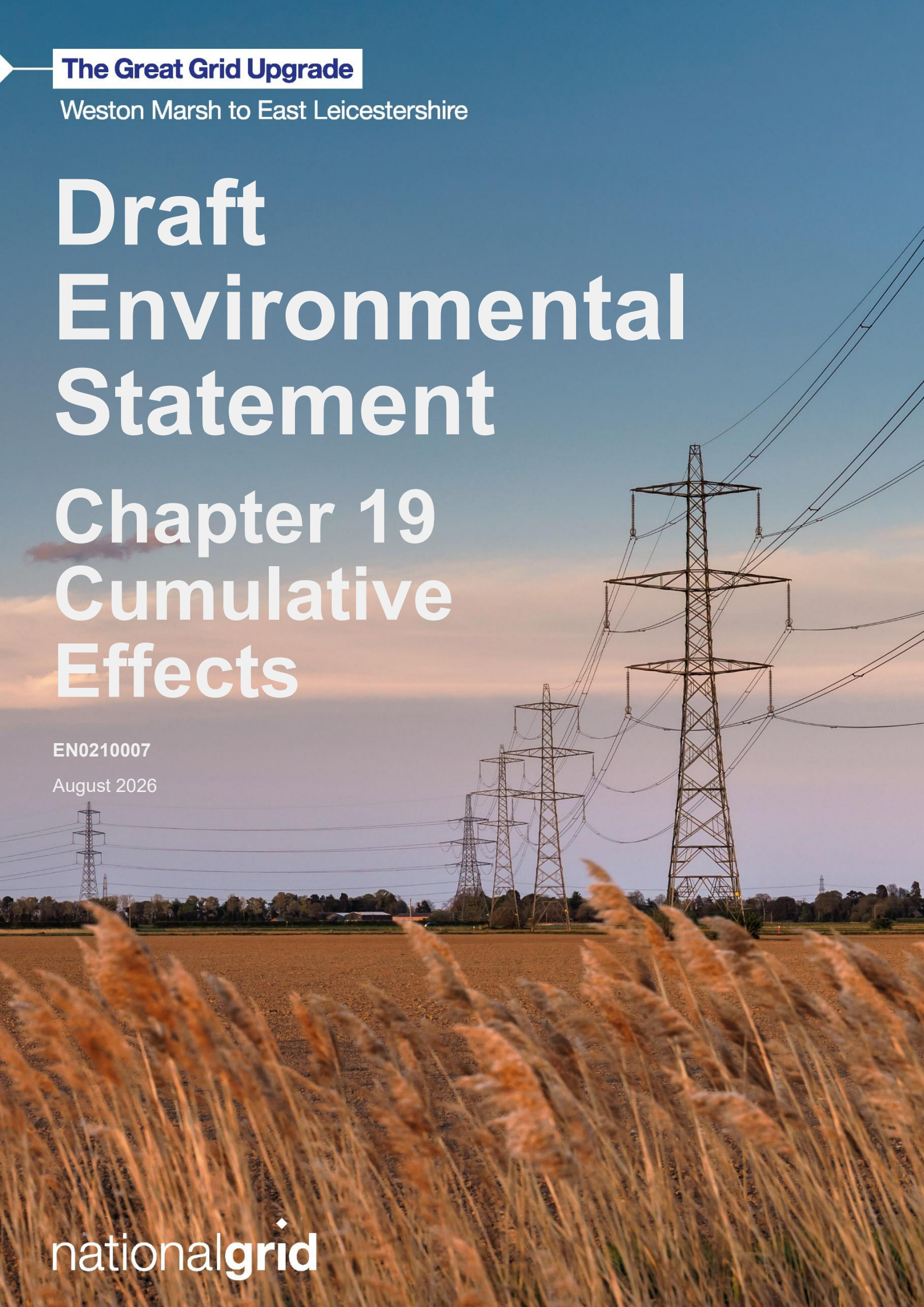




The Great Grid Upgrade

Weston Marsh to East Leicestershire

Draft Environmental Statement

Chapter 19 Cumulative Effects

EN0210007

August 2026

nationalgrid

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19. Cumulative Effects

19.1 Introduction

- 19.1.1 This chapter of the non-statutory Draft Environmental Statement (DES) (referred to in this document as “DES” and “non-statutory DES”) reports the preliminary cumulative effects assessment (CEA) of the Weston Marsh to East Leicestershire Project (the Project). This chapter presents the CEA methodologies and the pre-screening assessment for intra-project effects, **Appendix 19A Preliminary Long List of Other Developments** presents the developments considered for the CEA that have been and **Appendix 19B Preliminary Assessment of Cumulative Effects** presents the preliminary assessment for inter-project effects.
- 19.1.2 Cumulative effects occur when impacts caused by past, present and reasonably foreseeable activities combine to create an increased effect on a receptor(s). A single development or a single environmental impact resulting from a development may not be significant on its own but can become significant when combined with other developments or environmental impacts.
- 19.1.3 Cumulative effects are the result of multiple actions on environmental receptors or resources. The CEA for the Project will consider the following types of effect:
- **Intra-project effects** (also referred to as combined or interactive effects): these effects occur when a single receptor is affected by more than one source of effect from the Project. For example, residential properties may be affected by both noise and dust impacts resulting from the construction phase activities of a single development.
 - **Inter-project effects** (also referred to as cumulative effects): these effects arise as a result of the Project in combination with the effects of other existing or reasonably foreseeable developments or projects. These effects may individually be insignificant, but when combined may result in a significant cumulative effect on a shared receptor (such as people, habitats, or infrastructure). For example, the combined construction traffic from the Project and another development using the same section of highway may result in a cumulative effect that is significant, even if the individual contributions are not.
- 19.1.4 This chapter should be read in conjunction with the following chapters which provide the Project context and approach to Environmental Impact Assessment (EIA):
- **Chapter 2 Regulatory and Planning Policy Context;**
 - **Chapter 3 Main Alternatives Considered;**
 - **Chapter 4 Description of the Project; and**
 - **Chapter 5 EIA Approach and Methodology.**
- 19.1.5 This chapter is supported by the following figures and appendices:
- **Figure 19.1 Zones of Influence for Cumulative Effects Assessment;**
 - **Figure 19.2 Preliminary Long List of Other Developments;**

- **Figure 19.3 Preliminary Short List of Other Developments;**
- **Appendix 19A Preliminary Long List of Other Developments;** and
- **Appendix 19B Preliminary Assessment of Cumulative Effects.**

19.1.6 This chapter has links with all environmental aspect chapters because the assessment presented in this chapter draws on the assessment of impacts undertaken within the aspect-specific assessments in **Chapters 6 to 18**. This chapter and supporting appendix (**Appendix 19A Preliminary Long List of Other Developments**) also provide details of other existing or approved developments within the vicinity of the Project that may be of relevance to the CEA, using information that is available within the public domain. This includes information relating to Nationally Significant Infrastructure Projects (NSIPs), local plan allocations, Marine Licence Applications and proposed schemes that have planning applications registered with the local planning authorities and/or already consented developments that have not yet been constructed.

19.2 Legislation, Policy Framework, and Guidance

Legislation and National Policy

19.2.1 Legislation and national policy relevant to the Project and this chapter are described in **Chapter 2 Regulatory and Planning Policy Context**, and supporting appendices **Appendix 2A Key Legislation**, **Appendix 2B National and Regional Policy** and **Appendix 2C Local Policy**.

Regional and Local Policy

19.2.2 **Chapter 2 Key Legislation and Planning Policy Context** sets out relevant regional and local policy. There is no additional regional or local policy relevant to this chapter.

Guidance

19.2.3 Relevant guidance, specific to cumulative effects, that has informed this DES and will inform the assessment within the Environmental Statement (ES), comprises:

- Planning Inspectorate's Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment (Ref 19.1).

19.3 Scope of Assessment

19.3.1 The scope of the assessment has been informed by the **Appendix 5B Scoping Opinion** (adopted by the Planning Inspectorate on behalf of the Secretary of State on 17 December 2025) and ongoing engagement with relevant technical consultees.

19.3.2 A full summary of all issues raised relevant to Cumulative Effects in the Scoping Opinion and National Grid's response is provided in **Appendix 5C Preliminary Scoping Opinion Response**. Further details of engagement undertaken to date is provided in Section 19.4.

19.4 Stakeholder Engagement

- 19.4.1 National Grid has held several meetings with relevant consultees for each environmental aspect. A summary of any discussions regarding cumulative effects and how these have influenced the Project, scope and/or the approach to the assessment is provided in the Stakeholder Engagement section in **Chapters 6 to 18 of this DES**.

19.5 Intra-Project Cumulative Effects

Study Area

- 19.5.1 The intra-project cumulative effects Study Areas are the same as those presented within each of the environmental aspect chapters assessed in the DES (**Chapters 6 to 18**).

Data Collection

Desk study

- 19.5.2 The baseline information has drawn on a review of the receptors and likely effects identified within each of the environmental aspect chapters (**Chapters 6 to 18**).

Further data to be collected to inform the ES

- 19.5.3 The baseline data and impact assessment conclusions will be revisited as part of the ES to ensure the assessment incorporates the latest available information.

Intra-Project Cumulative Effects Assessment Methodology

- 19.5.4 There is no established EIA methodology for assessing and quantifying the effects of a number of individual impacts on the same receptors. The following section outlines the intra-project cumulative effects methodology. The initial stages of the methodology have been completed for this DES and the final stages of the methodology will be completed for the ES.
- 19.5.5 The assessment of intra-project cumulative effects adopts a four-stage approach:
- 1) **Stage 1:** A pre-screening exercise to determine whether a receptor is exposed to more than one type of effect was undertaken at the Scoping stage. This is shown in Chapter 5 in **Appendix 5A EIA Scoping Report**. Those receptors identified as experiencing more than one type of effect will be taken through to the second stage. This pre-screening exercise has been updated for the DES and is presented in **Table 19.1**.
 - 2) **Stage 2:** A pre-screening assessment to determine the approach to the assessment of interactions and the potential interactions on receptors that will be taken forward to the third stage. **Table 19.1** presents this initial pre-screening assessment.
 - 3) **Stage 3:** A screening exercise to identify the level of effect on each receptor. Those receptors exposed to two or more types of effect, with a level of effect greater than negligible, will be taken forward to the fourth stage.

4) **Stage 4:** The main intra-project assessment which will consider if the combination of effects is likely to lead to overall effects of greater significance.

- 19.5.6 This DES presents Stages 1 and 2 of the intra-project CEA within this chapter in **Table 19.1**, to identify receptor groups that are potentially exposed to more than one type of effect from multiple environmental aspects. This assessment has been undertaken based upon the initial findings set out within the environmental aspect chapters detailed in **Chapters 6 to 18** and currently available data relating to both the construction and operation (and maintenance) phases of the Project.
- 19.5.7 The environmental aspect chapters (**Chapters 6 to 18**) present a preliminary assessment of effects and do not confirm the level of effect at this stage. Therefore, an assessment of intra-project cumulative effects is not presented in this DES chapter and the assessment that is provided in this chapter is preliminary in nature. A full assessment of intra-project cumulative effects, including Stages 3 and 4, will be presented in the ES.
- 19.5.8 Any potential additional mitigation measures and monitoring requirements as a result of the intra-project CEA will be considered and outlined within the ES.

Initial Pre-Screening Exercise and Assessment of Intra-Project Cumulative Effects (Stages 1 and 2)

- 19.5.9 The initial pre-screening assessment is presented in **Table 19.1** showing how the receptor groups are likely to interact between aspects and the approach to the assessment of interactions. This will be revisited as part of the ES to ensure all receptors considered within the ES are taken through this pre-screening assessment.

Table 19.1 Intra-project cumulative effects initial pre-screening assessment

Receptors	Aspect Chapters															
	Landscape	Visual	Ecology and Biodiversity	Historic Environment	Water Environment	Geology and Hydrogeology	Agriculture and Soils	Traffic and Transport	Air Quality	Noise and Vibration	Socio-economics, Recreation and Tourism	Health and Wellbeing	Climate Change	Temporal Overlap	Spatial Overlap	Approach to Assessment of Interactions
Landscape character and designations	✓	✓	✓	✓										Yes	Yes	Although closely related, landscape and visual effects are reported separately. A Zone of Theoretical Visibility (ZTV) has been developed and considered in the landscape assessment, and the Project being visible is an inherent aspect of the assessment of impacts on landscape character. The historic features/value of a landscape, and the ecological designation, existing habitats, and vegetation cover, is considered in defining landscape character and the assessment.

Receptors	Aspect Chapters															
	Landscape	Visual	Ecology and Biodiversity	Historic Environment	Water Environment	Geology and Hydrogeology	Agriculture and Soils	Traffic and Transport	Air Quality	Noise and Vibration	Socio-economics, Recreation and Tourism	Health and Wellbeing	Climate Change	Temporal Overlap	Spatial Overlap	Approach to Assessment of Interactions
																Therefore, these potential interactions are included in the assessment reported in Chapter 6 Landscape and will not be considered further in Stages 3 and 4 in the intra-project effects assessment in the ES.
Visual receptors	✓	✓		✓					✓	✓	✓			Yes	Yes	The visibility of the Project is inherently considered in Chapter 6 Landscape, and the setting assessment reported in Chapter 9 Cultural Heritage, therefore these potential interactions will not be considered further in Stages 3 and 4 in the intra-project effects assessment in the ES. Potential interactions from air quality, noise and

Receptors	Aspect Chapters															
	Landscape	Visual	Ecology and Biodiversity	Historic Environment	Water Environment	Geology and Hydrogeology	Agriculture and Soils	Traffic and Transport	Air Quality	Noise and Vibration	Socio-economics, Recreation and Tourism	Health and Wellbeing	Climate Change	Temporal Overlap	Spatial Overlap	Approach to Assessment of Interactions
																vibration, and socio-economics, recreation and tourism effects on visual receptors are identified, therefore these will be considered further in Stages 3 and 4 in the intra-project assessment of the ES.
Commercial receptors								✓	✓	✓	✓			Yes	Yes	Potential interactions between air quality, traffic and transport, noise and vibration and socio-economics, recreation and tourism effects on commercial receptors are identified, therefore impacts on commercial receptors will be considered further in Stages 3 and 4 in the intra-project effects assessment of the ES.

Receptors	Aspect Chapters															
	Landscape	Visual	Ecology and Biodiversity	Historic Environment	Water Environment	Geology and Hydrogeology	Agriculture and Soils	Traffic and Transport	Air Quality	Noise and Vibration	Socio-economics, Recreation and Tourism	Health and Wellbeing	Climate Change	Temporal Overlap	Spatial Overlap	Approach to Assessment of Interactions
Ecological receptors			✓						✓	✓				Yes	Yes	Potential interactions between air quality, the water environment and noise and vibration effects on ecological receptors and notable habitats are considered in Chapter 8 Ecology and Biodiversity and will therefore not be considered further in Stages 3 and 4 in the intra-project effects assessment of the ES.
Notable habitats			✓		✓	✓			✓					Yes	Yes	
Designated heritage assets	✓	✓		✓						✓				Yes	Yes	Potential interactions from historic environment, noise and vibration, and visual effects on relevant heritage assets, are considered in the assessment reported in Chapter 9 Cultural Heritage and will therefore
Non-designated heritage assets				✓						✓				Yes	Yes	

Receptors	Aspect Chapters															
	Landscape	Visual	Ecology and Biodiversity	Historic Environment	Water Environment	Geology and Hydrogeology	Agriculture and Soils	Traffic and Transport	Air Quality	Noise and Vibration	Socio-economics, Recreation and Tourism	Health and Wellbeing	Climate Change	Temporal Overlap	Spatial Overlap	Approach to Assessment of Interactions
																not be considered further in the intra-project effects assessment of the ES.
Water resources					✓	✓								Yes	Yes	Potential interactions and pathways between surface water and groundwater are intrinsic parts of both
Watercourses and waterbodies					✓	✓								Yes	Yes	Chapter 10 Water Environment (which considers surface water) and Chapter 11 Geology and Hydrogeology (which considers groundwater); therefore, this will not be considered further in Stages 3 and 4 in the intra-project effects assessment of the ES.
Flood risk receptors					✓									No	No	Chapter 10 Water Environment and Appendix 10B Preliminary

Receptors	Aspect Chapters															
	Landscape	Visual	Ecology and Biodiversity	Historic Environment	Water Environment	Geology and Hydrogeology	Agriculture and Soils	Traffic and Transport	Air Quality	Noise and Vibration	Socio-economics, Recreation and Tourism	Health and Wellbeing	Climate Change	Temporal Overlap	Spatial Overlap	Approach to Assessment of Interactions
																Flood Risk Assessment consider flood risk on all relevant receptors and from all sources including surface and groundwater. No interaction with other aspects is identified and this will not be considered further in Stages 3 and 4 in the intra-project effects assessment of the ES.
Best and Most Versatile (BMV) agricultural land							✓							No	No	No interactions with effects on BMV agricultural land are identified, therefore those effects are reported in Chapter 12 Agriculture and Soils and will not be included in Stages 3 and 4 in the intra-project effects assessment in the ES.

Receptors	Aspect Chapters																
	Landscape	Visual	Ecology and Biodiversity	Historic Environment	Water Environment	Geology and Hydrogeology	Agriculture and Soils	Traffic and Transport	Air Quality	Noise and Vibration	Socio-economics, Recreation and Tourism	Health and Wellbeing	Climate Change	Temporal Overlap	Spatial Overlap	Approach to Assessment of Interactions	
Agricultural holdings							✓				✓			Yes	Yes	The potential socio-economic impact on farm operations is considered in Chapter 12 Agriculture and Soils , therefore this will not be considered further in Stages 3 and 4 in the intra-project effects assessment in the ES.	
Soil							✓				✓			Yes	Yes	The assessment of soil as a resource and potential socio-economic impact on farm operations is considered in Chapter 12 Agriculture and Soils , therefore this will not be considered further in Stages 3 and 4 in the intra-project effects assessment in the ES.	

Receptors	Aspect Chapters															
	Landscape	Visual	Ecology and Biodiversity	Historic Environment	Water Environment	Geology and Hydrogeology	Agriculture and Soils	Traffic and Transport	Air Quality	Noise and Vibration	Socio-economics, Recreation and Tourism	Health and Wellbeing	Climate Change	Temporal Overlap	Spatial Overlap	Approach to Assessment of Interactions
Public Rights of Way		✓						✓		✓	✓			Yes	No	Potential interactions between visual, socio-economics, recreation and tourism effects and potential noise impacts on Public Rights of Way (PRoWs) are identified, therefore impacts to relevant PRoWs and cycle routes will be considered further in Stages 3 and 4 the intra-project effects assessment of the ES.
Cycle routes		✓						✓		✓	✓			Yes	No	
The highway network								✓						No	No	No interactions with the effects reported in Chapter 13 Traffic and Transport are identified, therefore, this will not be considered further in Stages 3 and 4 in the intra-project effects assessment of the ES.

Receptors	Aspect Chapters															
	Landscape	Visual	Ecology and Biodiversity	Historic Environment	Water Environment	Geology and Hydrogeology	Agriculture and Soils	Traffic and Transport	Air Quality	Noise and Vibration	Socio-economics, Recreation and Tourism	Health and Wellbeing	Climate Change	Temporal Overlap	Spatial Overlap	Approach to Assessment of Interactions
Communities		✓							✓	✓	✓	✓	✓	Yes	Yes	Potential interactions between air quality, noise and vibration, socio-economics, recreation and tourism, health and wellbeing, and climate change effects on communities are identified, therefore impacts to relevant communities will be considered further in Stages 3 and 4 in the intra-project effects assessment of the ES.
Geology						✓								No	No	No interactions with the effects on geology reported in Chapter 11 Geology and Hydrogeology are identified, therefore, this will not be considered further in Stages 3 and 4 in the intra-

Receptors	Aspect Chapters															
	Landscape	Visual	Ecology and Biodiversity	Historic Environment	Water Environment	Geology and Hydrogeology	Agriculture and Soils	Traffic and Transport	Air Quality	Noise and Vibration	Socio-economics, Recreation and Tourism	Health and Wellbeing	Climate Change	Temporal Overlap	Spatial Overlap	Approach to Assessment of Interactions
																project effects assessment of the ES.
Mineral reserves						✓					✓			Yes	Yes	Potential interactions between socio-economics, recreation and tourism, and geology and hydrogeology effects are considered because socio-economic effects on mineral reserves are considered in Appendix 11B Preliminary Mineral Resource Assessment . Therefore, mineral reserves will not be considered further in Stages 3 and 4 in the intra-project effects assessment in the ES.
Human health	✓	✓			✓	✓		✓	✓	✓	✓	✓		Yes		Chapter 17 Health and Wellbeing reports a holistic assessment of effects on human health including

Receptors	Aspect Chapters															
	Landscape	Visual	Ecology and Biodiversity	Historic Environment	Water Environment	Geology and Hydrogeology	Agriculture and Soils	Traffic and Transport	Air Quality	Noise and Vibration	Socio-economics, Recreation and Tourism	Health and Wellbeing	Climate Change	Temporal Overlap	Spatial Overlap	Approach to Assessment of Interactions
																consideration of neighbourhood amenity (including air quality, traffic, noise and landscape/visual), physical activity (including PRow), open space and leisure, and access to facilities. Therefore, further consideration of these potential interactions is not required. Other aspects such as water and geology/soils (contamination exposure) use health-based standards to define baseline conditions, mitigation, and assessment, and therefore intrinsically consider human health in that assessment.

Receptors	Aspect Chapters															
	Landscape	Visual	Ecology and Biodiversity	Historic Environment	Water Environment	Geology and Hydrogeology	Agriculture and Soils	Traffic and Transport	Air Quality	Noise and Vibration	Socio-economics, Recreation and Tourism	Health and Wellbeing	Climate Change	Temporal Overlap	Spatial Overlap	Approach to Assessment of Interactions
																Therefore, human health will not be considered further in Stages 3 and 4 in the intra-project effects assessment of the ES.
Climate			✓		✓								✓	Yes	Yes	The receptor for greenhouse gas emissions is the global atmosphere/ climate, and the assessment considers all emissions from the Project against sector and national budgets. Where climate change is a material consideration in an individual aspect assessment, it is considered directly in that assessment, e.g. flood risk. The climate assessment is inherently cumulative and

Receptors	Aspect Chapters															
	Landscape	Visual	Ecology and Biodiversity	Historic Environment	Water Environment	Geology and Hydrogeology	Agriculture and Soils	Traffic and Transport	Air Quality	Noise and Vibration	Socio-economics, Recreation and Tourism	Health and Wellbeing	Climate Change	Temporal Overlap	Spatial Overlap	Approach to Assessment of Interactions
																already considered in relevant assessments and therefore, will not be considered further in Stages 3 and 4 in the intra-project assessment of the ES.

19.6 Inter-Project Cumulative Effects

Inter-Project Cumulative Effects Assessment Methodology

- 19.6.1 Inter-project cumulative effects occur where a receptor is affected by two or more developments or projects at the same time, potentially amplifying the overall effect. Individually the effects may not be significant, but when considered together, could create a significant cumulative effect.
- 19.6.2 In accordance with the approach contained within the Planning Inspectorate's Advice on CEA (Ref 19.1), the approach to the assessment of inter-project cumulative effects follows a staged approach. The following section outlines the approach that has been adopted for this DES, which will also be followed for the ES. The stages are outlined below:
- **Stage 1** (divided into **Stages 1A and 1B** for the purposes of the DES): the approach for the first stages of the Project involves identifying a 'long list' of other existing developments and/or approved developments that could interact with the Project within the identified Zones of Influence (Zols).
 - **Stage 2**: the identified developments from Stages 1A and 1B are screened against the scale of developments and nature and temporal thresholds to see if they should progress to Stage 3. This is referred to as a 'shortlist' of developments for consideration in Stages 3 and 4.
 - **Stage 3**: information is gathered for each of the shortlisted developments.
 - **Stage 4**: the shortlisted developments are assessed to identify whether there are any likely significant cumulative effects with the Project.
- 19.6.3 These stages are explained in more detail below.
- 19.6.4 Stages 1A, 1B, 2, 3 and 4 have been completed for the assessment of inter-project cumulative effects in this DES. All stages will be updated and presented in the cumulative effects chapter of the ES.

Stage 1A: identify Zones of Influence

- 19.6.5 The Study Area for inter-project cumulative effects comprises multiple Zols. Each Zol is the geographic area within which a development is likely to affect environmental receptors. As such, the Zols would vary for different types of receptors. The Zols used for this DES are typically based on a distance extending from either side of the draft Order Limits, or other specified area where stated. This will be updated for the ES.
- 19.6.6 The Zols used for the environmental aspects are listed in **Table 19.2**. The rationale for the distances chosen are summarised below and explained in the relevant aspect chapters.

Table 19.2 Zol for environmental aspects

Environmental Aspect	Zol	Rationale
Landscape and visual	3 km from the horizontal Limits of Deviation for the new overhead line (75 m from the centreline) and the draft Order Limits for the substations.	The 3 km Zol seeks to encompass all landscape and visual receptors with the potential to be significantly affected by the Project in accordance with good practice guidance set out in the Guidelines for Landscape and Visual Assessment (GLVIA3) (Ref 19.6). Potential effects on the perception or experience of the landscape, views and visual amenity resulting from the Project are unlikely to be significant beyond this distance.
Ecology and biodiversity	10 km from the draft Order Limits.	The 10 km Zol is regarded as the industry standard for the CEA as significant cumulative effects beyond this are unlikely. The 10 km Zol encompasses statutory designated sites of international, national and local nature conservation value, plus non-designated sites, and is considered appropriate to identify sites where there are potential impact pathways which could result in a potentially significant cumulative effect. The wider 30 km Study Area described in Chapter 8 Ecology and Biodiversity is for the identification of the presence of any Special Areas of Conservation (SACs) with bats as a qualifying feature, or Special Protection Areas (SPAs) where bird species with large foraging ranges are noted as, or one of, the qualifying features only. There are no SACs with bats as the qualifying feature within 30 km of the draft Order Limits. There are eight internationally designated nature conservation sites within the 30 km Study Area, with birds that are listed as qualifying features. Seven are within 10 km and will be considered in the cumulative assessment. For those over 10 km and within 30 km (Rutland Water,

Environmental Aspect	Zol	Rationale
		and the Nene Washes, both SPA/Ramsar sites), the draft Order Limits are located outside Impact Risk Zones (IRZs) for the underlying Sites of Special Scientific Interest (SSSIs). It is therefore considered unlikely that qualifying species for these SPA/Ramsar sites would use habitats within the draft Order Limits in sufficient numbers that impacts such as habitat loss, disturbance and displacement would result in a harmful effect on them. On this basis, land within the draft Order Limits is unlikely to represent Functionally Linked Land (FLL) (areas of land that occur outside a designated site that is considered to be critical to, or necessary for, the ecological or functional needs of the species or features for which that site is designated. Therefore, 10 km is considered sufficient to identify any likely significant cumulative effects.
Cultural heritage	5 km from the draft Order Limits to identify any assets of the highest significance.	The 5 km Zol includes potential visual impacts to the setting and significance of designated heritage assets of the highest value (scheduled monuments, grade I and II* listed buildings and grade I and II* registered parks and gardens) arising from the Project and potential cumulative effects from other developments. This also encompasses the 3 km Study Area for all designated heritage assets.
Water environment	500 m from the draft Order Limits.	The 500 m Zol has been considered appropriate based on technical knowledge of similar projects and has been set following consideration of the distance over which likely significant effects can reasonably be expected to occur.
Geology and hydrogeology	250 m from the draft Order Limits for geology and land contamination.	A Zol of 250 m for geological receptors and a Zol of 500 m for hydrogeological receptors (due to the high sensitivity and connectivity

Environmental Aspect	Zol	Rationale
	500 m from the draft Order Limits for hydrogeology.	across a wider area for hydrogeological receptors) have been identified because significant cumulative effects beyond these distances are unlikely due to the nature of the Project.
Agriculture and soils	The draft Order Limits for Agricultural Land Classification (ALC) and soils, and whole farm holdings where impacted for farm operations.	The Zol has been defined in this way in relation to agriculture and soils because the impacts from the Project will be limited to areas of direct land take or land disturbance, and the overall operation of the farm holdings.
Traffic and transport	The Primary Access Routes described in Chapter 13 Traffic and Transport have been used as the Zol in this DES. The Affected Road Network will be identified as part of the Transport Assessment and used as the Zol in the ES.	At this early stage, the future baseline includes background growth which makes some allowance for changes in traffic due to committed development, but does not include the higher traffic impacts local to the committed development sites, which will be included in the ES. Chapter 13 Traffic and Transport considers the impact of preliminary construction traffic estimates on the future baseline for the Primary Access Routes. The traffic and transport preliminary CEA assumes that committed developments are included in the future baseline, and the assessment in Appendix 19B Preliminary Assessment of Cumulative Effects identifies the potential cumulative effects due to any schemes that are not yet committed but are considered to have impacts affecting the Zol. For the ES, the Traffic and Transport assessment will include the higher traffic impacts local to the committed development sites in the future baseline, which will include a wider Zol (study area) taking account of additional routes used by workers and potentially other routes materially impacted by the construction of the Project.

Environmental Aspect	Zol	Rationale
		The cumulative scenario will include any schemes that are not yet committed but are considered to have impacts affecting the Zol.
Air quality	250 m from the draft Order Limits.	The 250 m Zol is based on the Institute of Air Quality Management guidance document regarding the assessment of dust from demolition and construction (Ref 19.7).
Noise and vibration	300 m from the draft Order Limits.	The 300 m Zol is based on guidance from BS 5228-1:2009+A1:2014 (Ref 19.8) for calculation validity. Significant effects only expected at shorter distances.
Socio-economics, recreation and tourism	Harborough, Melton, North Northamptonshire, South Holland, South Kesteven and West Northamptonshire local authorities for population and deprivation, and economy and employment receptors. 5 km from the draft Order Limits for tourism and recreation and aviation and defence infrastructure. 500 m from the draft Order Limits for the remaining relevant receptors: • users of recreational routes and PRowS; • development land, utilities and renewable infrastructure; and • users of local businesses and community facilities.	The Zol is based on relevant industry guidance and best practice.
Health and wellbeing	500 m from the draft Order Limits.	The 500 m Zol is regarded as the industry-leading standard for CEA as significant effects beyond this are unlikely.
Climate change	Not applicable.	In-combination Climate Change Impacts (ICCI) have been scoped out, as proposed in Appendix 5A EIA Scoping Report and agreed with the Planning Inspectorate through the EIA scoping process.

Environmental Aspect	Zol	Rationale
		Instead, each environmental chapter will take account of projected future climate change within their future baseline. The receptor for the greenhouse gas (GHG) assessment is the global climate and significance is considered against sectors and/or national budgets which are considered and set cumulatively. Therefore, the GHG assessment is inherently cumulative. This is further detailed in Chapter 18 Climate Change.

- 19.6.7 The Zols are illustrated on **Figure 19.1 Zones of Influence for Cumulative Effects Assessment**. This will be kept under review as the Project develops and the long list of developments for consideration is updated as required during the production of the ES.

Stage 1B: Identifying long list of other developments

- 19.6.8 For the inter-project assessment, a long list of other developments to be considered in the CEA has been prepared and detailed in **Appendix 19A Preliminary Long List of Other Developments**. The Planning Inspectorate's Advice on CEA (Ref 19.2) identifies three tiers of development based on where the other developments are in the planning process and recognises that the amount of information available to inform the assessment varies according to which tier the other developments fit into. Tier 1 projects are the most certain, with a high level of publicly available information, while Tier 3 projects are the least certain, with limited publicly available information to inform assessments. The three tiers are described in **Table 19.3**.
- 19.6.9 Minor planning applications have been identified and considered as part of the long list exercise when in close enough proximity to the Project. Developments which met the criteria provided in **Table 19.4** were included in the preliminary long list of developments.
- 19.6.10 An initial search of planning applications held on the relevant planning authority websites and the Planning Inspectorate's Programme of Projects was undertaken in April 2026. A provisional long list of developments is provided in **Appendix 19A Preliminary Long List of Other Developments**. This long list will be updated periodically through an ongoing planning search, to consider any new planning applications made since the undertaking of the initial scoping exercise.
- 19.6.11 It should be noted that the long list will continue to change throughout the preparation of the ES as new planning applications are submitted, approved, rejected, or withdrawn. Additional developments will be added to the long list for the ES as they are submitted to planning portals, with an intended cut-off date three months before submission of the Project's application for development consent, to enable the assessment to be concluded.

Table 19.3 'Other development' for inclusion in the inter-project cumulative effects assessment

Tier	Development
Tier 1	Other existing and/or approved development: - Projects under construction. - Permitted application(s) under the Planning Act 2008 or other regimes but not yet implemented. - Submitted application(s) under the Planning Act 2008 or other regimes but not yet determined. - 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. - Projects identified in the relevant Development Plan and emerging Development Plans, with appropriate weight being given as they near adoption, recognising that there will be limited information available on the relevant proposals. - Projects 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.

Table 19.4 CEA long list of developments inclusion criteria

Development	Housing Unit (no)	Housing Land (Area)	Non-Residential Floorspace (Area)	Non-Residential Total Site Area	Distance from the Draft Order Limits
Nationally Significant Infrastructure Projects	All	All	All	All	10 km
Transport and Works Act orders	All	All	All	All	10 km
Minerals and waste EIA applications	All	All	All	All	10 km
Transport allocations in non-statutory plans, e.g. local transport plans	All	All	All	All	10 km
Applications or allocations	Large scale major	200+	4 ha+	10,000 m ² + or 2 ha+	10 km

Development		Housing Unit (no)	Housing Land (Area)	Non-Residential Floorspace (Area)	Non-Residential Total Site Area	Distance from the Draft Order Limits
Medium scale major		10-199	0.5-4 ha	1,000-10,000 m ²	or 1-2 ha	2 km
Small scale minor		1-9	Less than 0.5 ha	Less than 1,000 m ²	or less than 1 ha	500 m

Stage 2: Establishing a shortlist of ‘other existing developments and/or approved developments’

- 19.6.12 Following Stage 1, the projects included on the long list have been screened based on the scale and nature of the other existing and/or approved developments, and the potential for interactions with the Project across all environmental aspects. This has taken into consideration the Zol of each environmental aspect in order to identify if the development should progress to the shortlist for consideration in the CEA.
- 19.6.13 Professional judgement has been used during the assessment to determine whether developments should be scoped in or out of the assessment. A justification for scoping a development in or out of the shortlist has been provided for each development on the long list in **Appendix 19A Preliminary Long List of Other Developments**.
- 19.6.14 The following inclusion/exclusion criteria will be used for the assessment:
- **Temporal Scope:** other projects within a Zol and an overlapping construction phase (currently expected to be 2030-2035 including any reinstatement required) and in some cases operational effects would be scoped into the assessment. Planning applications considered include those submitted within a five-year period prior to the submission of the application for development consent for this Project. This is because planning permissions typically expire after a period of three to five years without implementation. The status of planning applications will be monitored to include committed projects and those applications that remain undetermined but could still provide forthcoming committed developments. Developments where construction is likely to be completed prior to the Project’s indicative construction start date have not been included in the assessment. These developments will be considered as part of the future baseline of each individual aspect assessment within the ES.
 - **Scale and nature of development:** developments identified as Schedule 1 and 2 developments in the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the ‘EIA Regulations’) (Ref 19.2) would be considered further. Development not identified as Schedule 1 or 2 developments would be scoped out of the assessment, except where professional judgement identifies specific scenarios where there is a high likelihood of significant environmental effects arising in combination with the Project.

- **Sensitivity of the receiving environment:** where there are potential source-pathway-receptor linkages (viable mechanisms by which a source of impact can affect a receptor via a connecting pathway) between the Project and other developments, cumulative effects would be considered further. Other development with no clear source-pathway-receptor linkage would be scoped out of the assessment.
- **Consultation:** requests from relevant stakeholders for the inclusion of specific projects and/or plans within the CEA may be considered.

Stage 3: Information gathering

- 19.6.15 **Appendix 19A Preliminary Long List of Developments** of this DES presents the preliminary information gathered for Stage 3 for the Short List of Developments. Further information on the shortlisted developments has been gathered to inform the CEA, where this is available. This includes:
- proposed design and location information;
 - construction and operational timescale; and
 - results of any environmental assessments completed for the other developments.
- 19.6.16 Project data have been gathered and obtained from local authority planning portals, statutory bodies' websites and the Planning Inspectorate's website.
- 19.6.17 Information gathering for Stage 3 will be updated and finalised in the ES and will also include project data obtained by discussion with other developers and engagement with local planning authorities.

Stage 4: Assessment

- 19.6.18 At the ES stage, an assessment of the cumulative effects of the Project with the other existing development and/or approved development identified in Stage 2 will be undertaken using the following methodology:
- Each of the 'other existing developments and/or approved developments' will be assessed in turn with the Project. The author of each environmental aspect chapter would determine if both activities/proposals potentially alter the residual effects identified in their assessments and potentially give rise to significant cumulative effects during either construction or operation.
 - The assessment will consider the apportionment of effect between the Project and the 'other existing development' - e.g. is the contribution to the effect demonstrably related to one development or is there an equal contribution from either development, based on professional judgement.
 - The assessment will consider whether certain assessments (e.g. transport and associated air quality/noise vehicular emissions assessments) are inherently cumulative and have been undertaken on a worse-case basis. In such circumstances, no additional cumulative assessment will be undertaken.
 - Cumulative effects will be identified by considering whether there would be any change in the significant effects from the Project, as identified within the individual aspect chapters of the DES and ES, taking into consideration any effects from the shortlisted 'other existing development and/or approved development'. The criteria for the significance of effects for the preliminary inter-project CEA in **Appendix 19B**

Preliminary Assessment of Cumulative Effects are outlined in each environmental aspect chapter (**Chapters 6 to 18**). For example, a moderate adverse significant cumulative effect becoming a major adverse significant cumulative effect; or where the effects of the Project on key receptors potentially affected by the shortlisted 'other existing development and/or approved development' would trigger a significant cumulative effect where the effects of the Project in isolation would be non-significant. For example, a minor adverse non-significant cumulative effect becoming a moderate adverse cumulative significant effect.

- Significant and non-significant cumulative effects of the Project will be taken from the environmental aspect chapters to inform the significance of cumulative effects with other developments. Effects will be identified as direct, indirect, short-term or long-term, permanent or temporary.
- All likely significant cumulative effects and a description of the proposed mitigation and monitoring measures that may be required will be documented and presented in an accessible format similar to that in Annex 2 provided in the Planning Inspectorate's Advice on CEA (Ref 19.1) and tabulated within the ES.

19.6.19 **Appendix 19B Preliminary Assessment of Cumulative Effects** of this DES presents a preliminary CEA from each environmental aspect for the developments that have progressed to Stages 3 and 4.

19.6.20 Stages 1A, 1B, 2, 3 and 4 have been completed for this DES at a preliminary stage. All Stages will be updated and further detailed in the Cumulative Effects chapter of the ES.

19.7 Assessment Assumptions and Limitations

19.7.1 As the DES is a preliminary assessment and utilises the baseline information available at the time of writing, it is possible that the effects reported within the ES may differ to those set out in this DES. This could occur, for example, where new information becomes available and identifies new receptors or where further assessment is undertaken on an updated design.

19.7.2 The CEA assumes that mitigation identified within the preceding chapters and/or within the EIAs of other proposed developments is included before undertaking the assessment.

19.7.3 The assumptions and limitations of the CEA with regard to both intra-project and inter-project cumulative effects will be reviewed and updated as part of the ES.

19.7.4 The following assumptions and limitations apply to the intra-project and inter-project CEA respectively.

Intra-Project Assessment:

- Negligible effects identified in aspect assessments are assumed to have no ability to interact with another identified effect and will be excluded from consideration.

Inter-Project Assessment:

- In accordance with the Planning Inspectorate's advice on cumulative effects (Ref 19.1), other existing and/or approved developments may be considered as part of the construction and operational assessment where they are expected to be

completed before the commencement of construction of the Project and where the effects arising from them are fully determined. The effects arising from these other existing and/or approved developments should be considered as part of the future baseline. It has been considered reasonably likely that developments which have been granted permission before 2025 will have been completed before the commencement of construction works for the Project. Any developments which fall within this category have been considered unlikely to give rise to cumulative effects during construction, and operational effects would already form part of the baseline/future baseline environment.

- The assessment has been conducted utilising information only available within the public domain, such as the Planning Inspectorate's website, or local authority planning portals, discussion with other developers and engagement with local planning authorities.

19.8 Design, Standard and Additional Mitigation Measures

- 19.8.1 Mitigation measures to avoid, reduce, manage, or control potential impacts and resulting effects of the Project are typically described and considered in assessment in three groups or types as defined on **Chapter 5 EIA Approach and Methodology** of this DES.
- 19.8.2 The Project draft Order Limits have been designed to avoid sensitive receptors as far as practicable. This is in accordance with the 'Holford Rules' (Ref 19.3) applicable to routing of new overhead lines and the 'Horlock Rules' (Ref 19.4) which apply to design and siting of substations. These approaches are explained in further detail within the Corridor Preliminary Routeing and Siting Study (CPRSS) (Ref 19.5) and **Chapter 3 Main Alternatives Considered**. Principles include, but are not limited to, seeking to avoid areas of highest amenity, cultural or scientific value, taking advantage of natural screening provided by existing landform and features (e.g. woodland) and keeping visual, noise and other environmental effects to a minimum.
- 19.8.3 Each environmental aspect as part of the individual aspect assessments undertaken for the Project has considered and applied design, standard and additional mitigation where necessary. These measures have inherently been considered in the CEA undertaken for the purposes of the DES.
- 19.8.4 The specific mitigation measures being applied for each aspect assessment can be found in **Chapters 6 to 18** and proposed mitigation measures applicable to the Project are outlined in **Appendix 19B Preliminary Assessment of Cumulative Effects**.
- 19.8.5 Additional mitigation measures and monitoring for the CEA have not been considered at this stage due to the preliminary nature of the assessment that has been undertaken.
- 19.8.6 The assessment will be revisited and conducted in full as part of the production of the ES, at which time the need for any mitigation measures for cumulative effects will be considered and applied to the assessment as needed.

19.9 Further Assessment

- 19.9.1 The following further work and assessment will be conducted and presented in the ES:
- A full assessment including Stages 3 and 4 of intra-project cumulative effects. Any potential additional mitigation measures and monitoring requirements as a result of the intra-project CEA will also be considered and outlined within the ES.
 - A final updated version of all stages of the inter-project CEA will be presented, to identify any likely significant cumulative effects.

References

- Ref 19.1 The Planning Inspectorate (2025). Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment [online]. Available at: <https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-cumulative-effects-assessment> [Accessed 09 January 2026].
- Ref 19.2 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 [online]. Available at: <https://www.legislation.gov.uk/uksi/2017/572/contents/made> [Accessed 16 January 2026].
- Ref 19.3 National Grid. The Holford Rules: Guidelines on Overhead Line Routeing [online]. Available at: <https://www.nationalgrid.com/sites/default/files/documents/13795-The%20Holford%20Rules.pdf> [Accessed 16 January 2026].
- Ref 19.4 National Grid. NGC Substations and the Environment: Guidelines on Siting and Design [online] Available at: <https://www.nationalgrid.com/sites/default/files/documents/13796-The%20Horlock%20Rules.pdf> [Accessed 16 January 2026].
- Ref 19.5 National Grid (2025) Weston Marsh to East Leicestershire Corridor Preliminary Routeing and Siting Study. [online] Available at: <https://www.nationalgrid.com/document/561431/download> [Accessed 16 January 2016].
- Ref 19.6 Landscape Institute and Institute of Environmental Management and Assessment, (2013). Guidelines for Landscape and Visual Impact Assessment 3rd Edition. Abingdon: Routledge.
- Ref 19.7 Institute of Air Quality Management (2024) [online] Guidance on the assessment of dust from demolition and construction (Version 2.2). Available at: <https://iaqm.co.uk/wp-content/uploads/2013/02/Construction-Dust-Guidance-Jan-2024.pdf> [Accessed 17 February 2026].
- Ref 19.8 British Standards Institution (2009). BS 5228-1:2009+A1:2014. Code of practice for noise and vibration control on construction and open sites. Part 1: Noise. London: BSI.

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