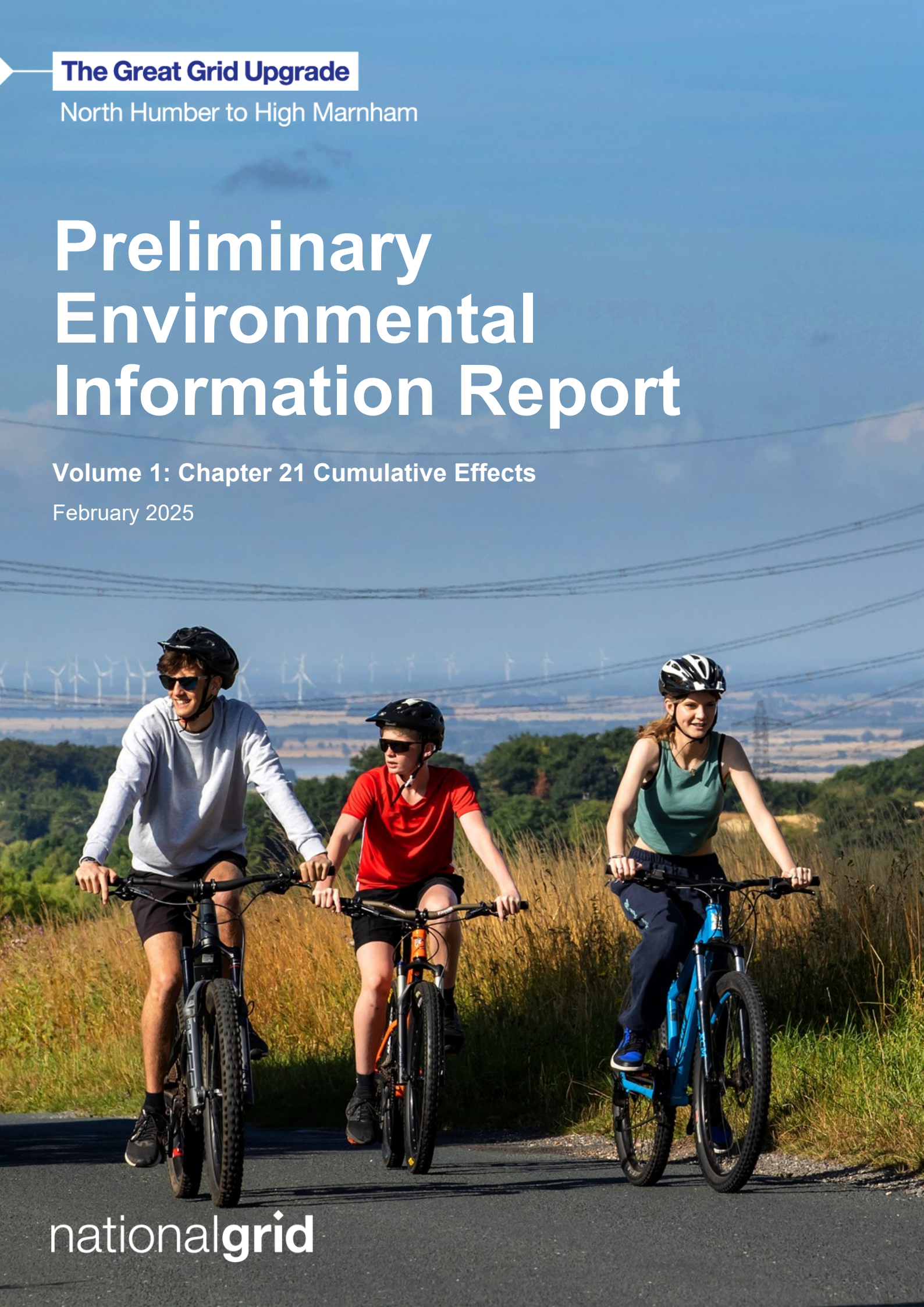
The Great Grid Upgrade

North Humber to High Marnham

Preliminary Environmental Information Report

Volume 1: Chapter 21 Cumulative Effects

February 2025



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Contents

North Humber to High Marnham
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21. Cumulative Effects

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21. Cumulative Effects

21.1 Introduction

21.1.1 When undertaking an assessment of environmental effects of a project, it is necessary to consider how its various effects may interact, and also how the effects of the Project could accumulate with the effects of other developments proposed within the same Zone of Influence (ZoI).

21.1.2 There are two types of cumulative effects: 'intra–project' and 'inter–project' effects (Ref 21.2).

- **inter–project effects**: effects resulting from the Project combined with the same aspect[1]–related effects generated by other developments to affect a common receptor; and
- **intra–project effects**: individual environmental aspect effects resulting from the Project, which may not be significant, but could combine with other environmental aspect effects from the Project to create effects that are significant.

21.1.3 This chapter presents a preliminary inter–project cumulative assessment. It has not been possible to provide a preliminary intra–project cumulative assessment at this stage, as the PEIR is a preliminary assessment and the level of significance for individual effects within topic assessments are not yet defined.

21.1.4 Full inter–project and intra–project cumulative assessments will be presented within the Environmental Statement (ES).

21.1.5 This chapter is supported by the following figures in Volume 2 and appendices in Volume 3:

- **Figure 21.1 Cumulative Long List of Other Developments**
- **Figure 21.2 Cumulative Short List of Other Developments**
- **Appendix 21.1 Long List of Other Developments**
- **Appendix 21.2 Stage 1 and 2 Preliminary Cumulative Assessment of Other Developments**

21.2 Regulatory and Planning Context

21.2.1 This section sets out the legislation and planning policy that is relevant to the preliminary cumulative assessment. A full review of compliance with relevant national and local planning policy will be provided within the Planning Statement that will be submitted as part of the application for Development Consent.

[1] The Planning Inspectorate refers to 'aspects' as meaning the relevant descriptions of the environment identified in accordance with the EIA Regulations (Ref 21.1)

21.2.2 **Chapter 2 Regulatory and Planning Context** describes the overall regulatory and planning policy context for the Project. Key legislation, policy and planning guidance relevant to the assessment of cumulative effects associated with the construction, operation and maintenance of the Project is presented below.

Legislation

21.2.3 Schedule 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (Ref 21.1) (the EIA Regulations) states that an ES is to include a description of the likely significant effects of development on the environment, which should cover, amongst others, cumulative effects.

21.2.4 Paragraph 5(e) describes cumulative as '*The cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources*'.

21.2.5 In addition, Regulation 5(2)(e) of the EIA Regulations (Ref 21.1) requires that the EIA considers the interaction of environmental effects associated with the Project. The inter–related effects assessment considers likely significant effects from multiple impacts and activities from the construction and operation of the Project on the same receptor, or group of receptors.

21.2.6 The requirements of the EIA Regulations (Ref 21.1) to identify these types of effects are being met through the delivery and reporting of a cumulative effects assessment of the Project.

National Policy Statements (NPS)

21.2.7 **Chapter 2 Regulatory and Planning Context** sets out the overarching policy context relevant to the Project, including the Overarching NPS for Energy (EN-1) (Ref 21.3). This is supported by the NPS for Electricity Networks Infrastructure (EN-5) (Ref 21.4).

21.2.8 EN-1 (Ref 21.3) contains the following paragraphs relating to the overall assessment of Cumulative Effects. EN-1 also sets out for each topic how cumulative effects should be considered; these have accordingly been considered in this chapter.

21.2.9 Paragraph 4.1.5 states '*In considering any proposed development, in particular when weighing its adverse impacts against its benefits, the Secretary of State should take into account: … its potential adverse impacts, including on the environment, and including any long–term and cumulative adverse impacts, as well as any measures to avoid, reduce, mitigate or compensate for any adverse impacts, following the mitigation hierarchy*'.

21.2.10 Paragraph 4.2.12 set out the requirement for '*The cumulative impacts of multiple developments with residual impacts should also be considered*.'

21.2.11 Paragraph 4.3.3 states '*The Regulations require an assessment of the likely significant effects of the Project on the environment, covering the direct effects and any indirect, secondary, cumulative, transboundary, short, medium, and long–term, permanent and temporary, positive and negative effects at all stages of the project, and also of the measures envisaged for avoiding or mitigating significant adverse effects'*.

21.2.12 National Policy Statement EN–5 (Ref 21.4) provides topic–specific guidance for electrical infrastructure including overhead lines but makes only limited reference to cumulative considerations; paragraph 2.9.10 refers to overhead lines and the potential for landscape and visual cumulative impacts to arise in relation to substations, wind farms and other sources of power generation.

21.2.13 Full consideration of the NPS will be included in the Planning Statement submitted with the application for development consent.

Other National Policy

21.2.14 Although the Project will be tested in line with the NPSs described above, the preliminary assessment has also been undertaken with reference to the following national policy:

- National Planning Policy Framework (NPPF) (Ref 21.10) and accompanying National Planning Practice Guidance.

21.3 Scoping Opinion

21.3.1 The scope of the assessment has been informed by the Scoping Opinion () provided by the Planning Inspectorate in 2023 on behalf of the Secretary of State, following the submission of the EIA Scoping Report (Ref 21.7). The scope has also been informed through consultation and engagement with relevant consultees.

21.3.2 A summary of the Scoping Opinion (Ref 21.7 Ref 21.7) together with a response from National Grid against each point of relevance to the cumulative effects assessment is provided in Table 21.1 below.

Table 21.1 – Comments raised in the Scoping Opinion

ID	Inspectorate's comments	Response
2.2.8	**Cumulative Effects Assessment (CEA) – consultation:** The Applicant should seek to agree the size of study area and the list of plans or projects for inclusion within the CEA with the relevant local authorities, taking into account the zones of influence for different aspect assessments.	The approach to defining the study area / ZoI for the inter–project cumulative effects assessment is set out in section 5 below. This takes account of each of the study areas for each aspect chapters. The long list of other developments identified within the ZoI is set out in **Appendix 21.1 Long List of Other Developments** and shown on **Figure 21.1 Cumulative Long List of other Developments**. The proposed short list of other developments to be taken forward into the assessment is set out in **Appendix 21.2 Stage 1 and 2 Preliminary Cumulative Assessment of Other Developments** and shown on **Figure**

ID	Inspectorate's comments	Response
		21.2 Cumulative Short List Developments. These will be kept under review during production of the ES and National Grid will engage with the local authorities.
2.2.9	**CEA – short list of projects:** The ES should include an appropriate figure clearly depicting the locations and extent of projects included in the CEA in relation to the location of the Proposed Development. This should include consideration of those projects that cover a wide geographical area extending beyond the proposed study area or provide justification for why cumulative effects are unlikely to occur. This should include other major renewable energy projects in Lincolnshire and Nottinghamshire. The short list should also reflect the development pressures affecting the Humber Estuary, in particular the potential for effects on land functionally linked to protected sites along the Humber.	The proposed short list of other developments to be taken forward into the assessment is set out in **Appendix 21.2 Stage 1 and 2 Preliminary Cumulative Assessment of Other Developments** and shown on **Figure 21.2 Cumulative Short List** Developments. The approach to defining the cumulative ZoI is set out in section 21.5; this takes into account developments which sit outside of the study areas for each of the aspect chapters. The cumulative effects assessment presented in the ES will consider the potential for cumulative effects on the Humber Estuary's designated sites and functionally linked land.

21.4 Intra–Project Cumulative Effects Methodology

21.4.1 Intra–project cumulative effects (sometimes referred to as combined or interactive effects) occur where a single receptor is affected by more than one source of effect or aspect of the Project. An example of an intra–project effect would be where a local community is affected by dust, noise, and traffic disruption during the construction of the Project, with the result being a greater level of impact than each individual effect alone.

21.4.2 The principle of cumulative intra–project effects is noted by the Planning Inspectorate in Advice Note Nine: Rochdale Envelope (Ref 21.8).

21.4.3 This is summarised below.

21.4.4 The interrelationship between aspects of the proposed development (i.e. the Project) should be assessed and careful consideration should be given by the developer to explain how interrelationships have been assessed in order to address the environmental impacts of the proposal as a whole and establish a robust worst–case scenario(s).

21.4.5 Where the Applicant chooses to follow a parameter–led assessment to establish the worst–case scenario for the ES, the applicable parameters are to be explained and clearly set out in order to:

- ensure that interactions between individual assessments – for example where both noise and air quality impacts may combine to affect a single receptor – are taken into account relevant to the worst-case scenario(s) identified, and that careful consideration is given to how these are assessed; and
- ensure that the assessment of the worst–case scenario(s) identifies impacts which may not be significant on their own but could become significant when considered together.

21.4.6 Paragraphs 4 and 5 of Schedule 4 of the EIA Regulations (Ref 21.1) states that an ES should include the following:

'*A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter relationship between the above factors*.'

'*A description of the likely significant effects of the development on the environment which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long–term, permanent and temporary, positive and negative effects of the development, resulting from*:

- *The existence of the development;*
- *The use of natural resources;*
- *The emission of pollutants, the creation of nuisances and the elimination of waste, and the description by the applicant of the forecasting methods used to assess the effects on the environment*.'

21.4.7 The Overarching NPS EN–1 states the following in relation to requirements for the assessment of cumulative effects (Ref 21.3):

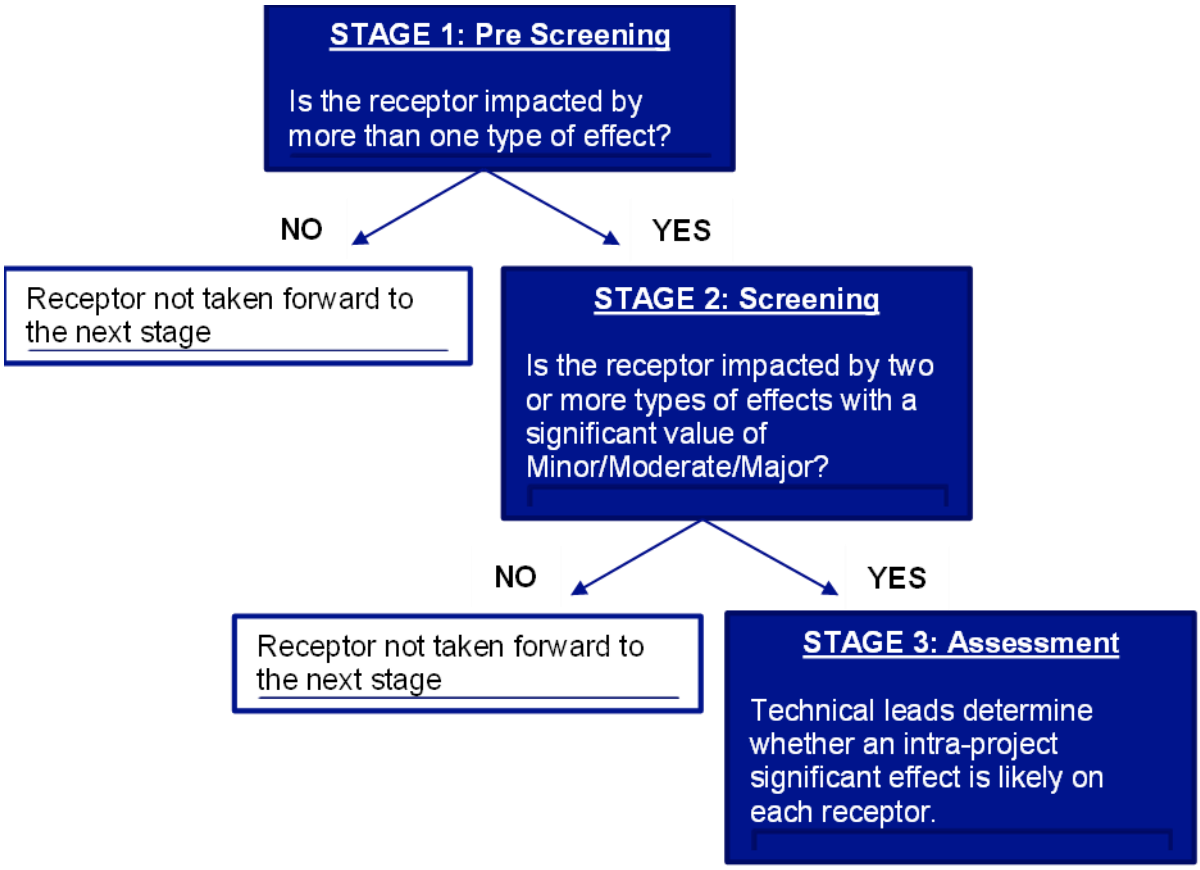
'The Secretary of State should consider how the accumulation of, and interrelationship between, effects might affect the environment, economy, or community as a whole, even though they may be acceptable when considered on an individual basis with mitigation measures in place'

21.4.8 There is no standard approach to the assessment of intra–project effects although it should be carried out with reference to guidance and to professional judgement.

21.4.9 Some receptors are potentially subject to multiple sources of effect (which are therefore assessed within multiple topic areas) and as such intra-project cumulative effects are more likely to occur. Receptors considered in multiple chapters are likely to include local residents, communities and businesses.

21.4.10 The assessment of intra–project cumulative effects uses a three–stage approach (see **Image 21–1**). The first stage consists of a pre–screening exercise to determine whether a receptor is exposed to more than one type of effect. Those receptors identified as experiencing more than one type of effect will be taken through to the second stage. The second stage will consist of a screening exercise to identify the significance each type of effect has on each receptor. Those receptors exposed to two or more types of effect, with a significance of effect greater than negligible, will be taken forward to the third stage. The third stage is the main intra–project assessment, which will consider if the combination of effects is likely to lead to overall effects of greater significance.

Image 21–1 – Methodological approach to identifying intra–project cumulative effects



21.4.11 As the PEIR is presenting a preliminary assessment (and the level of significance for identified effects within topic assessments are not defined), an assessment of intra–project cumulative effects is not presented in this chapter as it is not possible to progress this assessment past stage 1. An assessment of intra–project cumulative effects will, however, be presented in the ES.

21.5 Inter–Project Cumulative Effects Methodology

21.5.1 Inter–project cumulative effects occur where a receptor is affected by two or more developments 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.

21.5.2 The Planning Inspectorate's Advice on Cumulative Effects Assessment (Ref 21.5) provides a methodology for assessing inter–project cumulative effects. It provides guidance about the type and scale of other developments that should be considered in the assessment of cumulative effects with other developments. It is acknowledged that the availability of information necessary to conduct the inter–project effects assessment will depend on the current status of the other existing development and/or approved development. Any assumptions or limitations in relation to the 'other existing development and/or approved development' data collected will be stated in the ES. A level of certainty, reflecting the availability of detail and information necessary for the assessment, will be assigned to each development and recorded.

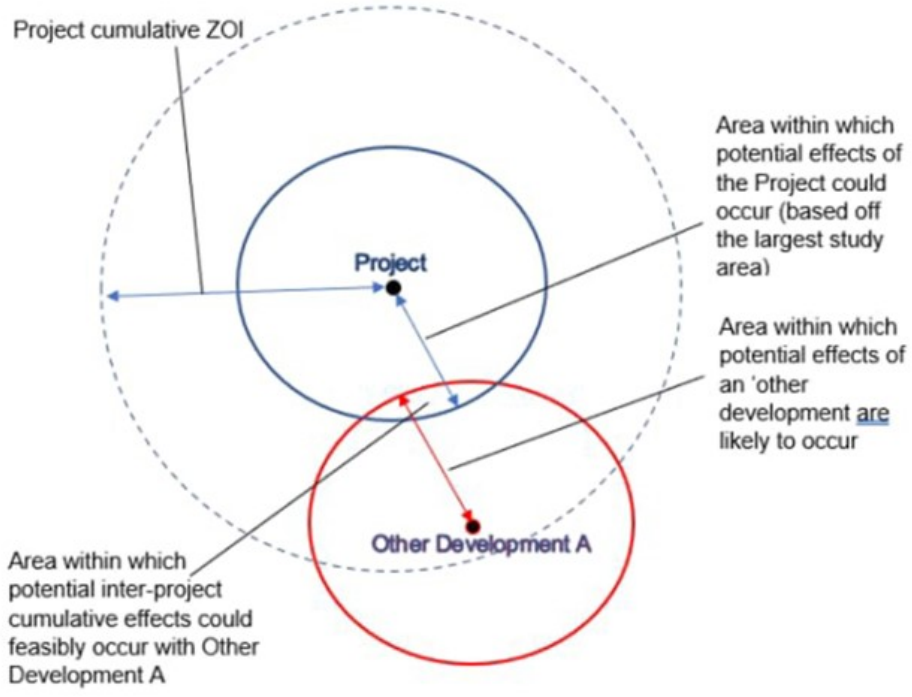
21.5.3 The approach outlined in the advice note (Ref 21.5) is split into four stages, as outlined below:

- **Stage 1** – the two main tasks in this stage are to establish what the "zone of influence" (ZoI) is for each topic and to then identify a 'long list' of other developments, by reviewing planning applications[2], development plans and other available and relevant sources.
- **Stage 2** – criteria are set for the inclusion or exclusion of developments on the long list. These will be based on overlaps in construction programmes, shared receptors, or shared effect pathways.
- **Stage 3** – information is gathered about the shortlisted developments, including design, location, programme, operation, and decommissioning information, and reported environmental effects.
- **Stage 4** – Cumulative Effects Assessment (CEA) is undertaken in relation to the shortlisted developments and the findings are reported in the matrix format. The focus is on Tier 1 and 2 developments, with Tier 3 included if possible (these three tiers are described in Table 21.3).

Stage 1: Establishing the long list

21.5.4 The first step of Stage 1 is to identify a ZoI within which the long list of developments has been identified. It is considered that doubling the maximum study area is sufficient to identify the long list of 'other developments' whose study areas may overlap with the area within which the Project could result in a potential effect. This is illustrated on Image 21–2. Professional judgement has also been applied so as to not apply this as an arbitrary 'cut off' when identifying the long list of developments.

Image 21–2 – Zone of influence



[2] Using both local authorities planning portals and the planning inspectorate website.

21.5.5 During the EIA scoping exercise, an overall cumulative assessment ZoI of 20 km was proposed. This was based upon the largest topic study area (ecology) being identified as 10 km, therefore a ZoI of 20 km from the draft Order Limits was established to identify the initial long list of other developments. This ZoI has been identified during EIA scoping and has been reviewed as part of this preliminary assessment to take account of any changes to the proposed study area since undertaking EIA scoping. The study areas applied in the technical chapters are summarised in Table 21.2. The rationale for these study areas is explained in section 4 of the relevant technical topic chapters 6 – 19.

Table 21.2 – Study areas for environmental topics

Environmental topic	**Study areas** (measured from the draft Order limits unless otherwise stated)
Landscape	5 km from the Limits of Deviation (LoD) for all landscape receptors
Visual	5 km from the LoD for all visual receptors
Ecology & Ornithology	30 km[3] – Special Areas of Conservation (SAC) and Special Protection Areas (SPA) where (respectively) bats or bird species with large foraging ranges are noted as qualifying features. 10 km – Statutory designated sites of international nature conservation value e.g. SACs, SPAs, and Ramsar sites (as well as proposed or potential sites). 5 km – Statutory designated sites of national and local nature conservation value 2 km – Non–statutory designated sites of nature conservation value and records of protected and notable species received from the Local Records Centres (LRC).
Cultural Heritage	1 km for all designated and non–designated assets 3 km for assets of the highest significance
Water Environment	0.5 km
Geology and Hydrogeology	0.25 km for geology and contaminated land 0.5 km for hydrogeology
Agriculture and Soils	1 km
Traffic and Transport	Construction Traffic Routes and relevant sections of Public Rights of Way (PRoW) affected by the Project
Air Quality	0.25 km and for human receptors and 0.05 km for ecological receptors – construction dust

[3] See Para 21.5.6 below

Environmental topic	**Study areas** (measured from the draft Order limits unless otherwise stated)
	0.2 km – construction vehicle emissions on the affected road network 0.2 km – Non–Road Mobile Machinery (NRMM) emissions
Noise and Vibration	0.3 km construction noise 0.1 km construction vibration Construction Traffic Routes – construction Traffic noise
Socio-economics recreation and tourism	60-minute drive time area for employment 1 km for local communities 0.5 km for all other receptors
Health and Wellbeing	For sensitive receptors, the study areas are defined based on the geographic extent of other topics for each environmental aspect of relevance to health and wellbeing (see Chapter 18 for further information)

21.5.6 With regard to ecology and ornithology, a 30 km study area was applied to identify SACs and SPAs for certain species of birds and bats. The assessment has concluded the identification of one international designated site (for qualifying ornithological features), located approximately 15 km from the draft Order Limits, with no potential effect. As such the 30 km study area has not been used to define the cumulative ZoI (largest study area doubled) as this would be unrealistic in relation to the potential for likely cumulative effects. Instead, the cumulative ZoI has been based off the 10 km ecology and ornithology study area and, accordingly, a ZoI of 20 km from the draft Order Limits has been adopted to identify the long list of other developments. This distance is also deemed appropriate to capture developments that may result in cumulative effects for topics that have more bespoke study areas such as Traffic and Transport and Socio-economics, Recreation and Tourism. This is illustrated on **Figure 21.1 Cumulative Long List of other Developments**. This will be kept under review as the Project develops and the long list updated as required.

Exclusion of Climate change assessment from Cumulative Environment Assessment

21.5.7 The current Institute of Environmental Management and Assessment (IEMA) Greenhouse Gas (GHG) (Ref 21.13) assessment guidance states ‘All global cumulative GHG sources are relevant to the effect on climate change, and this should be taken into account in defining the receptor (the atmospheric concentration of GHGs) as being of ‘high’ sensitivity to further emissions. Effects of GHG emissions from specific cumulative projects therefore in general should not be individually assessed, as there is no basis

for selecting any particular (or more than one) cumulative project that has GHG emissions for assessment over any other.'.

21.5.8 In essence, there is no difference in the impact on the global climate for a tCO_2e (tonnes CO_2 equivalent) emitted at one location compared to the same mass emitted anywhere on the planet. So, it is not meaningful to carry out a cumulative assessment of the Project alongside other developments in a geographical area, nor is such an exercise reasonably practical due to the difficulties in accessing reliable future emissions data for other developments. As such, it is considered that the GHG lifecycle impact assessment is inherently cumulative for the following reasons:

21.5.9 The environmental impact arising from GHGs is the aggregation and increased concentration of GHGs within the atmosphere the location of the emissions source is not relevant to the impact arising from it; any development leading to GHG emissions has the same impact whether it is located near the Project or in another region/country impacts on a given location arise from the aggregated GHG levels in the atmosphere, not from the magnitude of GHG emissions in the local area.

21.5.10 Any attempt to compile a cumulative assessment of GHG emissions would have to include all developments in United Kingdom (as the impact of GHG is not related to their emission location), and for this reason, the approach for managing the cumulative GHG emissions across the United Kingdom is through the adoption of national carbon budgets.

21.5.11 The inappropriateness of undertaking a cumulative appraisal (other than by contextualising against Carbon Budgets) is reflected in the IEMA GHG assessment guidance (Ref 21.13) mentioned above.

21.5.12 Therefore, the GHG lifecycle impact assessment has considered whether the carbon emissions from the Project will have a material impact on the UK's ability to meet its carbon reduction target. In addition, it is not feasible to assess 'cumulative effects' with regards to climate change risk, as the effects of climate change are not contained within a project boundary. That said, the cross–cutting impacts of climate change are identified and presented in the ICCI assessment for this Project, refer to **Appendix 19.2** for further detail.

Development Tiers

21.5.13 Developments on the long list have been categorised into three tiers (Ref 21.7), as presented in Table 21.3.

Table 21.3 – Other Development for inclusion in the inter–project cumulative effects assessment

Tier	Development
Tier 1	Under construction
	Permitted application(s), where the project is classified as 'major development,' whether under the Planning Act 2008 (Ref 21.11) or other consent regimes, but not yet implemented.
	Submitted application(s), where the project is classified as 'major development,' whether under the Act or other consent regimes, but not yet determined.

Tier	Development
Tier 2	Projects on the Planning Inspectorate's Programme of Projects, and/or the relevant local planning authorities planning portal where the project is classified as 'major development' and a scoping or screening report has been submitted[+]
Tier 3	Projects on the Planning Inspectorate's Programme of Projects, and/or the subject of pre–application discussion with a relevant local planning authority, where a scoping or screening report has not been submitted. Projects registered on the local planning authority's portal classed as major development but do not require EIA.
	Identified in other plans and programmes (as appropriate) which set the framework for future development consents/approvals, where such development is reasonably likely to come forward

[+]Projects at the scoping stage under the Town and Country Planning Act 1990 (Ref 21.12 have also been included within this tier.

21.5.14 Major planning applications made under the Town and Country Planning Act 1990 (Ref 21.12 procedures have been included in the assessment as these are defined as comprising larger applications involving: mineral extraction; waste development; the provision of 10 dwellings or more; a site area of >0.5 ha (and the number of dwellings is not known); and a floorspace of >10,000m^2 (or a site area of 1 ha).

21.5.15 As minor planning applications represent anything smaller than the criteria for major developments, these have been excluded from the assessment as they represent smaller scale developments of local significance which are highly unlikely to give rise to significant cumulative environmental effects over and above the Project in isolation.

21.5.16 All reasons for excluding any development from further consideration will be clearly recorded and presented in the ES.

Stage 2: Establishing the Short List

21.5.17 Following Stage 1, the developments included on the long list have been screened as to the temporal scope, scale and nature of the development to identify whether they would be likely to result in a potential for a significant cumulative effect with the Project. Professional judgement has also been used during the application of threshold criteria to determine whether developments should be scoped in or out of the assessment. This includes developments that were below the threshold criteria but with characteristics that were likely to give rise to a significant effect or could give rise to cumulative effects by virtue of its proximity to the Project.

21.5.18 The following inclusion/exclusion criteria has been used for the preliminary assessment.

- **Temporal Scope**: other developments with an overlapping construction phase (currently expected to be 2028 – 2032) and in some cases operational effects have been scoped into the assessment. Planning applications submitted up to five years prior to the planned commencement year of construction (2028) have been included in the assessment. Five years is selected as planning permissions typically expire after a period of three to five years (unless an application for extension is permitted). Applications submitted outside this temporal scope would be excluded.

- **Scale and nature of development**: development identified as Schedule 1 and 2 developments in the EIA Regulations (Ref 21.1) has been considered further. Development not identified as Schedule 1 or 2 developments have been 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 between the Project and other development, cumulative effects have been considered further. Other development with no clear source–pathway–receptor linkage have been scoped out of the assessment.
- **Consultation:** requests from relevant stakeholders for the inclusion of specific developments and/or plans within the cumulative effects assessment.

Stage 3: Information Gathering

21.5.19 The preliminary assessment includes both stages 1 and 2. Stages 3 and 4 will be undertaken as part of the EIA and reported in the ES. These sections provide the methodology which will be used for these stages.

21.5.20 Further information on the shortlisted developments will be gathered to inform the final cumulative effects assessment, where this is available. This will include:

- proposed design and location information;
- construction and operational timescales; and
- results of any environmental assessments completed for the other developments.

21.5.21 Project data will be gathered from a variety of sources including the website of the relevant local planning authority(ies), the Planning Inspectorate's website and potentially through direct liaison with stakeholders including local authorities, statutory bodies and relevant applicants/developers.

Stage 4: Assessment

21.5.22 The cumulative effects assessment will be commensurate with information available at the time of assessment. Information on some proposals may be limited, and such gaps are acknowledged within the assessment. The assessment for Tier 3 other development may be high level in comparison to Tier 1 and 2, reflective of the level of information available. Any measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant cumulative effects and, where appropriate, any proposed monitoring arrangements will be identified.

Preliminary Assessment Key Parameters and Assumptions

21.5.23 It was considered reasonably likely that developments related to permissions granted before 2024 or those where more than 5 years has elapsed from consent with no activity will have been completed (or have been abandoned) before the Project construction works start. Such developments were therefore considered unlikely to give rise to cumulative effects during construction, and operational effects would already form part of the baseline/ future baseline environment. These developments have therefore been considered in the future baseline (see Section 21.6).

21.5.24 The information is preliminary, as the full EIA has not yet been undertaken for the Project. The likely effects identified could change as new information and further assessment is undertaken, potentially changing the receptors and effects that are carried through to the assessment. The cumulative assessment assumes that mitigation identified within the preceding chapters and/or within the EIAs of other developments is included before undertaking the preliminary assessment.

21.5.25 The preliminary assessment of the potentially relevant planning applications is based on the best available Information at the time of authoring. The level of information for application varies in detail Tier 1 (most certain) to Tier 3 (least certain)[4] and as a result some applications have used a centre point to measure distance but for others it has been possible to measure from Planning application boundary to the Project draft Order Limits.

21.5.26 The key parameters and assumptions will be reviewed based on the final Project description and design and where required, updated, or refined. The ES will present the final key parameters and assumptions used within that assessment.

Further Assessment within the ES

21.5.27 As previously noted, only stages 1 and 2 have been completed. Stages 3 and 4 will be undertaken as part of the EIA once assessments are complete and presented in the cumulative effects chapter of the ES.

21.6 Future Baseline

21.6.1 The construction and/or operation of consented developments in the surrounding area has the potential to result in changes to the baseline environment.

21.6.2 In reviewing the long list of other developments with the ability to interact with the Project, National Grid has reviewed the available information including construction and operational dates. Where another development is due to be operational by the time the Project commences construction, these other developments have been considered as part of the future baseline in the topic chapters rather than as a cumulative development.

21.6.3 The other developments which have been considered as future baseline are set out in Table 21.4.

[4] Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment, https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-cumulative-effects-assessment

Table 21.4 – Future baseline developments

ID	Planning application reference	Planning authority	Development name
10	EN010142	Planning Inspectorate	Tillbridge Solar Project
11	EN010088	Planning Inspectorate	West Burton C power station
19	22/00211/EIASCO	East Riding of Yorkshire Council	Hydrogen to Humber (H2H) Project. HU12 8DS
97	21/01311/STPLF	East Riding of Yorkshire Council	Erection of 204 dwellings, Land South of Larkfield 23 Great Gutter Lane West Willerby East Riding of Yorkshire HU10 6DP
98	20/03207/STREM	East Riding of Yorkshire Council	Erection of 257 dwellings, Land Southwest of Stone Cottage Long Lane Woodmansey East Riding of Yorkshire HU17 0RN
99	20/03206/STREM	East Riding of Yorkshire Council	Erection of 146 dwellings, Land Southwest of Stone Cottage Long Lane Woodmansey East Riding of Yorkshire HU17 0RN
100	20/01027/STREM	East Riding of Yorkshire Council	Erection of 320 one and two storey dwellings, Land at Ings Lane and East of Skillings Lane Ings Lane Elloughton East Riding of Yorkshire HU15 1EN
101	20/00410/STREM	East Riding of Yorkshire Council	Erection of 225 dwelling, Land at Ings Lane and East Of Skillings Lane Ings Lane Elloughton East Riding Of Yorkshire HU15 1EN
109	22/01208/STPLF	East Riding of Yorkshire Council	Kenley House Farm Solar, HU7 5XZ
327	23/03527/PLF	East Riding of Yorkshire Council	Wind Turbine York Grounds Farm Riplingham Road Raywell East Riding of Yorkshire
184	PA/2018/1768	North Lincolnshire Council	Part demolition, refurbishment and extension of existing buildings, Belton Business Park, A161 between Belton and Epworth, Belton, DN9 1NY
343	PA/2022/1520	North Lincolnshire Council	Planning permission to create two wildlife ponds for great crested newts, Land off Stealgoose Lane, Field North Of, Temple Gardens, Belton

ID	Planning application reference	Planning authority	Development name
344	PA/2022/1605	North Lincolnshire Council	Planning permission to create a habitat pond for great crested newts, Land off Stealgoose Lane, Field North Of, Temple Gardens, Belton
274	18/00249/FUL	Bassetlaw District Council	Proposed 50MW Battery Storage Facility
279	22/00358/FUL	Bassetlaw District Council	Bumble bee solar farm and battery storage facility
281	20/00117/FUL	Bassetlaw District Council	Wood Lane solar farm, Land Northwest and South of Field Farm Wood Lane Sturton Le Steeple Nottinghamshire
291	21/01147/FUL/ 21/01577/FULM	Bassetlaw District Council/ Newark and Sherwood District Council	Tuxford Solar Farm, Land North and South Tuxford Road Skegby Tuxford Nottinghamshire
465	21/01661/DEM	Bassetlaw District Council	Demolition of former Cottam Power Station and works on adjoining Land Outgang Lane Cottam Nottinghamshire
467	19/00818/FUL	Bassetlaw District Council	Erection of a Storage Building (Class B8) with Associated Weigh Bridge at the Former High Marnham Power Station Power Station Access Fledborough Road High Marnham Newark Nottinghamshire NG23 6SE
383	136937	West Lindsey District Council	Outline planning application for residential development of up to 750no. dwellings, Land northeast of Highfields roundabout, Corringham Road, Gainsborough, DN21 1XZ
391	140235	West Lindsey District Council	Demolition of the former Lindsey Shopping Centre and proposal to develop multiplex cinema, car parking and commercial units in the following use classes, Class A1 (shops), ClassA2 (financial and professional services), Class A3 (restaurants and cafes), Class A4 (drinking establishments), Class A5 (hot food takeaways) and Class D2 (assembly and leisure), Former Lindsey Shopping Centre, Market Place, Gainsborough, Lincolnshire, DN21 2BP

ID	Planning application reference	Planning authority	Development name
419	19/01422/FULL	Hull City Council	Erection of 11 new dwellings and 14 new flats, including demolition of temporary structure, Ellerburn Avenue Corner of Orchard Park Road Kingston Upon Hull
13	EN010133	Planning Inspectorate	Cottam Solar Project; NSIP development comprising three electricity generating stations, each with anticipated capacity in excess of 50MW,

21.7 Preliminary Assessment

21.7.1 The Stage 1 preliminary long list comprises other developments and records of Nationally Significant Infrastructure Projects, planning applications, relevant development plan allocations, and other known developments within the identified ZoI. The list has a cut-off date of 31st October 2024 to allow assessment to be undertaken as part of the PEIR process. The list will be updated to support the cumulative effects assessment that will be reported in the ES. The long list is presented in **Appendix 21.1 Long List of Other Developments** and the locations of the long list of other developments shown on **Figure 21.1 Cumulative Long List of Other Developments** in Volume 2.

21.7.2 Following the application of thresholds during Stage 1, a short list was created that identified other development that could lead to potential cumulative effects with the Project. The shortlist of other developments is presented in Appendix 21.2 Stage 1 and 2 Preliminary Cumulative Assessment of Other Developments.

21.7.3 Table 21.5 and shown on **Figure 21.2 Cumulative Short List of Other Developments**. These will be taken forward to Stages 3 and 4 of the assessment which will be completed and presented in the ES.

21.7.4 For each development that has been taken forward to the short list, each topic has identified whether there is a spatial and or temporal overlap. Where a spatial and temporal overlap has been identified for a particular topic, commentary is provided as to the nature of the development that is likely to result in a cumulative effect and the relevant shared receptors or pathways that could result in a cumulative effect. These other developments will also be taken forward to assessment stages 3 and 4 for those topics where a potential cumulative effect has been identified. Where a spatial and temporal overlap has not been identified with a topic and thus there is no potential for a cumulative effect, the other development will not be considered any further for that particular topic.

21.7.5 The preliminary assessment tables for each shortlisted development are presented in **Appendix 21.2 Stage 1 and 2 Preliminary Cumulative Assessment of Other Developments**. The shortlisted and Stage 3 development below are illustrated on **Figure 21.2 Cumulative Short List of Other Developments.**

21.7.6 A summary of the shortlisted developments that are likely to result in cumulative effects and the relevant topics proposed to be carried to stage 3 is provided below in Table 21.5.

Table 21.5 – Summary of the preliminary assessment

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
1	EN010143	East Yorkshire Solar Farm	Ornithology	Yes – Potential for cumulative effects due to shared receptors and location within theoretical foraging distance of qualifying species of Humber Estuary Ramsar/SPA and Site of Special Scientific Interest (SSSI).
			Socio-economics, Recreation and Tourism	There is potential for cumulative Socio-economics, Recreation and Tourism effects from construction workforce availability.
			Health and Wellbeing	Yes – Potential likely cumulative effects are expected in the Socio-economics, Recreation and Tourism assessment, which the Health and Wellbeing cumulative assessment is dependent on.
2	EN020025	Continental Link Multi–Purpose Interconnector	Landscape and Visual	Yes – Both this development and the Project are located within an area of landscape defined by a single Landscape Character Type (LCT) (LCT16: Sloping Farmland), and within the same visual receptor area (Rowley parish).
			Ecology	Yes – Likely shared receptors, such as designated sites, notable habitats and protected species due to the distance between this development and the Project.
			Ornithology	Yes – Relevant shared receptors (such as species and designated sites) due to the short distance between this development and the Project.
			Cultural Heritage	This development is unlikely to result in any physical impacts on heritage assets that fall within the Project. The nature and proximity of this development, however, means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (primary access routes (PARs)) that are also associated with the construction of the Project. This includes the A1079.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects. Additionally, there is the potential for cumulative effects as a result of construction dust, as this development is within the construction dust study area of the Project.
			Noise and Vibration	The Project has shared receptors during the construction phase. Construction noise and vibration may have a cumulative effect.
			Socio-economics, Recreation and Tourism	There is potential for cumulative Socio-economics, Recreation and Tourism effects from construction workforce availability.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within Air Quality; Socio-economics, Recreation and Tourism; Noise and Vibration; Water Environment; Landscape and Visual; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
4	EN010120	Drax Bioenergy with Carbon	Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs)

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
		Capture and Storage Project		that are also associated with the construction of the Project. This includes the M62 and A161.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
7	EN010116	North Lincolnshire Green Energy Park	Ecology	Yes – Potential shared receptors/pathways, such as designated sites, due to the distance between this development and the Project.
			Ornithology	Yes – Shared receptors/pathways such as designated sites, due to the distance between this development and the Project.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the M181 and M180.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Socio-economics, Recreation and Tourism	There is potential for cumulative Socio-economics, Recreation and Tourism effects from construction workforce availability.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics,

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
8	EN010114	Keadby 3 Carbon Capture Power Station	Landscape and Visual	**Landscape** No – Although this development and the Project are in close proximity, they are not located within the same landscape character area. The location within an existing industrial area means significant cumulative effects on landscape receptors are unlikely. **Visual** Yes – Both this development and the Project may affect views from surrounding visual receptors areas (Crowle and Ealand, Eastoft, Amcotts and Belton) and could result in significant cumulative visual effects.
			Ecology	Yes – Likely shared receptors, such as designated sites, notable habitats and protected species due to the distance between this development and the Project.
			Ornithology	Yes – Likely shared receptors, such as designated sites, notable habitats and protected species due to the distance between this development and the Project.
			Cultural Heritage	This development is unlikely to result in any physical impacts on heritage assets that fall within the Project. The nature and proximity of this development, however, means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A18, A161 and M180.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Socio-economics, Recreation and Tourism	There is potential for cumulative Socio-economics, Recreation and Tourism effects from construction workforce availability.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
12	EN010131	Gate Burton Energy Park	Socio-economics, Recreation and Tourism	There is potential for cumulative Socio-economics, Recreation and Tourism effects from construction workforce availability.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within the Socio-economics chapter; the Health and Wellbeing cumulative assessment is dependent on this chapter.
14	EN010132	West Burton Solar Project	Ecology	Yes – Possible shared receptors, such as designated sites, due to the distance between this development and the Project.
			Socio-economics, Recreation and Tourism	There is potential for cumulative Socio-economics, Recreation and Tourism effects from construction workforce availability.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within Socio-economics, Recreation and Tourism; the Health and Wellbeing cumulative assessment is dependent on this chapter.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
296	EN010148	Tween Bridge Solar Farm	Landscape and Visual	No – Although this development and the Project are in close proximity, they are not located within the same landscape character area and separated by Crowle and Ealand which means significant cumulative effects on landscape receptors are unlikely. Visual Yes – Both this development and the Project are located within the same visual receptors areas (Crowle and Ealand, Eastoft and Belton) and could result in significant cumulative visual effects.
			Ecology	Yes – Likely shared receptors, such as designated sites and protected species due to the distance between this development and the Project.
			Ornithology	Yes – Shared receptors and pathways, such as designated sites and protected species due to the distance between this development and the Project.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes A18.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Socio-economics, Recreation and Tourism	There is potential for cumulative Socio-economics, Recreation and Tourism effects from construction workforce availability.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				Health and Wellbeing cumulative assessment is dependent on these assessments.
354	EN010159	One Earth Solar Farm	Landscape and Visual	Yes – Both this development and the Project are located within the same regional landscape character types (RLCT) (RLCT 3a: Floodplain Valleys and RLCT 4a: Unwooded Vales) and within the same visual receptor area (Darlton parish, Ragnall parish, Fledborough parish and Marnham parish) and could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Potential shared receptors, such as designated sites, due to the distance between this development and the Project.
			Ornithology	Yes – Potential shared receptors, such as designated sites, due to the distance between this development and the Project.
			Cultural Heritage	This development is likely to result in physical impacts on heritage assets that fall within the Project. Likewise, the nature and proximity of this development means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A57.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				associated with the construction of the Project. This could result in cumulative air quality effects.
			Noise and Vibration	There are potential shared noise sensitive receptors with this development
			Socio-economics, Recreation and Tourism	There is potential for cumulative Socio-economics, Recreation and Tourism effects from construction workforce availability.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
415	EN010157	Peartree Solar	Landscape and Visual	Yes – Both this development and the Project are located within the same LCT (LCT: 16 Sloping Farmland) and within the same visual receptor area (Woodmansey parish) and could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Possible shared receptors, such as protected species, due to the distance between this development and the Project.
			Ornithology	Yes – Possible shared receptors, such as protected species, due to the distance between this development and the Project.
			Cultural Heritage	This development is unlikely to result in any physical impacts on heritage assets that fall within the Project. The nature and proximity of this development, however, means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A1079.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Socio-economics, Recreation and Tourism	There is potential for cumulative Socio-economics, Recreation and Tourism effects from construction workforce availability.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, Socio-economics; Socio-economics, Recreation and Tourism; Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
14	EN010163	Steeples Renewables	Landscape and Visual	Yes – Both this development and the Project are located within the same RLCT (RLCT: 4a Unwooded Vales) and within the same visual receptor area (Sturton le Steeple parish) could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Likely shared receptors including designated sites and protected species, due to the spatial overlap of this development and the Project.
				Yes – Relevant shared receptors and pathways due to the distance between this development and the Project.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Ornithology	Yes – Relevant shared receptors and pathways due to the distance between this development and the Project.
			Cultural Heritage	This development is likely to result in physical impacts on heritage assets that fall within the Project. Likewise, the nature and proximity of this development means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A1631, A620, A57 and a number of local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects. Additionally, there is the potential for cumulative effects as a result of construction dust and NRMM emissions.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				Health and Wellbeing cumulative assessment is dependent on these assessments.
25	22/03461/EIASCR	Melton West Business Park	Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A63.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
36	21/01875/EIASCR	Cottingham Water Pumping Station	Ecology	Yes – possible shared receptors, including designated sites and protected species.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A1079 and A164.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
38	21/01520/EIASCR	Energy from Waste Facility, South Melton	Ornithology	Yes – Relevant shared receptors, such as designated sites and protected species. Potential for disturbance of SPA qualifying species.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A63.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
54	19/03585/EIASCR	Wind Energy Development, Melton Bottom Quarry	Landscape and Visual	Yes – Both this development and the Project are located within the same LCT (LCT12: Sloping Wooded Farmland) and could affect surrounding visual receptor areas and could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Possible shared receptors, such as designated sites.
			Ornithology	Yes – Relevant shared receptors, such as protected species and designated sites due to the distance of this development and the Project.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A63.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within Air Quality; Landscape and Visual; and Traffic and Transport. The Health and Wellbeing cumulative assessment is dependent on these assessments.
60	18/02918/EIASCR	49.5MW Battery Storage Scheme, Cottingham	Landscape and Visual	Landscape No – Although this development and the Project are in close proximity, they are not located within the same landscape character area and the location within an existing industrial area means it is unlikely to have significant cumulative effects to landscape receptors. Visual Yes – Both this development and the Project area located within the same visual receptor area (Skidby parish) could result in significant cumulative visual effects.
			Ecology	Possible shared receptors such as protected species due to the distance between this development and the Project.
			Ornithology	Yes – Relevant shared receptors and pathways such as protected species due to the distance between this development and the Project.
			Cultural Heritage	This development is unlikely to result in any physical impacts on heritage assets that fall within the Project. The nature and proximity of the Continental Link Multi–Purpose Interconnector development (see ID 2), however, means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A1079.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Noise and Vibration	This development will generate noise. This has cumulative effect with the proposed substation of the Project. But the effect is unknown.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
68	22/01302/CME	Melton plant wind project– Erection of 3 Wind Turbines, Omya UK Limited	Landscape and Visual	Yes – Both this development and the Project are located within the same LCT (LCT13: Open High Rolling Farmland) and could affect surrounding visual receptor areas and could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Likely shared receptors, including designated sites and protected species.
			Ornithology	Yes – Relevant shared receptors and pathways such as protected species due to the distance between this development and the Project.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A63.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
69	22/01990/STPLFE	Scotland England Green Link 2, Drax Power Station (A)	Ecology	Yes – Likely shared receptors, such as the Humber Estuary designated sites.
			Ornithology	Yes – Relevant shared receptors and pathways such as designated sites and protected species.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the M62.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
95	22/02152/STREM	102 Dwellings, Woodmansey	Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A1079 and A164.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
126	21/02335/STPLF	Creyke Beck Solar Farm	Landscape and Visual	Yes – Both this development and the Project are located within the same LCT (LCT16: Sloping Farmland) and within the same visual receptor area (Rowley parish) could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Likely shared receptors, including designated sites, notable habitats and protected species.
			Ornithology	Yes – Relevant shared receptor such as designated sites and protected species due to the distance between this development and the Project.
			Cultural Heritage	This development is likely to result in physical impacts on heritage assets that fall within the Project. The nature and proximity of this development also means that there is the possibility for cumulative effects on the setting of heritage assets assessed as part of the Project.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs)

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				that are also associated with the construction of the Project. This includes the A1079 and A164.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Noise and Vibration	The proposed battery storage and substation of this development will generate noise. This has cumulative effect with the proposed substation of the Project. But the effect is unknown.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
132	22/02118/STPLFE	Construction of Relief Road and Erection of Industrial Unit	Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the M62.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport;

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				the Health and Wellbeing cumulative assessment is dependent on these assessments.
155	22/03550/STPLF	Erection of a Building, Wyke Way Melton	Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A63.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
304	23/02216/CME	H2H Saltend	Ornithology	Yes – relevant shared receptors and pathways such as designated sites and protected species. Proximity to the Humber Estuary SPA and SSSI.
329	23/03926/STPLF	Albanwise BESS Battery Storage Facility, Cottingham	Landscape and Visual	Landscape No – Although this development and the Project are in close proximity, they are not located within the same landscape character area and the location on the edge of an existing industrial area means it is unlikely to have significant cumulative effects to landscape receptors. Visual Yes – Both this development and the Project area located within the same visual receptor area (Skidby parish) could result in significant cumulative visual effects.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Ecology	Yes – Possible shared receptors including protected species, due to the distance between this development and the Project.
			Ornithology	Yes – Relevant shared receptors and pathways such as protected species.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A164.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Noise and Vibration	This development will generate noise. This has cumulative effect with the proposed substation of the Project.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; Traffic and Transport. The Health and Wellbeing cumulative assessment is dependent on these assessments.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
330	23/03527/PLF	Wind Turbine, Raywel	Landscape and Visual	Yes – Both this development and the Project are located within the same LCT (LCT13: Open High Rolling Farmland) and may affect views from surrounding visual receptors areas (Rowley parish and Skidby parish) and could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Possible shared receptors including protected species, due to the distance between this development and the Project.
			Ornithology	Yes – Shared receptors and pathways such as protected species due to the distance between this development and the Project.
			Cultural Heritage	This development is unlikely to result in physical impacts on heritage assets that fall within the Project. The nature and proximity of this development, however, means that there is the possibility for cumulative effects on the setting of heritage assets assessed as part of the Project.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative impact.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Noise and Vibration	This development may have cumulative noise effect; however, it is not yet known.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport. The Health and Wellbeing cumulative assessment is dependent on these assessments.
473	24/01608/STOUTE	Erection of buildings to accommodate employment use development	Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A161 and M62.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
497	24/02518/STREM	Erection of 130 dwellings, Beverley	Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A1079 and A164.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport. The Health and Wellbeing cumulative assessment is dependent on these assessments.
509	23/02315/EIASCR	Creyke Beck Substation[5] (Wanless Beck 400 kV substation (extension) / Birkhill Wood 400kV substation)	Landscape and Visual	Yes – Both this development and the Project are located within the same LCT (LCT16: Sloping Farmland) and within the same visual receptor area (Skidby parish) could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Shared receptors, including protected species due to the spatial overlap of this development and the Project.
			Ornithology	Yes – Relevant shared receptors and pathways such as protected species and designated sites.
			Cultural Heritage	This development is likely to result in physical impacts on heritage assets that fall within the Project. The nature and proximity of this development also means that there is the possibility for cumulative effects on the setting of heritage assets assessed as part of the Project.
			Water Environment	Proposed Watercourse Diversion at Birkhill Wood substation to enable access, Shared receptors, including protected species due to the spatial overlap of this development and the Project

[5] Whilst the Proposed Birkhill Wood Substation has been included as part of the Project, this development is also subject to a separate application under the Town and Country Planning Act 1990 (Ref 21.12 procedures, and therefore has also been included as a shortlisted development.[6] Whilst the Proposed High Marnham Substation has been included as part of the Project, this development is also subject to a separate application under the Town and Country Planning Act 1990 (Ref 21.12 procedures, and therefore has also been included as a shortlisted development.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A1079 and A164.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Noise and Vibration	This development will generate noise, but the cumulative effect with the Project is unclear at present.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on local communities affected by severance.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
497	23/02638/EIASCR	400kV Gas Insulated Substation, Cottingham	Landscape and Visual	Yes – Both this development and the Project are located within the same LCT (LCT16: Sloping Farmland) and within the same visual receptor area (Woodmansey parish) could result in significant cumulative landscape and visual effects.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Ecology	Yes – Possible shared receptors including protected species, due to the likely spatial overlap of this development and the Project.
			Ornithology	Yes – Possible shared receptors including protected species, due to the likely spatial overlap of this development and the Project.
			Cultural Heritage	This development is unlikely to result in physical impacts on heritage assets that fall within the Project. The nature and proximity of this development, however, means that there is the possibility for cumulative effects on the setting of heritage assets assessed as part of the Project.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A1079 and A164.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects. Additionally, there is the potential for cumulative effects as a result of construction dust, as this development is within the construction dust study area of the Project.
			Noise and Vibration	This development will generate noise. This has cumulative effect with the proposed substation of the Project. But the effect is at present unknown.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
187	PA/2022/1262	Erection of 10 industrial units, Crowle	Ecology	Yes – Likely shared receptors, including designated sites and protected species. Yes – Relevant shared receptors and impact pathways due to proximity of development and shared receptors (designated sites and protected species).
			Ornithology	Yes – Relevant shared receptors and impact pathways due to proximity of development and shared receptors (designated sites and protected species).
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes a number of local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects. Additionally, there is the potential for cumulative effects as a result of

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				construction dust, as this development is within the construction dust study area of the Project.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
190	PA/SCR/2021/8	Keadby Solar Farm 49.9MW	Landscape and Visual	Yes – Both this development and the Project are located within the same LCT (LCT: Trent Levels Flat Drained Farmland) may affect views from surrounding visual receptors areas (Crowle and Ealand, Eastoft, Amcotts and Belton) and could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Likely shared receptors, including designated sites and protected species.
			Ornithology	Yes – Relevant shared receptors and pathways due to designated sites and protected species and distance between this development and the Project.
			Cultural Heritage	This development is unlikely to result in physical impacts on heritage assets that fall within the Project. The nature and proximity of this development, however, means that there is the possibility for cumulative effects on the setting of heritage assets assessed as part of the Project.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes local roads.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
191	PA/SCR/2021/7	Ealand Solar Farm 49.9MW	Landscape and Visual	Yes – Both this development and the Project are located within the same LCT (LCT: Trent Levels Flat Drained Farmland) and within the same visual receptor area (Crowle and Ealand parish) could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Overlap in boundaries and shared receptors.
			Ornithology	Yes – Relevant shared receptors and pathways and overlap in project boundaries.
			Cultural Heritage	This development is likely to result in physical impacts on heritage assets that fall within the Project's draft Order Limits. Likewise, the nature and proximity of this development means that there is also the possibility for cumulative effects on the setting of heritage assets assessed as part of the Project.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs)

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				that are also associated with the construction of the Project. This includes local roads.
			Air Quality	Yes – Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects. Additionally, there is the potential for cumulative effects as a result of construction dust, as this development is within the construction dust study area of the Project.
			Noise and Vibration	Yes – The nearest receptor is approximately 1km away from this project and 200 m from the Project.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
310	PA/2023/1124	599 Dwellings and lake, Scunthorpe	Ecology	Yes – Possible shared receptors. However, it is the opposite side of the M181 and the River Trent to the Project, which will act as barriers to certain species.
			Ornithology	Yes – Relevant shared receptors and pathways due to designated sites and protected species.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the M181.
			Air Quality	Yes – Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
313	PA/SCO/2023/3	Keadby Power Station Haul Road, Trent Side, Keadby, Scunthorpe	Ecology	Yes – Likely shared receptors, including notable habitats, protected species and designated sites.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes a number of local roads and the B1392.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects. Additionally, there is the potential for cumulative construction dust effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
316	PA/SCR/2023/3	Battery Energy Storage System, Keadby	Landscape and Visual	Landscape No – Although this development and the Project are in close proximity, they are not located within the same landscape character area and the location within an existing industrial area means it is unlikely to have significant cumulative effects to landscape receptors. Visual

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				Yes – Both this development and the Project may affect views from surrounding visual receptors areas (Crowle and Ealand, Eastoft, Amcotts and Belton) and could result in significant cumulative visual effects.
			Ecology	Yes – Likely shared receptors including protected species, notable and designated habitats.
			Ornithology	Yes – relevant shared receptors due to the close distance between this development and the Project.
			Cultural Heritage	This development is unlikely to result in any physical impacts on heritage assets that fall within the Project. The nature and proximity of this development, however, means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes a number of local roads and the B1392.
			Air Quality	Yes – Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
336	PA/2023/1831	23 Caravan Pitches, Oak Tree	Ecology	Yes – Likely shared receptors including protected species, and designated sites.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
		Fishery (PA/2023/1831)	Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A161.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
350	PA/2023/631	CEA 9 dwellings, Luddington	Cultural Heritage	This development is unlikely to result in any physical impacts on heritage assets that fall within the Project. The nature and proximity of this development, however, means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes local roads.
			Air Quality	Yes – Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
409	PA/2023/1903	67 Dwellings, Crowle	Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A161 and local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
410	PA/2024/362	14 dwellings, Crowle	Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A161.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
469	PA/2024/513	Mixed use development, Epworth (PA/2024/513)	Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A161.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
499	PA/SCR/2024/9	Sand Lane Solar Farm	Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the M180.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Health and Wellbeing	Likely cumulative effects are expected within Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on this chapter.
275	22/01713/FUL	Battery Energy Storage System (West Burton BESS), Gainsborough	Landscape and Visual	Yes – Both this development and the Project are located within the same RLCT (RLCT 4a: Unwooded Vales) and within the same visual receptor area (Bole parish) could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Likely shared receptors, including designated sites and protected species.
			Ornithology	Yes – Relevant shared pathways due to distance between this development and the Project.
			Cultural Heritage	The erection of this development is unlikely to result in any physical impacts on heritage assets that fall within the Project. The nature and proximity of this development, however, means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				associated with the construction of the Project. This could result in cumulative air quality effects.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on local communities affected by severance.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
276	22/01219/SCR	(West Burton) Power Station Demolition	Landscape and Visual	Yes – Both this development and the Project are located within the same RLCT (RLCT 3a: Floodplain Valleys Sloping Farmland) and within the same visual receptor area (West Burton parish) could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Potential shared receptors, including designated sites and protected species.
			Ornithology	Yes – Relevant shared receptors including designated sites and protected species.
			Cultural Heritage	The demolition of this development is unlikely to result in any physical impacts on heritage assets that fall within the Project. The nature and proximity of the demolition, however, means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes local roads.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on local communities affected by severance.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
280	21/00737/SCR	Solar Photovoltaic West of Sturton Road Bole	Landscape and Visual	Yes – Both this development and the Project are located within the same RLCT (RLCT 4a: Unwooded Vales) and within the same visual receptor area (Bole parish) could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Shared receptors and overlap of boundaries.
			Ornithology	Yes – Shared receptors and overlap of boundaries.
			Cultural Heritage	This development is likely to result in physical impacts on heritage assets that fall within the Project. Likewise, the nature and proximity of this development means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs)

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				that are also associated with the construction of the Project. This includes local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects. Additionally, there is the potential for cumulative effects as a result of construction dust and NRMM emissions.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
334	23/01135/FUL	8 MW Green Hydrogen Production Plant, High Marnham Power Station Power Station Access	Landscape and Visual	Yes – Both this development and the Project are located within the same RLCT (RLCT 3a: Floodplain Valleys) and within the same visual receptor area (Marnham parish) could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Likely shared receptors such as designated sites and protected species.
			Ornithology	Yes – Likely shared relevant receptors such as designated sites and species; and proximity of the Project.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Noise and Vibration	The proposed hydrogen production plan will generate noise. This will have cumulative effect with the New High Marnham substation.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on local communities affected by severance.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
288	22/01071/FUL	Erecting of Unit A and B at Former High Marnham Power Station	Landscape and Visual	Yes – Both this development and the Project are located within the same RLCT (RLCT 3a: Floodplain Valleys) and within the same visual receptor area (Marnham parish). Although not energy development, there may be views from PRoW which could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Likely shared receptors, including designated sites and protected species.
			Ornithology	Yes – Relevant shared receptors due to the distance between this development and the Project.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects. Additionally, there is the potential for cumulative effects as a result of construction dust.
			Noise and Vibration	Cumulative effect is likely. The proposal may increase the operational noise impact.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
289	22/00707/FUL	High Marnham solar farm, Land Adjoining Former High Marnham Power Station High Marnham Nottinghamshire	Landscape and Visual	Yes – Both this development and the Project are located within the same RLCT (RLCT 3a: Floodplain Valleys) and within the same visual receptor area (Marnham parish) could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Shared receptors, overlap in boundaries.
			Ornithology	Yes – Relevant shared receptors due to the overlap in boundaries between this development and the Project.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Cultural Heritage	This development is likely to result in physical impacts on heritage assets that fall within the Project. Likewise, the nature and proximity of this development means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Noise and Vibration	The proposed substation within this development will generate noise, but the cumulative effect is unclear.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
292	21/00376/SCR	Tuxford Road – Solar Farm, Land North and South Tuxford Road Skegby	Landscape and Visual	Yes – Both this development and the Project are located within the same RLCT (RLCT 3a: Floodplain Valleys) and within the same visual receptor area (Marnham parish) could result in significant cumulative landscape and visual effects.
			Cultural Heritage	This development is likely to result in physical impacts on heritage assets that fall within the Project. Likewise, the nature and proximity of this development means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.
			Health and Wellbeing	Likely cumulative effects are expected within Landscape and Visual; the Health and Wellbeing cumulative assessment is dependent on these assessments.
320	23/00677/FUL	Professional Services Centre, 55 Units	Ornithology	Yes – Relevant shared receptors due to designated sites and protected species.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the B1403 and A631.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
321	23/00746/FUL		Traffic and Transport	Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
		39 Dwellings Beckingham		associated with the construction of the Project. This includes the A161 and B1403.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
334	23/01135/FUL	Prototype Facility for the Production of Hydrogen from Ammonia, High Marnham	Landscape and Visual	Yes – Both this development and the Project are located within the same RLCT (RLCT 3a: Floodplain Valleys) and within the same visual receptor area (Marnham parish). Although not energy development, there may be views from PRoW which could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Possible shared receptors, such as designated sites and protected species.
			Ornithology	Yes – Relevant shared receptors and pathways due to the overlap between this development and the Project.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Noise and Vibration	The proposed hydrogen production plan will generate noise. This will have cumulative effect with the New High Marnham substation. Potential for cumulative Socio-economics, Recreation and Tourism effects on local communities affected by severance.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economic, Recreation and Tourism effects on local communities affected by severance.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
337	23/01519/SCR	400 KV Substation High[6] Marnham Green Energy Park	Landscape and Visual	Yes – Both this development and the Project are located within the same RLCT (RLCT 3a: Floodplain Valleys) and within the same visual receptor area (Marnham parish) which could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Overlap in boundaries and shared receptors.
			Ornithology	Yes – Relevant shared receptors and pathways due to overlap in project boundaries.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs)

[6] Whilst the Proposed High Marnham Substation has been included as part of the Project, this development is also subject to a separate application under the Town and Country Planning Act 1990 (Ref 21.12 procedures, and therefore has also been included as a shortlisted development.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				that are also associated with the construction of the Project. This includes local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects. Additionally, there is the potential for cumulative effects as a result of construction dust and NRMM emissions.
			Noise and Vibration	This development will generate noise and may have cumulative effect with the Project.
				Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
352	24/00167/RES	7 Dwellings with Garages, East Drayton (24/00167/RES)	Cultural Heritage	This development is unlikely to result in any physical impacts on heritage assets that fall within the Project. The nature and proximity of the residential development, however, means there is the possibility for cumulative impacts on the setting of heritage assets also assessed as part of the Project.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A57.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects. Additionally, there is the potential for cumulative effects as a result of construction dust and NRMM emissions.
			Noise and Vibration	Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. Cumulative construction noise effect is likely.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
466	22/01689/FUL	Widened Access Road and Vehicle	Ecology	Yes – Possible shared receptors due to an apparent overlap in boundaries.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
		Parking Area High, Marnham Power Station	Ornithology	Yes – Relevant shared receptors due to an overlap in project boundaries.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects. Additionally, there is the potential for cumulative effects as a result of construction dust and NRMM emissions.
			Noise and Vibration	This development will generate noise and may have cumulative effect with the Project.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
472	20/00817/FUL	Proposed Erection of 3 Modular Buildings, J G Pears (Newark) Limited	Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes local roads.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
482	24/00692/SCR	Trent BESS Battery Energy Storage System, Rampton	Landscape and Visual	Yes – Both this development and the Project are located within the same RLCT (RLCT 3a: Floodplain Valleys) and within the same visual receptor area (Rampton and Woodbeck parish) could result in significant cumulative landscape and visual effects.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
500	24/01138/FUL	Crabtree Lane Battery Energy Storage System, Skegby	Landscape and Visual	Yes – Both this development and the Project are located within the same RLCT (RLCT 4a: Unwooded Vales) and within the same visual receptor area (Marnham parish) could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Likely shared receptors including designated sites and protected species, due to the spatial overlap of this development and the Project.
			Ornithology	Yes – Relevant shared receptors due to overlap between this development and the Project.
			Cultural Heritage	This development is likely to result in physical impacts on heritage assets that fall within the Project. Likewise, the nature and proximity of this development means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A57 and local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality; Socio-economics, Recreation and Tourism; and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
502	24/01161/FUL	12 Leisure Holiday Caravans, Walkeringham	Ecology	Yes – Likely shared receptors including designated sites (e.g. Chesterfield Canal).
			Ornithology	Yes – Relevant shared receptors and pathways due to designated sites and protected species.
			Cultural Heritage	This development is unlikely to result in any physical impacts on heritage assets that fall within the Project. The nature and proximity of this development, however, means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the B1403.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
504	24/00565/FUL	Erection of 95 Dwellings. Retford	Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A638 and local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
458	22/SCR/00003	Solar Farm and Battery Storage Facility, Weston	Ecology	Yes – Possible shared receptors, including protected species.
			Ornithology	Yes – Possible shared receptors, including protected species.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes local roads.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Traffic and Transport; the Health and Wellbeing cumulative assessment is dependent on these assessments.
422	(19/01511/FULL)	Residential Development of 214 Homes, Kingston Upon Hull	Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A1079.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project.
255	22/01477/SCR	Oaks Lane Solar Farm	Landscape and Visual	Yes – Both this development and the Project are located within the same RLCT (RLCT 4a: Unwooded Vales) and within the same visual receptor area (Marnham parish) could result in significant cumulative landscape and visual effects.
			Ecology	Yes – Likely shared receptors, including protected species, due to location of this development (part of this development lies adjacent to the Project).
			Ornithology	This development may result in physical impacts on heritage assets that fall within the Project. The nature and proximity of this development means there is the possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.
			Cultural Heritage	This development may result in physical impacts on heritage assets that fall within the Project. The nature and proximity of this development means there is the

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				possibility for cumulative effects on the setting of heritage assets also assessed as part of the Project.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A631.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects. There is also the potential for cumulative effects as a result of NRMM and construction dust emissions.
			Noise and Vibration	The noise from the proposed battery storage facilities will generate noise at NSRs. This may have cumulative effect with the noise from the proposed overhead lines.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Landscape and Visual; the Health and Wellbeing cumulative assessment is dependent on these assessments.
18	22/02569/EIASCO		Ecology	Yes – Likely shared receptors, including designated sites (e.g. the Humber Estuary designations).

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
		Proposed residential development,	Ornithology	Yes – Likely shared receptors, including designated sites (e.g. the Humber Estuary designations).
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A63.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Landscape and Visual; the Health and Wellbeing cumulative assessment is dependent on these assessments.
72	22/03465/STOUT	Proposed residential development (up to 120 dwellings)	Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A63.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Landscape and Visual; the Health and Wellbeing cumulative assessment is dependent on these assessments.
338	22/02744/STPLF	Erection of an extension (Unit 19A) to existing manufacturing	Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A1079.

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
		facility, construction of a new 540 space car park to service Unit 19A, and associated highway improvement works.	Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Project. This could result in cumulative air quality effects.
			Socio-economics, Recreation and Tourism	Potential for cumulative Socio-economics, Recreation and Tourism effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land, PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected within chapters including Air Quality, and Landscape and Visual; the Health and Wellbeing cumulative assessment is dependent on these assessments.
511	EN010098	Hornsea Four Offshore Wind Farm	Landscape and Visual	Yes – Both this development and the Project are located within the same LCT (LCT16: Sloping Farmland) and within the same visual receptor areas (Skidby parish and Rowley parish).
			Ecology	Yes - Likely shared receptors e.g. protected species and designated sites.
			Ornithology	Yes – Overlap of project boundaries means that there will be shared receptors (species and possibly designated sites).
			Cultural Heritage	The Hornsea Four Offshore Wind Farm NSIP may result in physical impacts on heritage assets that fall within the NH-HM scheme. The nature and proximity of the energy project means that there is also the possibility for cumulative impacts on the setting of heritage assets assessed as part of the NH-HM scheme.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A63, A1079 and the A164.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Proposed Project. This could result in cumulative air quality effects. Additionally, there is the potential for cumulative effects as a result of construction dust and NRMM emissions due to the distance of this development from the Proposed Project.
			Noise and Vibration	Construction activities for the cable connection may result in cumulative noise effect.
			Socio-economics, Recreation and Tourism	Yes – Potential for cumulative socio-economic, tourism and recreation effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land and PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected in chapters such as Landscape and Visual and Traffic and Transport; the health and wellbeing cumulative assessment is dependent on these chapters.
512	EN010125	Dogger Bank South Offshore Wind Farms	Landscape and Visual	Yes – Both this development and the Project are located within the same landscape character area (LCT16: Sloping Farmland) and within the same visual receptor areas (Skidby parish and Woodmansey parish).

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
			Ecology	Yes - project boundaries overlap, likely shared receptors e.g. protected species and designated sites.
			Ornithology	Yes – project boundaries overlap, therefore there will be shared receptors (species and possibly designated sites).
			Cultural Heritage	This development may result in physical impacts on heritage assets that fall within the Project. The nature and proximity of the energy project means that there is also the possibility for cumulative impacts on the setting of heritage assets assessed as part of the NH-HM scheme.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A63, A1079 and the A164.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles associated with the construction of the Proposed Project. This could result in cumulative air quality effects. Additionally, there is the potential for cumulative effects as a result of construction dust and NRMM emissions due to the distance of this development from the Proposed Project.
			Noise and Vibration	Construction activities for the cable connection may result in cumulative noise effect.
			Socio-economics, Recreation and Tourism	Yes - Potential for cumulative socio-economic, tourism and recreation effects on residential receptors, business premises, visitor attractions, community facilities, open

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				space, development land and PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected in chapters such as Noise and Vibration and Traffic and Transport; the health and wellbeing cumulative assessment is dependent on these chapters.
513	EN010144	Dogger Bank D Wind Farm	Landscape and Visual	Yes – Both this development and the Project are located within the same landscape character area (LCT16: Sloping Farmland) and within the same visual receptor areas (Skidby parish and Woodmansey parish.
			Ecology	Yes – Potential for overlap and therefore likely shared receptors e.g. protected species and designated sites.
			Ornithology	Yes – Project boundaries are immediately adjacent, therefore there will be shared receptors (species and possibly designated sites).
			Cultural Heritage	This development may result in physical impacts on heritage assets that fall within the Project. The nature and proximity of the energy project means that there is also the possibility for cumulative impacts on the setting of heritage assets assessed as part of the Project.
			Agriculture and Soils	This development has the potential for the removal of land from agricultural use and the disturbance of soil resources, and therefore has the potential for a cumulative effect.
			Traffic and Transport	Yes – Vehicles involved in the construction of this development are expected to utilise certain routes (PARs) that are also associated with the construction of the Project. This includes the A1079.
			Air Quality	Vehicles associated with the construction of this development may share the same routes as vehicles

ID	Planning application reference	Shortlisted development	Topics with the potential for a cumulative effect	Shared receptors
				associated with the construction of the Proposed Project. This could result in cumulative air quality effects. Additionally, there is the potential for cumulative effects as a result of construction dust and NRMM emissions due to the distance of this development from the Proposed Project.
			Noise and Vibration	Construction activities for the cable connection may result in cumulative noise effect.
			Socio-economics, Recreation and Tourism	Yes - Potential for cumulative socio-economic, tourism and recreation effects on residential receptors, business premises, visitor attractions, community facilities, open space, development land and PRoW and recreational routes.
			Health and Wellbeing	Yes – Likely cumulative effects are expected in chapters such as Noise and Vibration and Traffic and Transport; the health and wellbeing cumulative assessment is dependent on these chapters.

21.7.7 The above lists comprise the preliminary cumulative assessment for the PEIR and identify planning applications to be taken forward to Stage 3 at this point. The CEA process will be reviewed, updated and progressed as part of the ongoing environmental impact assessment and reported in the Environmental Statement which will be submitted alongside the application for development consent

21.8 References

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Ref 21.6 The Planning Inspectorate, Available at: EN020034–000009–EN020034 North Humber to High Marnham – Scoping Opinion.pdf (planninginspectorate.gov.uk) Available at; https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN020034/EN020034-000009-EN020034%20North%20Humber%20to%20High%20Marnham%20-%20Scoping%20Opinion.pdf [Accessed October 2024]

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