW	Within 1 km	Planning permission approved

#### TABLE 4.5 Relevant Cumulative Developments within 5km of the Site

PLANNING REFERENCE AND NAME	PLANNING DESCRIPTION	DEVELOPMENT DESCRIPTION	DISTANCE FROM DEVELOPMENT	STAGE OF DEVELOPMENT
ECU00004993 - Braxbess BESS	Construction and operation of BESS, transformers, substations and associated infrastructure.	BESS with a capacity exceeding 650 MW	1.8 km	Under consideration
22/00852/PPM - Eastern Green Link 1	Converter station and associated development including a landfall and connecting buried cabling	Onshore underground High Voltage Direct and Alternating Current electricity cables connecting the converter station to a landfall south of Thorntonloch Beach and Branxton substation	1.7 km	Under construction
Torness Nuclear Power Station defuel and decommission	No specific planning application.	Lifespan of Torness Nuclear Power Station extended to 2030 instead of 2028.	2.4 km	Near decommissioning
23/01071/P - Aikengall 2 BESS	Formation of a battery energy storage system facility and associated works	A BESS with a capacity of 19.99 MW, featuring 46 battery units	3.9 km	Planning permission approved
P/0867/91 - Closure and restoration of Quarry	Restoration of quarry to agriculture by infilling with controlled waste - South Quarry	Closure and restoration of a quarry used for landfill	4 km	In planning
ECU000005085 - Bowshiel Solar and BESS	Construct and operate a Solar Farm with accompanying BESS, associated infrastructure, access, and landscaping	Solar farm generating up to 165 MW of power, including a 80 MW BESS	4.5 km	In planning

# 4.4.7 Mitigation

- 4.4.7.1 The Institute for Environmental Management and Assessment (IEMA) EIA Guide to Delivering Quality Development Report demonstrates that EIA is an iterative process rather than a unique, post-design, environmental appraisal. In adopting this approach, the findings of the technical environmental studies are used to inform the design of the project and hence achieve a 'best fit' with the environment. This approach has been adopted in respect of the Proposed Development; where potentially significant effects have been identified, their avoidance or minimisation has been prioritised at the design stage. This is referred to within this EIAR as 'embedded mitigation', i.e. mitigation that is embedded within the project design, and includes best practice as well as design features.
- 4.4.7.2 The technical chapters explain any embedded mitigation in a section before the assessment within each chapter. This sets out the mitigation embedded into the design of the Proposed Development and has therefore been included in the assessment.
- 4.4.7.3 In line with the mitigation hierarchy identified in Planning Advice Note (PAN) 1/2017, the strategy of avoidance, reduction and remediation is a hierarchical one, which seeks to:
  - First to avoid potential effects;
  - Then to reduce those which remain; and
  - Lastly, where no other measures are possible, to propose compensatory measures.
- 4.4.7.4 Appropriate mitigation measures are discussed within each technical chapter as relevant. In some cases, in addition to mitigation measures, chapters may propose enhancement measures to provide improvements over the existing baseline conditions. Some chapters may also propose monitoring of certain receptors for the impacts form potential effects of the development, as required by guidance and legislation, with the aim of determining whether further mitigation measures would be required.

#### 4.4.8 **Residual Effects**

- 4.4.8.1 The residual effects of the Proposed Development are those that remain following successful implementation of the identified additional mitigation measures.
- 4.4.8.2 Residual effects are identified in each technical assessment alongside an assessment whether any residual effects are significant or not in the context of the EIA Regulations.

#### 4.4.9 Summary and Conclusions

4.4.9.1 Following the identification of cumulative effects, each technical chapter will present a Statement of Significance. Effects are considered to be significant for the purposes of the EIA Regulations where the effect is classified as being of 'major' or 'moderate' significance, unless otherwise stated in the individual technical chapter.

# 4.5 The EIAR

- 4.5.1.1 The information that an Applicant is required to submit as part of the EIA process is presented in this EIAR. The preparation and production of this EIAR has been conducted in accordance with relevant regulations and good practice guidance. Relevant legislation, policy and guidance are referred to in each of the technical assessments within the EIAR. Overarching regulation, policy and guidance documents that have been used in preparing this EIAR are:
  - The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017;
  - National Planning Framework 4 (February 2023)<sup>1</sup>;
  - Planning Advice Note (PAN) 1/2013: Environmental Impact Assessment, 2013<sup>2</sup> which, whilst prepared to inform EIAs under the Town and Country Planning (Scotland) Act 1997 as amended, is also relevant to EIAs produced under the EIA Regulations;
  - Planning Circular 1/2017: Environmental Impact Assessment Regulations, 2017<sup>34</sup>;
  - Environmental Impact Assessment Handbook (Scottish Natural Heritage, 2018)<sup>5</sup>; and
  - Environmental Impact Assessment Guide to Delivering Quality Development (Institute of Environmental Management and Assessment [IEMA], 2016)<sup>6</sup>.

# 4.6 Assumptions and Limitations of EIA

- 4.6.1.1 A number of assumptions have been made during preparation of this EIAR. These assumptions are as follows:
  - The principal land uses adjacent to the Site remain as they are at the time of the submission of the application, except in cases where permission has already been granted for development. In these cases, it is assumed that the approved development will take place, and these have been treated as contributing to "cumulative" effects; and
  - Information provided by third parties, including publicly available information and databases is correct at the time of submission.

https://www.gov.scot/publications/national-planning-framework-4/documents/ (14/02/2025).

<sup>&</sup>lt;sup>1</sup> Scottish Government (2023) National Planning Framework 4 [Online] Available at:

<sup>&</sup>lt;sup>2</sup> The Scottish Government (2013, Rev. 2017) Planning Advice Note 1/2013 Environmental Impact Assessment [Online] Available at: Planning Advice Note 1/2013: Environmental Impact Assessment - gov.scot (www.gov.scot) (Accessed 18/10/2024)

<sup>&</sup>lt;sup>3</sup> The Scottish Government (2017) Planning Circular 1/2017 Environmental Impact Assessment regulations [Online] Available at: Planning Circular 1/2017: Environmental Impact Assessment regulations - gov.scot (www.gov.scot) (Accessed 14/02/2025)

<sup>&</sup>lt;sup>4</sup> Note, this guidance was produced to support Town and Country Planning Act Applications, however it has wider relevance, hence its utilisation for thie EIAR.

<sup>&</sup>lt;sup>5</sup> Nature Scot (2018) Environmental Impact Assessment Handbook [Online] Available at:

Environmental Impact Assessment Handbook version 5 - 2018 | NatureScot (Accessed 14/02/2025) <sup>6</sup> IEMA (2016) Environmental Impact Assessment Guide to: Delivering Quality Development (Accessed 14/02/2025)

- 4.6.1.2 The EIA is subject to the following limitations:
  - Baseline conditions are accurate at the time of the physical surveys but, due to the dynamic nature of the environment, conditions may change during the site preparation, construction and operational phases; and
  - The assessment of cumulative effects has been reliant on the availability of known information relating to existing developments of 3 months prior to the date of this EIAR.
- 4.6.1.3 Assumptions specific to certain environmental aspects are discussed in the relevant Chapters of this EIAR.