

# The Droves Solar Farm

# **Chapter 2: EIA Process and Methodology**

Prepared by: LDA Design Date: November 2025

PINS reference: EN0110013

Document reference: APP/6.1 (Original)

APFP Regulation Reg 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009





### **List of Contents**

<u>2</u>	EIA Process and Methodology	<u>3</u>		
2.1	EIA Process	3		
2.2	Baseline Conditions	5		
2.3	EIA Scoping	5		
2.4	Rochdale Envelope	7		
2.5	EIA Methodology	7		
2.6	Mitigation Measures	17		
2.7	Additional Mitigation	18		
List	t of Tables			
Table	e 2-1 Sensitivity Criteria	9		
Table	e 2-2: Magnitude Criteria	10		
Table	e 2-3 Scale of Effect	11		
Table 2-4 Cumulative Effects Assessment Approach14				

# **List of Figures**

Figure 2.1 Cumulative Schemes

# **List of Appendices**

Appendix 2.1 EIA Scoping Opinion Request

Appendix 2.2 Scoping Opinion Response

Appendix 2.3 Scheme Response to Scoping Opinion

Appendix 2.4 Cumulative Schemes



## 2 EIA Process and Methodology

#### 2.1 EIA Process

- 2.1.1 This chapter outlines the approach that has been applied to assess and understand the likely significant effects of the Scheme. This chapter sets out relevant standard methodology used in the Environmental Impact Assessment (EIA).
- 2.1.2 EIA is the process of compiling, evaluating and presenting the likely significant environmental effects of a proposed development and identifying measures to mitigate or manage any significant negative effects, through the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations) (hereafter referred to as the EIA Regulations) [Ref. 2-1].
- 2.1.3 The Environmental Statement (ES) contains information specified in Regulation 14(2) of the Regulations 2017 [Ref. 2-1] and must meet the requirements of Regulation 14(3) of the EIA Regulations. It also includes any additional information specified in Schedule 4 to the EIA Regulations which is relevant to the specific characteristics of the development and the environmental features likely to be significantly affected.
- 2.1.4 The key matters for ensuring a robust EIA process relating to Nationally Significant Infrastructure Projects (NSIPs) are:
  - Establish the baseline collate and review available data and undertake baseline surveys
  - Scoping identify likely significant effects to determine the scope of the EIA
  - Consultation seek feedback from consultees and the public in relation to key environmental issues, methodology and design approaches
  - Assessment and design response finalise methodologies using topic specific guidance and best practice techniques and assess the likely significant effects of the Scheme, identify and evaluate alternatives, provide feedback to the project design team, incorporate any necessary mitigation measures and assess residual effects; and
  - Preparation of the Preliminary Environmental Information Report (PEIR) and subsequent ES (following Statutory Consultation).
- 2.1.5 The EIA process is designed to produce an environmentally sensitive development by considering and assessing the effects of the Scheme against existing environmental baseline conditions. To date, the EIA team has undertaken a review of both the environmental sensitivities within and surrounding the Site, and the Study Areas of the respective environmental topic chapters (Volume 1, Chapters 6 to 16), to identify any potential environmental effects. Where the environmental baseline has been informed by site visits and environmental surveys, these are detailed in the relevant topic section of this ES.



- 2.1.6 The EIA should be informed by consultation with statutory consultees, other interested bodies and members of the public. The purpose of identifying likely significant effects is to ensure decision makers can make an informed judgement on the environmental impacts of a proposal.
- 2.1.7 The EIA process is undertaken in accordance with the EIA Regulations, guidance produced by the Planning Inspectorate (PINS) and the Institute of Environmental Management and Assessment (IEMA, now rebranded the Institute of Sustainability and Environmental Professionals (ISEP)) and other environmental topic-specific guidance. It should be noted that some technical disciplines may utilise different criteria when undertaking assessments due to differences in industry accepted guidelines and specifications. Where this is the case, the relevant environmental topic chapter will discuss how the assessment methodology or classification of effects differs from the general EIA methodology as described in this section and provide justification. Further details of topic specific methodologies, such as survey methods, are provided in the relevant ES topic chapters.
- 2.1.8 Each of the technical assessments has applied the following approach:
  - Description of the baseline conditions
  - Identification and assessment of likely effects
  - Identification of mitigation measures, including design changes and management control measures
  - · Assessment of potential residual effects that remain following mitigation; and
  - Assessment of 'cumulative' effects when considering the Scheme along with other planned developments in the area.
- 2.1.9 This ES sets out details on the methodology and approach, along with the overall conclusions of the EIA process. It also outlines the main parameters and detailed design aspects of the Scheme against which the assessment has been undertaken. Development parameters have been determined and fixed for the purposes of the ES assessment through an iterative approach taking into account baseline environmental information, the evolving design and any associated technical requirements.
- 2.1.10 This ES has been prepared in accordance with and to satisfy the requirements of the EIA Regulations [Ref. 2.1]. In preparing this ES, reference has been made to the following advice notes:
  - Planning Inspectorate, Nationally Significant Infrastructure Projects: Advice on EIA Notification and Consultation (September 2024) [Ref. 2.2]
  - Planning Inspectorate, Nationally Significant Infrastructure Projects Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements (June 2020, Version 7) [Ref. 2.3]
  - Planning Inspectorate, Nationally Significant Infrastructure Projects Advice Note Nine: Rochdale Envelope (July 2018, Version 3) [Ref. 2.4]



- Planning Inspectorate, Nationally Significant Infrastructure Projects Advice on Working with Public Bodies in the Infrastructure Planning Process (September 2024) [Ref. 2.5]
- Planning Inspectorate, Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment (September 2024) [Ref. 2.6]
- Planning Inspectorate, Nationally Significant Infrastructure Projects: Commitments Register (September 2024) [Ref. 2.7]
- Planning Inspectorate, Nationally Significant Infrastructure Projects: Advice on the Preparation and Submission of Application Documents (August 2024) [Ref. 2.8]; and
- Institute of Environmental Management and Assessment, Environmental Impact Assessment Guide to Delivering Quality Development (July 2016) [Ref. 2.9].

#### 2.2 Baseline Conditions

- 2.2.1 An important step in the EIA process is to establish a baseline against which to assess the effects of the Scheme. Information relating to the existing environmental baseline has been collected through field and desktop study, including:
  - Online/digital resources
  - Data searches, e.g. Local Biological Record Centres, Historic Environment record, etc
  - Baseline surveys; and
  - Available environmental information submitted in support of other planning applications for development in the vicinity of the Scheme.
- 2.2.2 For each environmental topic chapter, the methods of baseline data collection have been discussed with the relevant consultees, where relevant. Any limitations to the assessment are set out within each topic chapter.

## 2.3 EIA Scoping

- 2.3.1 EIA Scoping is the process of identifying the key expected environmental issues at an early stage, determining which elements of the Scheme are likely to result in significant effects on the environment and establishing the extent of survey and assessment requirements for the EIA. Although scoping is not a mandatory requirement under the EIA Regulations, it is recognised as a useful preliminary procedure which helps to identify the main effects that the Scheme is likely to have on the environment.
- 2.3.2 The environmental aspects and main issues to be covered by this ES were set out in the Scoping Opinion Request submitted to the Planning Inspectorate (PINS) on 8 November 2024 (see Appendix 2.1: EIA Scoping Opinion Request [APP/6.4]).
- 2.3.3 The Secretary of State's Scoping Opinion Response was received on 18 December 2024 (see **Appendix 2.2**: **Scoping Opinion Response [APP/6.4]**), including the formal responses received by PINS from consultees on the EIA Scoping Opinion Request.



- 2.3.4 Key issues raised in the Scoping Opinion Response have been considered during the EIA process. A table has been included within each technical chapter appendix, to show how and where comments from the Scoping Opinion Response and statutory consultation have been addressed within the ES.
- 2.3.5 In response to the Scoping Opinion Response, the EIA and this ES include assessments for the following environmental aspects:
  - Chapter 6: Landscape and Visual
  - Chapter 7: Ecology and Biodiversity
  - Chapter 8: Cultural Heritage and Archaeology
  - Chapter 9: Transport and Access
  - Chapter 10: Noise and Vibration
  - Chapter 11: Soils and Agriculture
  - Chapter 12: Water Resources
  - Chapter 13: Climate Change
  - Chapter 14: Socio-Economics
  - Chapter 15: Human Health
  - Chapter 16: Other Environmental Matters (Air Quality, Glint and Glare, Electromagnetic Fields (EMF), Telecommunications, Utilities and Television Receptors, Waste, and Arboriculture)
  - · Chapter 17: In-Combination Effects; and
  - · Chapter 18: Summary of Effects.
- 2.3.6 The EIA Scoping Opinion Request proposed to scope out a standalone waste chapter of the ES. However, the Scoping Opinion Response recommended the inclusion of a waste assessment which has been included within ES Chapter 16: Other Environmental Matters [APP/6.2] which identifies potential waste streams during the construction and decommissioning phases including estimated volumes, by type and quantity, of expected residues and emissions and quantities and types of waste produced, and an assessment of the likely significant effects.
- 2.3.7 Appendix 2.2: Scoping Opinion Response [APP/6.4] also confirmed that certain environmental aspects did not require a full chapter within the ES because they were not considered likely to give rise to likely significant effects. These aspects are described in within ES Chapter 16: Other Environmental Matters [APP/6.2], and relate to: Air Quality, Glint and Glare, EMF, Telecommunications, Utilities, Television Receptors, Waste, and Arboriculture.
- 2.3.8 It is noted that the PEIR presented a combined ES aspect chapter covering both Socioeconomics and Human Health. For the purposes of the ES, the structure of environmental assessments has been updated, and these aspects have been separated into standalone



ES chapters. This approach has been adopted to improve clarity, ensure each aspect is assessed in sufficient detail, and align with the relevant technical guidance and assessment methodologies specific to each discipline. The scope of the Socio-economics and Human Health assessments aligns with the agreed scope set out within the **Appendix 2.2**: **Scoping Opinion Response [APP/6.4].** 

2.3.9 The issues raised in the Scoping Opinion relating to EIA methodology and approach are summarised and responded to within **ES Appendix 2.3: Consultation and Legislation, Planning Policy and Guidance [APP/6.4]** which demonstrates how the matters raised in the Scoping Opinion are addressed in this ES.

## 2.4 Rochdale Envelope

- 2.4.1 In order to maintain flexibility in the design and layout included in the DCO Application, address uncertainties in the Scheme design and allow for advancements in technology from now to the time of construction, the Scheme has adopted the Rochdale Envelope approach. The Scheme's approach to the Rochdale Envelope is described further in ES Chapter 5: The Scheme [APP/6.1] and involves specifying parameter ranges. This approach allows for a project to be assessed on the basis of maximum parameters (which have been considered in detail by technical authors in the ES), i.e. to ensure the realistic worst-case effects of the Scheme have been assessed for each potential receptor. Planning Inspectorate Advice Note 9 [Ref. 2.4] sets out advice on the use of the Rochdale Envelope as a way of assessing a proposed development comprising EIA development where uncertainty exists with the final design details and necessary flexibility is sought.
- 2.4.2 In order to establish parameters for assessment within the Rochdale Envelope, a set of maximum parameters and Design Principles have been established and are presented in **Design Principles, Parameters and Commitments [APP/5.8].**
- 2.4.3 The illustrative layout of the Scheme is outlined in **ES Figure 5.1 Concept Masterplan** [APP/6.3], identifying potential areas for the Solar PV Arrays, Associated Development and mitigation and enhancement opportunities. The Concept Masterplan has been used to undertake the assessment of likely significant environmental effects, for aspects where the nature of the assessment methodology requires a specific level of detail, namely the landscape and visual, cultural heritage, and noise assessments.
- 2.4.4 **Figure 2.3 Works Plan [APP/2.3]** set out the limits of deviation for each of the Works Areas within the Order limits.

## 2.5 EIA Methodology

#### **EIA Assessment Scenarios**

- 2.5.1 The EIA assesses the effects of the following scenarios:
  - Construction phase (2031 2033)



- Operational phase (including maintenance) (2033 2093)
- Decommissioning phase (2093 2095).
- 2.5.2 The operational phase is proposed to be 60 years. Details on the anticipated construction programme and the start of operation are provided in **ES Chapter 5: The Scheme** [APP/6.1] and form the basis of technical assessments.
- 2.5.3 The potential likely significant effects arising as a result of the Scheme have been assessed against these three baselines as follows:
  - Construction phase Current and Future Baseline
  - · Operational phase (including maintenance) Future Baseline
  - Decommissioning phase Future Baseline.
- 2.5.4 The 'future baseline' scenario describes the changes from the baseline scenario as far as natural changes can be established, in the absence of the Scheme coming forward.

#### Assessment of Likely Effects

- 2.5.5 When undertaking an EIA, environmental effects are classified as either permanent or temporary, as appropriate to the effect in question. Permanent effects are those which are irreversible (e.g., permanent land take). The duration of temporary or reversible effects differs for each environmental topic, depending on their own methodologies, but can broadly be defined as:
  - Short Term
  - Medium Term; and
  - Long Term.
- 2.5.6 In assessing the significance of likely effects identified through the EIA process, account will be taken as to whether effects are direct or indirect, secondary, cumulative, transboundary, short, medium or long term, permanent or temporary and neutral, positive or negative.

#### **Determining Significance**

- 2.5.7 The EIA identifies the likely 'significance' of environmental effects (beneficial or adverse) arising from three phases (construction, operation and maintenance, and decommissioning) of the Scheme. The significance of residual effects is determined by reference to the criteria set out for each environmental topic.
- 2.5.8 The approach to assessing and assigning significance to an environmental effect is derived from a variety of sources including, in particular, the NPSs, NPPF, and relevant planning practice guidance, legislative requirements, topic specific guidelines, standards and codes of practice, the EIA Regulations, advice from statutory consultees and other stakeholders and the expert judgement of the team undertaking the EIA.



- 2.5.9 The likely effect that the Scheme may have on identified environmental receptors will be influenced by a combination of the sensitivity (or importance) of the receptor and the predicted magnitude of impact from the baseline conditions.
- 2.5.10 The assignment of environmental sensitivity of a receptor will generally depend on the vulnerability, recoverability and value/importance of the Receptor.
- 2.5.11 Each technical chapter will assess the following:
  - Sensitivity of receptor
  - Extent and magnitude of impact
  - Duration of effect
  - Nature of effect (i.e. is it direct, is it reversible?); and
  - Does the effect occur in isolation, or is it cumulative or in-combination?
- 2.5.12 The environmental sensitivity (or importance) will be determined using the following categories as set out in Table 2-1:

**Table 2-1 Sensitivity Criteria** 

Sensitivity	Definition		
High	High importance and rarity, international level and very limited potential for substitution.		
Medium	High or medium importance and rarity, regional level and limited potential for substitution.		
Low	Low or medium importance and rarity and local level.		
Negligible	Very low importance or rarity and local level.		

- 2.5.13 Where other categories of sensitivity have been used, this will be set out in the individual environmental topic assessment.
- 2.5.14 The categorisation of the magnitude of impact will take into account the following factors:
  - Extent
  - Duration
  - Frequency; and
  - Reversibility.
- 2.5.15 Impacts will be defined as either beneficial or adverse. As a guide, the magnitude of impact will generally be assigned using the categories in Table 2-2 below. Further details of the



topic-specific methodologies adopted for the EIA have been defined within the methodology section of each of the topic chapters.

**Table 2-2: Magnitude Criteria** 

Magnitude	Definition
High	<b>Adverse:</b> Loss of a resource and/or quality and integrity of a receptor; severe damage to key characteristics, features or elements.
r ng.r	<b>Beneficial:</b> Large scale or major improvement of receptor quality; extensive restoration or enhancement, major improvement of attribute quality.
Medium	<b>Adverse:</b> Loss of resource but not adversely affecting integrity; partial loss of and/or damage to key characteristics, features or elements.
Mediani	<b>Beneficial:</b> Benefit to or addition of key characteristics, features or elements. An improvement to attribute quality.
Low	<b>Adverse:</b> Some measurable change in attributes, quality or vulnerability, minor loss of or alteration to one (possibly more) key characteristics, features or elements.
LOW	<b>Beneficial:</b> Minor benefit to or addition of one (possibly more) key characteristics, features or elements, some beneficial impact on attribute or reduced risk of a negative impact occurring.
	Adverse: Very minor loss or detrimental alteration to one or more characteristics, features or elements.
Negligible	<b>Beneficial:</b> Very minor benefit to or positive addition of one or more characteristics, features or elements.
	<b>No Change:</b> No loss or alteration to characteristics, features or elements, no observable impact in either direction.

2.5.16 Effect nature is characterised as either adverse, beneficial, or neutral, and the scale of effect is determined by reference to the matrix in Table 2-3, which considers the sensitivity of the receptor and the magnitude of impact.



**Table 2-3 Scale of Effect** 

Sensitivity	High	Medium	Low	Negligible
Magnitude	Tilgii	IVICUIUIII	LOW	ivediidinie
High	Major	Major/Moderate	Moderate	Moderate/Minor
Medium	Major/Moderate	Moderate	Moderate/Minor	Negligible
Low	Moderate	Moderate/Minor	Minor	Negligible
Negligible	Moderate/Minor	Minor	Negligible	Negligible
No Change	Neutral	Neutral	Neutral	Neutral

- Major: This level indicates that the proposed project or activity is likely to cause severe, potentially irreversible, and widespread adverse impacts on the environment. Extensive assessment and mitigation measures, often leading to significant redesigns, may be necessary to minimise adverse effects
- **Moderate:** This level indicates that the project or activity is likely to cause adverse impacts on the environment. These impacts may be localised, temporary, or reversible, requiring mitigation measures
- Minor: This level indicates that the proposed project or activity is expected to have minimal adverse impacts on the environment, typically involving minor disturbances. They generally do not pose significant environmental risks
- Negligible: This level indicates that the project or activity is not expected to have any
  discernible adverse impacts on the environment, with impacts so minor that they can be
  disregarded. Negligible significance impacts generally require no mitigation measures or
  further assessment
- **Neutral:** The level of impact where the project/activity has neither positive nor negative effects, or has no effect, on the environment.
- 2.5.17 Following the classification of the scale of effect, clear statements have been made within the aspect chapters as to whether that effect is 'significant' or 'not significant' for the purposes of the EIA. Generally, major and moderate effects are considered to be significant (as shown in grey in Table 2-3), whilst minor and negligible effects are considered to be not significant. In the event an aspect chapter uses a different methodology or threshold for determining significance, including where professional judgement is applied, this will be set out in the relevant aspect chapter.



#### **Cumulative Effects Assessment**

- 2.5.18 The Cumulative Effects Assessment (CEA) will be undertaken in accordance with PINS Advice on Cumulative Effects Assessment (September 2024) and will consider two types of cumulative effects:
  - In-combination effects the inter-relationship between individual development effects, for example, noise, dust and visual on one particular receptor; and
  - Cumulative effects multiple existing and/or approved developments generating additive effects which together have an increased effect on the same receptors.

#### In-combination effects

- 2.5.19 A summary of potential likely In-combination Effects is provided within **ES Chapter 17: In-Combination Effects [APP/6.1]** to provide a summary of effect interactions between topics, setting out the inter-relationship arising as a result of direct effects from other environmental topics.
- 2.5.20 **ES Chapter 17: In-combination Effects [APP/6.1]** sets out a table demonstrating where multiple effects from the Scheme would combine to affect sensitive receptors, which explains what mitigation measures are proposed and how such mitigation may have an in-combination effect across several topics.
- 2.5.21 In-combination effects occur when receptors are subject to residual effects under more than one environmental topic. As such, the residual effects presented in ES Chapters 6-16 (regardless of whether they are classed as significant or not significant) have been reviewed to identify receptors subject to one or more types of effect to ensure that the interrelationship between each of the aspects of the environment likely to be affected by the Scheme has been properly evaluated and considered.
- 2.5.22 In-combination effects have been considered during the construction, operation and maintenance, and decommissioning phases of the Scheme. In light of the comprehensive range of embedded design measures, effect interactions have only been considered where residual adverse or beneficial effects of at least slight or minor in at least one receptor group have been identified.
- 2.5.23 Likely In-combination effects have been identified and qualitatively assessed using the findings of all technical assessments reported within this ES, together with professional judgement.
- 2.5.24 The approach to assessing In-combination effects has followed a four-stage process, as outlined in the following paragraphs.

#### **Stage 1: Topic-specific Assessments**

2.5.25 The first stage of the assessment is presented in each of the individual environmental topic chapters and comprises the individual assessments of residual effects on receptors across



the construction, operation and decommissioning phases of the Scheme. The embedded mitigation is assumed to be implemented before consideration of the effects.

#### **Stage 2: Identification of Receptors**

- 2.5.26 Stage 2 involves a review of the assessments undertaken in the topic-specific chapters to identify 'receptor groups' requiring assessment within the In-combination effects assessment. The term 'receptor group' is used to highlight that the approach taken for the In-combination effects assessment does not assess every individual receptor assessed at the EIA stage, but rather potentially sensitive groups of receptors identified through the EIA process. Only receptors that are expected to incur more than one potential effect have been included in the assessment (e.g. noise and dust).
- 2.5.27 Receptors predicted to be affected by only a single effect (e.g. only noise) are excluded because there is considered to be no potential for In-combination effects to take place. It should be noted that uncertainty in the assessment of effects, for most of the technical chapters in this ES, is dealt with by making conservative, or worst-case, assumptions.
- 2.5.28 The receptor groups identified within this ES can be broadly categorised as follows:
  - Landscape and visual resources: landscape character; visual receptors (residents; users
    of public rights of way; other visual receptors)
  - Ecology and biodiversity: ecological nationally designated sites
  - Historic environment: settings of nationally designated heritage assets
  - Access and highways: road users, residents; pedestrians/cyclists; sensitive local uses (e.g. schools, hospitals, local facilities)
  - Noise and vibration: residents, users of public rights of way; users of other land uses (e.g. places of work)
  - Air quality: local residents; ecological designated sites
  - Water resources and Ground conditions: land at risk of flooding, land quality/soils
  - Agriculture: agricultural land; farm businesses; and
  - · Socio-economics: employment levels and tourism.

#### Stage 3: Assessment of potential In-combination effects on receptor groups

- 2.5.29 Consideration is given to the potential for multiple In-combination effects to arise for each of the identified receptor groups across the construction, operation and maintenance, and decommissioning phases of the Scheme.
- 2.5.30 This involves the assessment of the scope for all effects to interact, spatially and temporally, to create In-combination effects on a receptor or receptor group. As an example, all effects on a given receptor such as local residents construction dust and noise, increased traffic and visual change etc. may combine to produce a greater effect on this receptor than when the effects are considered in isolation. Receptor-led effects might be short term, temporary or transient effects, or incorporate longer term effects.



#### **Stage 4: In-combination effects Assessment**

- 2.5.31 The following receptor groups that have the potential to be subject to In-combination effects have been identified:
  - Landscape character
  - Visual receptors
  - Ecologically designated sites
  - Road users, pedestrians and cyclists, users of public rights of way, railway operations, train drivers, aviation operations
  - Residents and users of other land uses (e.g. places of work, heritage based visitor attractions)
  - · Land at risk of flooding
  - Land quality/soils; and
  - Employment and tourism.
- 2.5.32 In-combination effects have been identified and set out in full in **ES Chapter 17: In- Combination Effects [APP/6.1].**

#### **Cumulative effects**

- 2.5.33 Each topic chapter within the ES sets out how the particular topic area has considered and assessed the cumulative effects arising as a result of other existing or proposed development that is set out in the long and short lists for the EIA.
- 2.5.34 The Cumulative Effects Assessment will adopt a four-staged approach, as set out in Table 2-4below.

**Table 2-4 Cumulative Effects Assessment Approach** 

CEA Stage	Key Activities
	Define and document the ZoI for each environmental aspect considered in the ES.
Stage 1: Establish the long list of other existing and / or approved development	Identify a long list of developments in the vicinity of the Scheme utilising Matrix 1 of Annex 1 of the PINS advice on Cumulative Effects Assessment.
	Undertake a desk-based review of available environmental information for the identified cumulative developments to inform the baseline, and keep this under review.



CEA Stage	Key Activities
Stage 2: Establish a short list of other existing and / or approved development	Develop and apply threshold criteria to the long list to establish the short list of projects to be included in the CEA, utilising Matrix 1 of Annex 1 of the PINS advice on Cumulative Effects Assessment.  Discuss and agree thresholds with Norfolk County Council.
Stage 3: Information gathering	Information relating to each of the existing or approved developments on the short list is compiled (where available), including, but not limited to:  • Proposed design and location  • Proposed programme of construction, operation and decommissioning; and  • Environmental assessments that set out baseline data, and effects arising from other existing and / or approved development.  Information will be summarised and presented in tabular format, utilising Matrix 2 of Annex 2 of the PINS advice on Cumulative Effects Assessment.
Stage 4: Assessment	A proportionate assessment of the cumulative effects of the Scheme with the other existing and / or proposed developments identified in Stage 1 to 3.  Identify any additional mitigation measures and set out the means of securing delivery of such measures, utilising Matrix 2 of Annex 2 of the PINS advice on Cumulative Effects Assessment.

Stage 1: Establish the long list of other existing and / or approved development

2.5.35 PINS Advice on Cumulative Effects Assessment (September 2024) sets out the types of development that should be considered:

Tier 1 (Other existing and, or approved development)

- Under construction
- Permitted applications under the Planning Act or other regimes but not yet implemented
- Submitted applications under the Planning Act or other regimes but not yet determined; and
- All refusals subject to appeal procedures not yet determined.

Tier 2 (Other existing and, or approved development)



 Projects on the Planning Inspectorate's programme of projects (where a scoping report has been submitted).

Tier 3 (Other existing and, or approved development)

- Projects on the Planning Inspectorate's programme of projects where a scoping report has not been submitted
- Identified in the relevant Development Plan and emerging Development Plans, with appropriate weight given as they near adoption, recognising that there will be limited information available on the relevant proposals; and
- Identified in other plans and programmes, as appropriate, which set the framework for future development consents or approvals, where such development is reasonably likely to come forward.
- 2.5.36 A decreasing level of detail is likely to be available from Tier 1 to Tier 3.
- 2.5.37 Stage 2: Establish a short list of other existing and / or approved development
- 2.5.38 Stage 2 of the CEA will be to review and apply a threshold criteria to the long list, in order to establish a short list of other existing and/or approved developments to ensure that the cumulative assessment is proportionate, utilising Matrix 1 of Annex 1 of the PINS advice on Cumulative Effects Assessment. The criteria will ensure that only other existing and/or approved developments that are likely to result in significant cumulative effects are taken forward to the assessment stage. The shortlist of existing and/or approved developments will be consulted upon with statutory and non-statutory consultees during the EIA process.
- 2.5.39 The threshold criteria to be used will consider the following factors:
  - Temporal Scope
  - Scale and Nature of the Development; and
  - Other factors such as the nature and capacity of the receiving environment, source-pathway-receptor approach, and professional judgment.

Stage 3: Information gathering

- 2.5.40 Environmental information will be gathered for short-listed existing and/or approved development, where available, utilising Matrix 2 of Annex 2 of the PINS advice on Cumulative Effects Assessment, and including details of:
  - Proposed design and location
  - Proposed programme of construction, operation and decommissioning; and
  - Environmental assessments that set out baseline data, and effects arising from other existing and / or approved development.

Stage 4: Assessment



- 2.5.41 Technical disciplines will assess the cumulative effects of the Scheme with the other existing and / or approved development identified in Stage 1 to 3. The assessments will explain and record any time gaps in information, consider all tiers of developments where possible, and be documented in ES.
- 2.5.42 Some assessments may inherently be cumulative in which case no additional cumulative assessment of these aspects is required. However, separate consideration regarding the inter-relationship of effects on an individual Receptor may be needed.
- 2.5.43 In cases where significant cumulative effects between the Scheme and other existing and / or approved developments are identified, it may be necessary to propose additional mitigation measures to be delivered either by the Applicant, or in collaboration with another developer, in which case collaboration and agreement will be sought, where possible.
- 2.5.44 No transboundary effects have been identified as arising from the Scheme.

## 2.6 Mitigation Measures

- 2.6.1 Regulation 14(2) of the EIA Regulations requires that where significant effects are identified, "a description of any features of the proposed development, or measure envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects in the environment" should be included in the ES.
- 2.6.2 Environmental effects remaining after mitigation measures have been incorporated are termed residual effects and these have been fully described in this ES.
- 2.6.3 Mitigation measures are developed as part of an iterative process and therefore have been developed throughout the EIA process in response to the findings of the initial assessments.

#### **Embedded Mitigation**

- 2.6.4 Measures will be identified in order to avoid, reduce and, if possible, offset significant adverse effects identified during the EIA process. Where possible, these measures have been incorporated into the form or design of the Scheme. Once these measures are incorporated into the design, they are termed 'embedded measures'.
- 2.6.5 Embedded measures relevant to the construction, operation and maintenance and decommissioning phases have been described within the outline management plans, and within each technical chapter in the ES.
- 2.6.6 For the operational phase, such embedded measures are represented in the design of the Scheme, and through control measures as part of the DCO, such as the outline Operational Environmental Management Plan (oOEMP) [APP/7.8]. Embedded measures are either incorporated into the design from the outset or identified through the assessment process.
- 2.6.7 This ES assesses potential effects with embedded measures in place. Where significant adverse effects are identified after considering these embedded measures, additional



mitigation measures have been proposed. These are then taken into account in the assessment of residual effects.

2.6.8 A summary of all mitigation measures and how they will be secured, either inherently through the Scheme design, or through control documents, or requirements within the DCO, are set out in the Commitments Register [APP/6.5], which will be kept under review as the DCO Application progresses through Examination.

#### **Monitoring**

2.6.9 Regulation 21(3)(a) of the EIA Regulations requires the Secretary of State to consider whether it is appropriate to impose a 'monitoring measure' which is a "provision requiring the monitoring of any significant adverse effects on the environment". The ES specifies which effects, if any, will require monitoring, and the mechanism by which they will be monitored.

#### Consideration of Alternatives

2.6.10 It is necessary to consider reasonable alternatives for the Scheme, the reasons for selecting the chosen design and location, and to set these out clearly within the ES in accordance with paragraph 2 of Schedule 4 to the EIA Regulations:

"A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects."

2.6.11 Regulation 14(2)(d) of the EIA Regulations also requires that the ES should include:

"A description of the reasonable alternatives studied by the applicant, which are relevant to the proposed 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".

- 2.6.12 Planning Inspectorate Advice Note 7 [], states that a good ES is one that "explains the reasonable alternatives considered and the reasons for the chosen option taking into account the effects of the Proposed Development on the environment".
- 2.6.13 The consideration of alternatives has involved the analysis of different layouts for the Scheme, scales, technologies adopted, design parameters, the location of supporting infrastructure and the Site selection process. ES Chapter 4: Reasonable Alternatives and Design Evolution [APP/6.1] includes a summary of the approach to Site selection and alternatives relevant to the Scheme that have been considered, as well as the justification for selecting the chosen option.

# 2.7 Additional Mitigation

2.7.1 Additional mitigation measures are measures introduced to reduce or mitigate likely significant impacts resulting from the Scheme. Measures could include, for example:



- Fencing / hoarding to reduce glint and glare impacts; and
- Additional planting and hedgerow improvements to reduce visual impacts.
- 2.7.2 Additional mitigation measures are set out within Chapters 6 to 16 of this ES. The mechanism by which the measures are to be secured and implemented, and the party responsible for their delivery, is outlined within the commitments register, which is presented in the **Commitments Register [APP/6.5]**.

#### **Management Plans**

- 2.7.3 The management plans outline mitigation measures included within the ES and how they will be implemented. Both embedded and additional mitigation measures can be secured by management plans. The **Commitments Register [APP/6.5]** outlines securing mechanisms.
- 2.7.4 The following management plans have been drafted to accompany the DCO Application:

#### **Construction Phase**

- Outline Construction Environmental Management Plan (oCEMP) [APP/7.6]
- Outline Construction Traffic Management Plan (oCTMP) [APP/7.7]
- Outline Landscape and Ecological Management Plan (oLEMP) [APP/7.11]
- Outline Public Rights of Way and Permissive Paths Management Plan (oPROWPPMP) [APP/7.12]
- · Outline Soil Management Plan (oSMP) [APP/7.13]; and
- Outline Employment, Skills, and Supply Chain Strategy (oESSCS) [APP/7.15].

#### **Operational Phase**

- Outline Operational Environmental Management Plan (oCEMP) [APP/7.8]
- Outline Operational Traffic Management Plan (oCTMP) [APP/7.9]
- oLEMP [APP/7.11]
- oPROWPPMP [APP/7.12]
- Outline Battery Safety Management Plan (oBSMP) [APP/7.14]; and
- oESSCS [APP/7.15].

#### **Decommissioning Phase**

Outline Decommissioning Strategy (oDS) [APP/7.10].

#### **Residual Effects**

2.7.5 Each technical Chapter of the ES has a residual effects section that outlines the significance of each environmental effect resulting, after the implementation of the embedded and additional mitigation measures.



2.7.6 However, it should be noted that not all environmental factor assessments follow this approach. Where this is the case, it is explained within the relevant environmental factor assessment chapter.



#### References

- Ref 2-1 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 [as amended].
- Ref 2-2 Planning Inspectorate (2024): Nationally Significant Infrastructure Projects: Advice on EIA Notification and Consultation.
- Ref 2-3 Planning Inspectorate (2020): Nationally Significant Infrastructure Projects: Advice Note Seven: Environmental Impact Assessment: process, preliminary environmental information and environmental statements.
- Ref 2-4 Planning Inspectorate (2018): Nationally Significant Infrastructure Projects: Advice Note Nine: Rochdale Envelope.
- Ref 2-5 Planning Inspectorate (2024): Nationally Significant Infrastructure Projects: Advice on working with public bodies in the infrastructure planning process
- Ref 2-6 Planning Inspectorate (2024): Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment.
- Ref 2-7 Planning Inspectorate, Nationally Significant Infrastructure Projects: Commitments Register (September 2024).
- Ref 2-8 Planning Inspectorate, Nationally Significant Infrastructure Projects: Advice on the Preparation and Submission of Application Documents (August 2024).
- Ref 2-9 Institute of Environmental Management and Assessment, Environmental Impact Assessment Guide to Delivering Quality Development (July 2016)
- Ref 2-10 Institute of Environmental Management and Assessment (IEMA), 2024. Mitigation in EIA: Guidance.

