



One Earth Solar Farm

Volume 9: Other Post-Submission Documents'

Joint Interrelationship Report [EN010159]

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1. Introduction

1.1 Purpose of this report

- 1.1.1 This report has been produced following the Relevant Representation (RR) submitted by some Host Authorities (specifically West Lindsey District Council and Lincolnshire County Council) which requests that the Examining Authority (ExA) adopts a mechanism previously employed in other solar Nationally Significant Infrastructure Projects (NSIPs) across Lincolnshire and Nottinghamshire. Under this mechanism, each applicant is required to submit a comprehensive Interrelationship Report at the commencement of their examination. This report is then reviewed, revised, and resubmitted at key deadlines throughout the examination process.
- 1.1.2 The purpose of this report is to provide detail on how the One Earth Solar Farm (the Proposed Development) interacts between aspects with other NSIP developments addressing the potential for cumulative and interrelated effects. The following NSIPs have been considered in detail, which are the closest projects within 16km of the Proposed Development (further information is provided below):
- > Cottam Solar Project [EN010133];
 - > Gate Burton Energy Park [EN010131];
 - > Great North Road Solar and Biodiversity Park [EN010162];
 - > West Burton Solar Project [EN010132];
 - > Fosse Green Energy [EN010154];
 - > Tillbridge Solar [EN010142]
 - > Steeple Renewables Project [EN010163];
 - > North Humber to High Marnham [EN020034]; and
 - > High Marnham Substation [EN020034]¹.
- 1.1.3 This report is intended to provide a strategic framework to inform and support the future development of projects within the surrounding area. The current assessment of interrelationships is based on the best available information within

¹ In response to stakeholder feedback received during the Issue Specific Hearing 1, the potential interrelationship between the Proposed Development and the High Marnham Substation has been carefully considered. It is acknowledged that the High Marnham Substation is subject to a separate application under the Town and Country Planning Act 1990 (TCPA), rather than being part of the Nationally Significant Infrastructure Project (NSIP) process. Nonetheless, information pertaining to the substation has been integrated into the NSIP documentation for the North Humber to High Marnham project [EN020034] to ensure a comprehensive assessment of potential cumulative and interrelated effects.

the public domain. It is recognised that greater clarity will emerge as further proposals are advanced.

- 1.1.4 Notwithstanding this, the Applicant is committed to ongoing engagement and collaboration with other developers and relevant statutory bodies to facilitate a coordinated, transparent, and evidence-based approach to future planning and environmental considerations.
- 1.1.5 As part of the Environmental Impact Assessment (EIA) process, consideration of interrelationships with other projects was assessed within Chapter 18: Cumulative Effects [APP-047] of the Environmental Statement (ES) submitted to support the DCO application.

1.2 Clarification on Technical Aspect Zones of Influence

- 1.2.1 As required by the EIA Regulations², Chapter 18: Cumulative Effects [APP-047] submitted to support the DCO application considers the possible effects that a proposal may have in combination with existing or consented developments. It also considers other proposed developments or activities. Likely cumulative effects have been defined as the likely effects that the Proposed Development may have in combination with other relevant developments in the vicinity of the Site.
- 1.2.2 The cumulative assessment follows the guidance provided in the PINS Advice Note published in September 2024³. This includes identifying relevant schemes, reviewing available information and assessing potential cumulative effects. Relevant schemes considered for the cumulative assessment have been identified within a 10km⁴ radius of the Proposed Development, in consultation with the Host Authorities. These included schemes which are at application stage, consented, under construction or operational.
- 1.2.3 Each environmental aspect has considered the spatial area (Zone of Influence (Zol)) within which the environmental effects of the Proposed Development are expected to occur. The Zol differs depending on the environmental aspect, and for some follow a more established approach defined by specialist aspect guidance,

² His Majesty's Office (HMSO) (2017) Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

³ PINS (2024); Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment (September 2024). Available at: Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment - GOV.UK.

⁴ 10km is the distance beyond which significant effects on International/ European designated sites are considered unlikely to occur (which is the greatest spatial distance for any environmental aspect) and as such has informed the selection of cumulative schemes. Some cumulative schemes however fall just outside the 10km buffer to account for other effects such as transport, which have been accounted for within the future baseline as set out in Chapter 12: Transport and Access of the ES (APP-041). It is noted that other DCOs, such as Oaklands Farm Solar Park [EN10122] considered a smaller Zol distance, being only 5km from the Order Limits, and as such the 10km Zol is considered worst-case.

and for others a more bespoke approach is undertaken. The environmental aspect spatial extent of potential cumulative impacts is set out in Table 18.2 of Chapter 18: Cumulative Effects [[APP-047](#)], and generally covers an area within which receptors could potentially be subject to significant cumulative effects.

1.3 Structure of this report

1.3.1 This report is structured as follows:

- > Section 2: An overview of Solar NSIPs located in Lincolnshire and Nottinghamshire, and substations and overhead lines within the Order Limits;
- > Section 3: An overview of the specific NSIPs, as listed above, which have been considered in detail in this report;
- > Section 4: An overview of any shared Order Limits and any potential mitigation measures of the Other Projects Identified;
- > Section 5: Review of the Environmental Aspect Cumulative Effects with the Other Projects Identified;
- > Section 6: A summary and conclusion of the interrelationship.

2. Solar NSIPs located in Lincolnshire and Nottinghamshire and Proposed Substation and Overhead Lines within the Order Limits

- 2.1.1 Figure 1 illustrates the locations of the NSIP solar projects across Lincolnshire and Nottinghamshire, as well as the substation and overhead lines within the Order Limits. During the Issue Specific Hearing, some Host Authorities requested that the Order Limits for interrelated projects be illustrated. Due to the wide geographical spread of the NSIP solar projects, Figure 1 provides only an overview of their locations. However, the Order Limits for the solar projects closest to the Proposed Development (as listed in Section 1), which are of greatest concern, are shown in more detail in Figure 2.
- 2.1.2 Table 1 sets out further details of the NSIP solar schemes and the substation and overhead lines within the Order Limits as obtained in July 2025. The distance provided measures the approximate distance from the project listed under “Project Name” to the closest edge of the Proposed Development Order Limits. It should be noted that the Order Limits for all projects not yet submitted are evolving and may change over time.

Figure 1: Solar NSIPs located in Lincolnshire and Nottinghamshire, and substations and overhead lines in the Order Limits

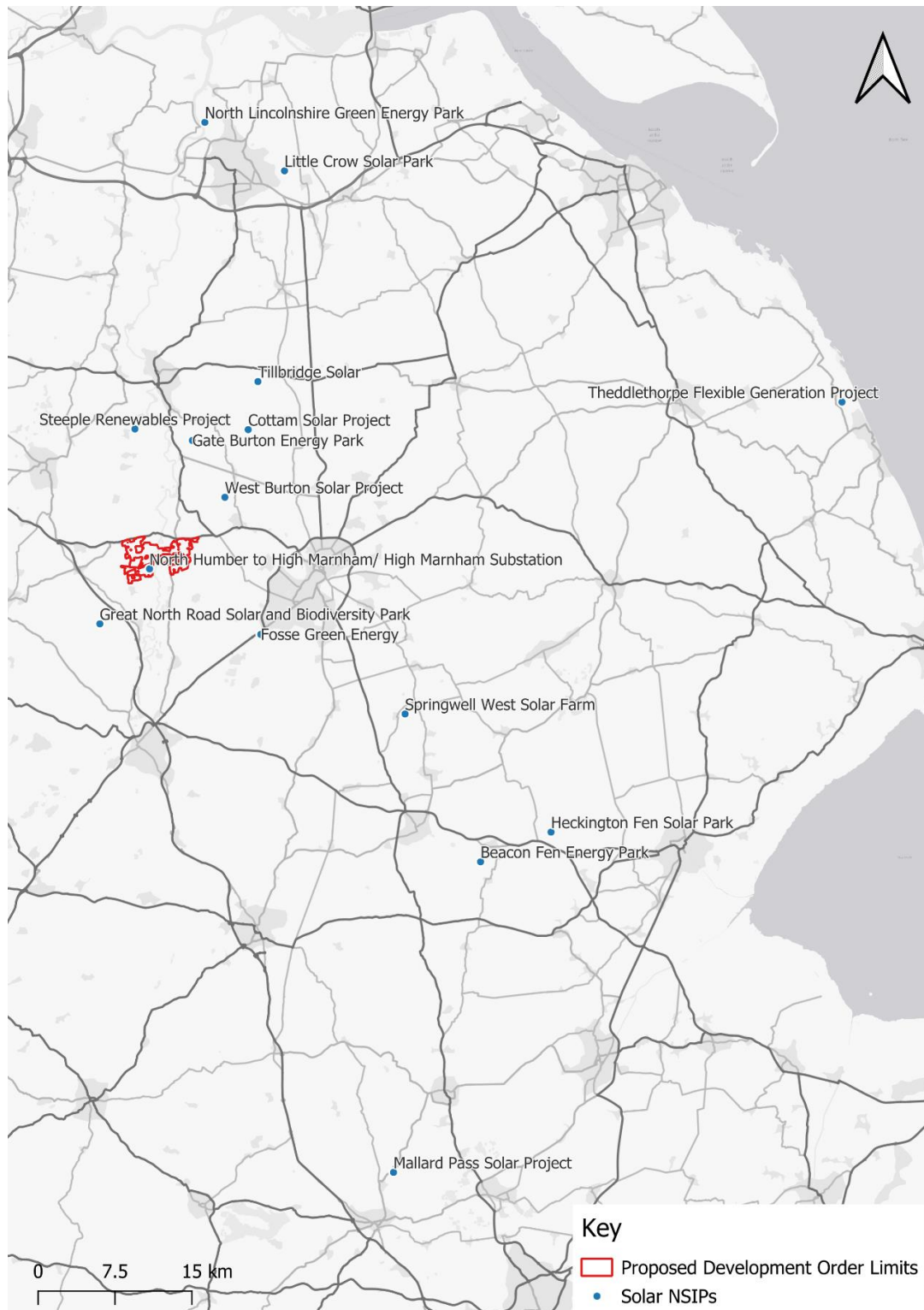


Table 1: List of Solar NSIP Located in Lincolnshire and Nottinghamshire and substations and overhead lines in the Order Limits

Project Name	Application Reference	Stage of Application	Distance to the nearest edge of One Earth	Considered in EIA, Stage 2 of the Cumulative Effects Assessment (CEA)	Stage 2 Reasoning
North Humber to High Marnham	EN020034	Pre-Application. Scoping Response October 2023	Within RLB	Yes	Located within Order Limits
High Marnham Substation	EN020034	Pre-Application. Scoping Response October 2023	Within RLB	Yes	Located within Order Limits
Cottam Solar Project	EN010133	Consent Granted September 2024	11.6km	No	Not located within the Aspect Zone of Influences (Zoi), however as requested by the Host Authorities, further consideration given.
Gate Burton Energy Park	EN010131	Consent Granted July 2024	9.44km	Yes	Located within the 10km Aspect Zoi.
Great North Road Solar and Biodiversity Park	EN010162	Acceptance Stage July 2025	4.84km	Yes	Located within the 10km Aspect Zoi.

West Burton Solar Project	EN01032	Granted Consent January 2025	4.68km	Yes	Located within the 10km Aspect Zol.
Fosse Green Energy	EN010154	Acceptance Stage July 2025	9.63km	Yes	Located within the 10km Aspect Zol.
Tillbridge Solar	EN01042	Decision sent to Secretary of State July 2025.	16.3km	No	Not located within the Aspect Zone of Influences (Zol), however as requested by the Host Authorities, further consideration given.
Steeple Renewables Project	EN010163	Pre-examination July 2025	10.5km	Yes	Not located within the Aspect Zone of Influences (Zol), however as requested by the Host Authorities, further consideration given.
Springwell Solar Farm	EN010149	Examination July 2025	25.6km	No	Scheme too far to have the potential to result in cumulative effects and therefore discounted.
Beacon Fen Energy Park	EN010151	Pre-examination July 2025	40.5km	No	Scheme too far to have the potential to result in cumulative effects and therefore discounted.
Heckington Fen Solar Park	EN010123	Granted Consent January 2025	43.8km	No	Scheme too far to have the potential to result in cumulative effects and therefore discounted.

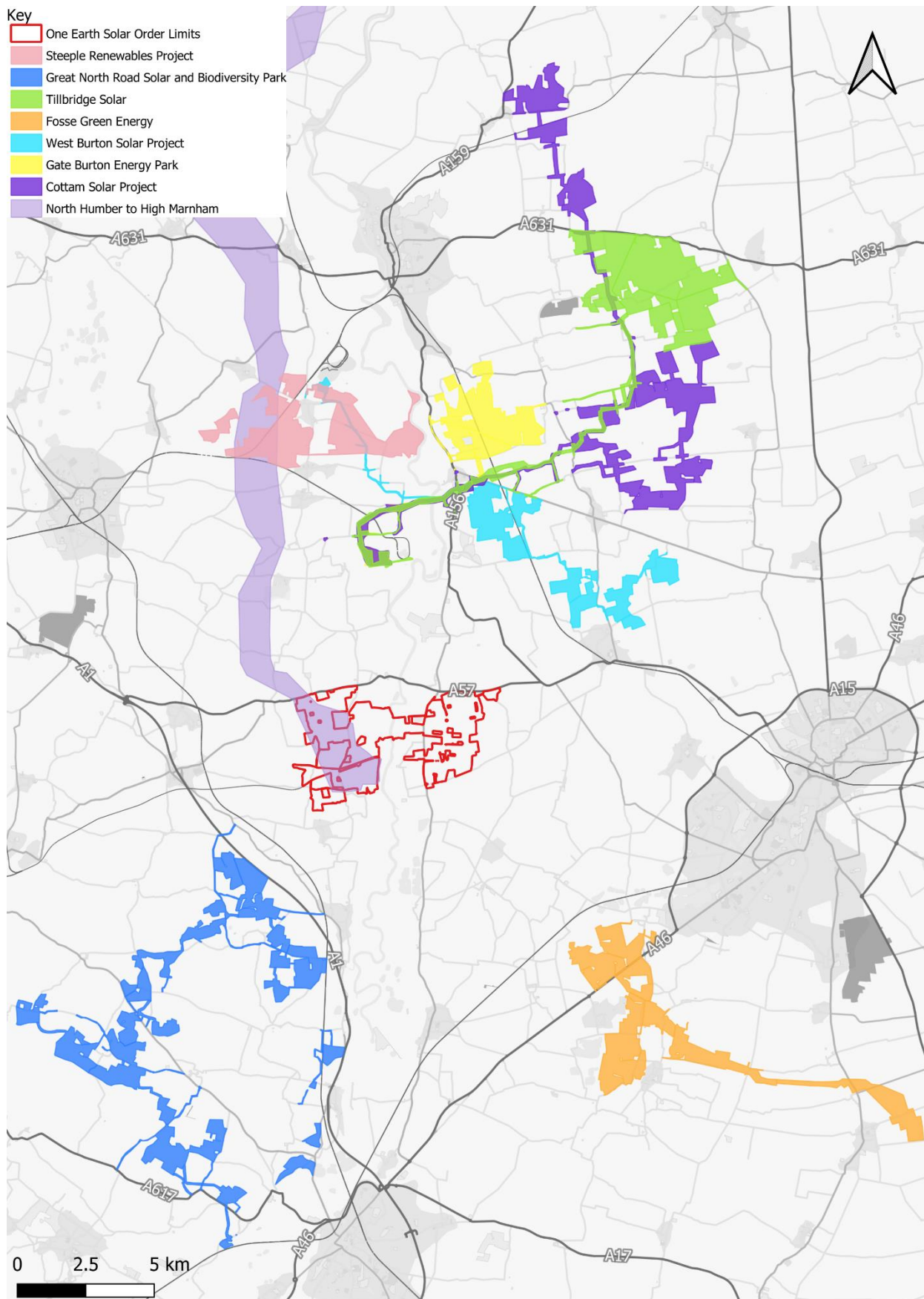
Mallard Pass Solar Project	EN010127	Granted Consent July 2024	62.2km	No	Scheme too far to have the potential to result in cumulative effects and therefore discounted.
Little Crow Solar Park	EN010101	Granted Consent April 2024	36.7km	No	Scheme too far to have the potential to result in cumulative effects and therefore discounted.
North Lincolnshire Green Energy Park	EN010116	Granted Consent March 2025	40.5km	No	Scheme too far to have the potential to result in cumulative effects and therefore discounted.
Theddlethorpe Flexible Generation Project	EN0110008	Pre-Application. No project application documents in July 2025	64.2km	No	Scheme too far to have the potential to result in cumulative effects and therefore discounted.

3. Overview of the other Nationally Significant Infrastructure Projects Considered

3.1 Overview of the Projects Identified

- 3.1.1 As mentioned in Section 1, this Report discusses the interrelationships between the Cottam Solar Project, Gate Burton Energy Park, Great North Road Solar and Biodiversity Park, West Burton Solar Project, Fosse Green Energy, Tillbridge Solar, Steeples Renewables Project, North Humber to High Marnham and High Marnham Substation, because these are the projects with the potential for cumulative effects, as well as being those geographically closest to each other and/or requested by some Host Authorities to be considered within the Joint Interrelationship Report.
- 3.1.2 All the projects would deliver electricity to the national electricity transmission network. They involve a mix of solar schemes, substations and overhead lines. Each project is distinct and is being promoted by a different undertaker.
- 3.1.3 Figure 2 shows the Order Limits of the Proposed Development and the other NSIPs. This includes the cable corridors, which are located underground but have been visualised to show the interrelationships between the projects.
- 3.1.4 Table 2 provides further details of each of these projects as of July 2025.

Figure 2: Order Limits of the Proposed Development and the other NSIPs.



3.2 Overview of the Other Projects Identified

North Humber to High Marnham [EN020034]

- 3.2.1 North Humber to High Marnham project is being promoted by National Grid Electricity Transmission (NGET), which is part of National Grid. The North Humber to High Marnham project is a proposed reinforcement of a new 400kV kilovolt (kV) electricity transmission overhead power line over a distance of approximately 90 kilometres (km) between North Humber to High Marnham. This would connect a proposed new substation close to the existing Creyke Beck Substation and a proposed new substation close to the existing High Marnham Substation. Located within 5km of the North Humber to High Marnham project are the city of Kingston-upon-Hull, towns of Beverley, Crowle, Scunthorpe, Epworth, Gainsborough and Retford, as well as there are multiple villages and individual properties within or near. The North Humber to High Marnham project is located within the Order Limits of the Proposed Development. The DCO application is expected to be submitted between April and June 2026. The North Humber to High Marnham project does not include a new substation at High Marnham, which is discussed below.

High Marnham Substation [EN020034]

- 3.2.2 As detailed in the EIA Scoping Report for the above North Humber to High Marnham project, the proposal involves submitting a Town and Country Planning application to Bassetlaw District Council for a separate substation at High Marnham.
- 3.2.3 Information in the public domain⁵ states construction of the High Marnham substation is expected to begin in summer 2026, with a 2.5 to 3-year construction programme, with the substation fully operational by winter 2029. The substation will be an Air Insulated Switchgear (AIS) installation, located to the west of the existing site at High Marnham. The compound will measure approximately 490 metres by 220 metres and will include around 20 bays, network stability equipment, standard substation plant, and control infrastructure. Overhead line gantries, approximately 12 metres high, will connect the incoming overhead cable from the EN020034 North Humber to High Marnham project (as above), forming the tallest structures on site. The compound is expected to be enclosed by an electrified palisade fence for security. Access during both the construction and operational phases is likely to be from Main Street, to the west of the site. Temporary diversions of existing overhead lines in proximity to the substation will be required during construction and are expected to remain in place for up to three years. As part of the works, two new pylons will be constructed to the north and seven to the south, while 26 existing pylons will be removed.

⁵ National Grid (2024). The Great Grid update: Brinsworth to High Marnham, Project summary document. High Marnham Substation. April 2024.

Cottam Solar Project

- 3.2.4 Cottam Solar Project (the “Cottam scheme”) is being promoted by Cottam Solar Project Limited (the “Cottam undertaker”), which is part of Island Green Power UK Limited. The Cottam scheme is a proposed solar farm across four areas of land connected by underground cable with a capacity of approximately 600MW together with a battery energy storage system. Two of the areas of the Cottam scheme containing solar panels are located between the villages of Willingham by Stow, Thorpe le Fallows and Fillingham. The other two areas are located further north around Blyton, Pilham and Corringham. The electricity generated will be transferred to the grid via a substation at Cottam Power Station. The DCO application was submitted to PINS on 12 January 2023 and accepted for Examination on 10 February 2023. Examination commenced on 5 September 2023 and closed on 5 March 2024. The Cottam scheme was consented on 5 September 2024.

Gate Burton Energy Park

- 3.2.5 The Gate Burton Energy Park is a proposal for a solar PV park with a capacity of approximately 531MW together with a battery energy storage system, promoted by Gate Burton Energy Park Limited (the “Gate Burton undertaker”), which is part of Low Carbon Limited. It is located to the east of the River Trent between the villages of Knaith, Gate Burton and Willingham by Stow. The electricity generated will be transferred by an underground 400kV cable to the grid connection substation at Cottam Power Station to the south-west. The DCO application was submitted by the Gate Burton undertaker to the Planning Inspectorate (PINS) on 27 January 2023 and accepted for Examination on 22 February 2023. Examination commenced on 4 July 2023 and closed on 4 January 2024. The Gate Burton scheme was consented on 12 July 2024.

Great North Road Solar and Biodiversity Park

- 3.2.6 Great North Road Solar and Biodiversity Park (the “Great North Road scheme”) is being promoted by Elements Green Trent Limited. It is a proposal for a solar photovoltaic (PV) electricity generating facility with a capacity of 800MW and a Battery Energy Storage System (BESS), to provide the option to store electricity prior to exporting it to the grid. The Great North Road scheme is located to the west of the A1, north of the A617, east of Eakring, and south of Eganton, occupying two main areas to the north and north-west of Staythorpe, consisting of a loop of land parcels proposed to be occupied by solar PV panels, connected by cable route areas. The DCO application was submitted to PINS on 27 June 2025 and, at the time of writing, PINs are expected to announce if the project has been accepted for examination.

West Burton Solar Project

- 3.2.7 West Burton Solar Project (the “West Burton scheme”) is being promoted by West Burton Solar Project Limited (the “West Burton undertaker”), which is also part of Island Green Power. It is a proposal for a solar PV park across three areas of land

connected by underground cable, with a capacity of approximately 480MW together with a battery energy storage system. The areas of the West Burton scheme siting solar panels are located south of the A1500 around the villages of Marton, Ingleby and Bransby. The electricity generated will be transferred to the grid via a substation at West Burton Power Station. The DCO application was submitted to PINS on 21 March 2023 and accepted for Examination on 18 April 2023. The Examination commenced on 8 November 2023 and closed on 8 May 2024. The West Burton scheme was consented on 24 January 2025.

Fosse Green Energy

- 3.2.8 Fosse Green Energy (the “Fosse Green scheme”) is being promoted by Fosse Green Energy Limited, and is a subsidiary of Windel Energy Limited and Canadian Solar Inc. It is a proposal for the installation of solar photovoltaic (PV) generating panels and on-site Battery Energy Storage System (BESS), cabling and on-site energy storage facilities together with grid connection and associated infrastructure, with an anticipated capacity in excess of 50MW. The Fosse Green scheme is approximately 9 km south-west of Lincoln, the solar and energy storage park being located adjacent to Witham St Hughs and the grid connection corridor options located around Navenby and Coleby. The DCO application was submitted to PINS on 18 July 2025 and is currently at the pre-application stage.

Tillbridge Solar

- 3.2.9 Tillbridge Solar Project (the “Tillbridge scheme”) is being promoted by Tillbridge Solar Limited (the “Tillbridge undertaker”) and is a joint venture between Tribus Clean Energy Limited and Recurrent Energy. The Tillbridge scheme has secured a Bilateral Connection Agreement (BCA) with National Grid to allow 500MW of renewable energy to be transferred into and out of its substation. The proposed solar farm is located between Springthorpe and Glentworth. The electricity generated will be transferred to the grid via a substation at Cottam Power Station (National Grid Cottam Substation). The DCO application was submitted to PINS on 10 April 2024 and accepted for Examination on 8 May 2024. The Examination commenced on 15 October 2024 and a decision from the Secretary of State is due on 14 October 2025.

Steeple Renewables Project

- 3.2.10 Steeple Renewables Project (the “Steeple scheme”) is being promoted by Steeple Solar Farm Limited a wholly owned subsidiary of Renewable Energy Systems (RES) Limited. The Steeple scheme is a proposal for construction, operation, and decommissioning of a ground mounted solar photovoltaic (PV) electricity generation station with a capacity of over 50 MW and associated development comprising of energy storage and grid connection infrastructure on land at Sturton le Steeple. The proposed solar farm is located north of South Leverton, south of North Wheatley and east of Clarbrough. The DCO application was submitted to PINS on 14 May 2025 and was accepted for examination on 11 June 2025.

3.3 Overview of the Other Project Details of Consenting, Construction and Operation Timetables

- 3.3.1 Table 2 sets out key details for each of the projects including details on the estimated timetable of works such as obtaining consent, construction phasing, grid connection and operational commencement.

Table 2: Overview of the Other Project Details of Consenting, Construction and Operation Timetables

Project Name	Application Reference	Submission of Application	Decision/ Due Date of Decision	Predicted Start of Construction	Predicted end of Construction/ Duration	Predicted Operation Date
North Humber to High Marnham	EN020034	Q2 2026	Q3 2027	Q4 2027	Q4 2029	Q4 2029
High Marnham Substation	EN020034	Q2 2026	Q3 2027	Q4 2027	Q4 2029	Q4 2029
Cottam Solar Project	EN010133	12 January 2023	05 September 2024	Q4 2024	Q4 2026	Q4 2026
Gate Burton Energy Park	EN010131	27 January 2023	15 July 2024	Q1 2025	Q1 2028	Q1 2028
Great North Road Solar and Biodiversity Park	EN010162	27 June 2025	Q3 2026	Q3 2026	Q3 2028	Q3 2028
West Burton Solar Project	EN01032	21 March 2023	24 January 2025	Q1 2025	Q4 2026	Q4 2026
Fosse Green Energy	EN010154	18 July 2025	Q4 2026	Q4 2026	Q4 2028	Q4 2028
Tillbridge Solar	EN01042	10 April 2024	Q4 2025	Q4 2025	Q4 2027	Q1 2028

Steeple Renewables Project	EN010163	14 May 2025	Q4 2026	Q2 2027	Q2 2029	October 2029
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4. Shared Order Limits and Mitigation Measures of the Other Projects Identified

4.1 The Approach taken to coordinate between Projects

- 4.1.1 The Applicant is committed to working with other developers to reduce potential cumulative impacts where possible or practicable. While such engagement has not occurred to date, the Applicant will seek opportunities for collaboration, as set out in the outline Construction and Environmental Management Plan (oCEMP) [\[APP-176\]](#).
- 4.1.2 Where there are any temporal construction overlaps identified the Applicant will:
- > Engage proactively with other developers to share relevant information on construction programmes, site access arrangements, and key activities;
 - > Coordinate works, where practicable, to avoid or minimise cumulative impacts such as traffic congestion, noise, dust, or disruption to local communities and land users;
 - > Participate in any local or planning authority-led coordination groups, liaison committees, or working groups as required;
 - > Seek to agree on mitigation measures with other developers where necessary to manage overlapping environmental effects (such as transport routes);
 - > Keep relevant local authorities, statutory consultees, and stakeholders informed of any coordination activities and outcomes;
 - > Document and maintain records of all engagement and cooperation efforts with third-party developers.
- 4.1.3 This approach will be maintained throughout the construction phase, as detailed within the outline Construction and Environmental Management Plan (oCEMP) [\[APP-176\]](#). Post consent, the CEMP will be updated as necessary to reflect changes in either project or surrounding development activities.
- 4.1.4 In addition to the oCEMP, the outline Construction Traffic Management Plan (oCTMP) [\[APP-181\]](#) confirms to avoid the need for repetition and delay to existing road users, the Applicant will liaise with other significant developments in the area with a view to coordinating works and deliveries.
- 4.1.5 Given the High Marnham Substation and the North Humber to High Marnham [\[EN020034\]](#) projects are located within the Order Limits, the oCEMP includes a specific commitment to work with the NGET to minimise the impact of the two projects interacting. The Applicant is also in discussions with NGET with respect to protective provisions, which will manage the interface between the projects.

- 4.1.6 During the operation, the Applicant is committed to ensuring that the creation and management of new habitats, as well as the enhancement of existing habitats, are delivered effectively thorough coordination with other projects. This will be achieved via a Steering Group, which will include other willing solar developers in the area, the host authority ecologists and conservation organisations such as the Lincolnshire Wildlife Trust and Nottinghamshire Wildlife Trust. The Steering Group will seek opportunities for strategic biodiversity enhancements, sharing lessons learnt on habitat establishment and management, explore the potential for resource-sharing (such as the use of a local grazier) and adding to the overall knowledge base associated with the effect of solar farms on biodiversity. This commitment is made within the outline Landscape and Ecological Management Plan (oLEMP) submitted as part of Deadline 2.

4.2 Shared Order Limits and/or Mitigation for other Solar DCOs

- 4.2.1 As shown in Figure 2, the Proposed Development does not include any shared Order Limits or mitigation measures with other solar DCO projects. This is primarily due to the separation distance between the Proposed Development and nearby schemes, with the closest being the West Burton Solar Project, located approximately 4.68 km from the Proposed Development's Order Limits. In addition, the Proposed Development cannot share a cable corridor with the other solar DCOs due to differences in connection points to the National Grid substation.
- 4.2.2 As above, the Applicant is committed to working with other developers to reduce potential cumulative impacts where possible or practicable, these commitments are set out in the oCEMP [\[APP-176\]](#), the oCTMP [\[APP-181\]](#) and the updated oLEMP submitted with Deadline 2.

4.3 Substation and Overhead Line

- 4.3.1 The High Marnham Substation upgrade is within the Order Limits of the Proposed Development. The High Marnham Substation upgrade has been considered throughout the design process for the Proposed Development, as this will be the secured connection point for the Proposed Development, and the area of its potential location has been included within Work Area 4 of the Order Limits.
- 4.3.2 The North Humber to High Marnham [\[EN020034\]](#) projects does overlap the Order Limits of the Proposed Development, however there is no shared mitigation because the project does not yet have a final preferred alignment, making it difficult to coordinate where shared mitigation could be. The Applicant is aware that the project would need access to their overhead line assets that pass through the Order Limits in order to undertake the construction of the new transmission line at a currently undefined point in the next 5 years. The oCEMP [\[APP-176\]](#) does state the project will, where possible, coordinate works with NGET to minimise impact of the two projects interacting.

- 4.3.3 As noted above, the Applicant is also negotiating protective provisions with NGET, with a view to managing the interaction between the projects within the Order limits.

5. Review of the Environmental Aspect Cumulative Effects with the Other Projects Identified

- 5.1.1 Table 3 considers the potential for inter-project cumulative effects with the other projects identified.
- 5.1.2 It is noted that the conclusions presented in Table 3 are consistent with those outlined in the most recent Joint Interrelationship Report, submitted for Tillbridge Solar on 3 April 2025 as part of Deadline 6. The Tillbridge Joint Interrelationship Report concluded that the Proposed Development (i.e. One Earth Solar Farm) can be scoped out from cumulative effects with the Cottam Solar Project, the Gate Burton Energy Park, the West Burton Solar Project, and Tillbridge Solar, as the distance between these schemes is sufficient to ensure there are no potential cumulative effects.

Table 3: Summary of inter-project Cumulative Effects

Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
Biodiversity	
The Proposed Development has the potential to have cumulative effects with the North Humber to High Marnham project and High Marnham substation on International/ European Sites, Statutory Designated Sites, Legally Protected and notable Species, Priority Habitats and Veteran Trees, Waterbodies and Watercourse, Habitats, as a result of their close proximity to each other.	A oCEMP [APP-176] will be in place for the Proposed Development, as well as for the North Humber to High Marnham project. The oCEMP [APP-176] will outline the necessary measures to effectively manage and minimise short-term construction impacts, such as noise disturbance. The North Humber to High Marnham project and the High Marnham substation have also not been submitted for approval yet and as stated within the oCEMP [APP-176] , we

Based on the latest publically available information, the Proposed Development has the potential to have cumulative effects with the Great North Road scheme, Steeple scheme and the Fosse Green Scheme, on land take of or disturbance of International/ European Sites.

Additionally, there is overlap in construction phases between the Proposed Development, the Great North Road scheme, the Steeple scheme, NEGAT scheme, and High Marnham Substation.

have been engaging with them and we will continue to engage and once the information is available to minimise impacts from overlapping construction phases. This is set out within the oCEMP [\[APP-176\]](#).

During the operational phase, no cumulative effects are anticipated, as the habitats within the Proposed Development area are expected to be significantly enhanced compared to current conditions.

Although there is some overlap in the construction timelines of the Proposed Development, the Great North Road scheme, the Steeple scheme, and the Fosse Green scheme, the distance between these sites makes it unlikely that land take would indirectly affect species associated with the nearest European Sites. In other words, there is no identified pathway for impact. If any of the proposals fall within the Zone of Influence of an International Site, the appropriate Habitat Regulations Assessment (HRA) screening and assessment process will be undertaken to ensure that potential impacts are properly identified and mitigated.

No interproject cumulative significant effects on biodiversity are anticipated.

Hydrology

The Proposed Development has the potential to have cumulative effects with the North Humber to High Marnham project, the High Marnham substation and the Great North Road scheme on hydrology, and there being overlap in construction phases between the projects.

The Fosse Green scheme and Steeple Scheme are not located within the Zone of Influence (ZoI) for hydrology of the Proposed Development, therefore, there is no potential for significant cumulative effects.

As with the Proposed Development it is assumed for the North Humber to High Marnham project, the High Marnham substation and the Great North Road scheme that a site-specific oCEMP, Flood Risk Assessment (FRA) along with supporting Surface Water Drainage Strategy, will ensure that potential impacts on flood risk, water quantity and quality are managed and minimised as far as practicable, even during construction phase overlap. The North Humber to High Marnham project and the High Marnham substation have also not been submitted for approval yet and as stated within the oCEMP [[APP-176](#)], we have been engaging with them and we will continue to engage and once the information is available to minimise impacts from overlapping construction phases.

No interproject cumulative significant effects on hydrology are anticipated.

Land and Soils

The Proposed Development has the potential to have cumulative effects with the North Humber to High Marnham project and the High Marnham substation in relation to accidental spills on site to groundwater, and

There is potential for construction related accidental spills to have a temporary combined effect on groundwater receptors. However, it is assumed that the North Humber to High Marnham project and the High Marnham substation will be subject to the respective mitigation plans, such as

sediment and pollutants to be transferred offsite during the overlapping construction phases.

The Fosse Green scheme, Great North Road scheme and Steeple Scheme are not located within the ZOI for land and soils of the Proposed Development, therefore, there is no potential for significant cumulative effects.

Code of Construction Practice and oCEMP, agreed with the relevant authorities, and that adverse effects on groundwater receptors would be mitigated and not be significant. In view of this, the probabilities of significant inter-project cumulative effects occurring on groundwater is anticipated to be low.

The potential for sediment and pollutants to be transferred off-site from the Proposed Development will be managed by the oCEMP [\[APP-176\]](#), Outline Operational Environmental Management Plan (oOEMP) [\[APP-177\]](#) and Outline Decommissioning Environmental Management Plan (oDEMP) [\[APP-178\]](#), meaning there is limited potential for the Proposed Development to contribute to a cumulative effect on groundwater quality. On the basis that the requirements of relevant policy and legislation concerning land contamination and remediation will be integral to the design of the Proposed Development, and appropriate mitigation measures will be applied as appropriate, it is considered that no interaction of impact on land would be expected between the Proposed Development, the North Humber to High Marnham project and the High Marnham substation.

The North Humber to High Marnham project and the High Marnham substation have also not been submitted for approval yet and as stated within the oCEMP [\[APP-176\]](#), we have been engaging with them and we will continue to

engage and once the information is available to minimise impacts from overlapping construction phases.

No interproject cumulative significant effects on land are anticipated.

Buried Heritage

The Proposed Development has the potential to have cumulative effects with the North Humber to High Marnham project and the High Marnham substation to buried heritage assets during overlapping construction phases between the projects.

The Fosse Green scheme, Great North Road scheme and Steeple Scheme are not located within the ZOI for buried heritage of the Proposed Development, therefore, there is no potential for significant cumulative effects.

The Archaeological Advisory team to the Local Planning Authority (LPA) has advised the Applicant that the High Marnham substation site overlaps with the location of the former cooling towers, where previous ground disturbance is expected to have been extensive. As a result, the likelihood of surviving archaeological remains is considered low. In addition, it is anticipated that the relevant LPA will assess any direct or indirect impacts arising from construction activities associated with the North Humber to High Marnham project, and that an appropriate programme of archaeological investigation and mitigation will be secured through the planning process for that development.

Although the extent of temporal overlap between the developments is currently unknown, it is not expected that any cumulative effects would exceed the predicted impacts of each individual development. This is because archaeological impacts will be assessed and mitigated on a project-specific basis. Accordingly, the measures in place are considered sufficient to minimise the potential for cumulative effects on buried heritage assets arising from the Proposed Development, the North Humber to High Marnham project, and the High Marnham substation.

No interproject cumulative significant effects on buried heritage are anticipated.

Cultural Heritage

The Proposed Development, North Humber to High Marnham project and the High Marnham substation all sit within the settings of a number of heritage assets and an area which is defined by the former High Marnham Power Station and remaining substations. Furthermore, the ES for the Steeple scheme considers there to be a potential cumulative effect between it and the Proposed Development, as well as there being temporal overlap of the construction phase.

The North Humber to High Marnham project and the High Marnham substation is considered to “at least preserve the setting of the surrounding built heritage”, and with the Proposed Development only proposing below ground cabling in the context of the heritage assets and result in no effect. The North Humber to High Marnham project and the High Marnham substation were found to result in no effect and as such there would be no cumulative effect. The North Humber to High Marnham project and the High Marnham substation have also not been submitted for approval yet

The Fosse Green scheme, and Great North Road scheme are not located within the ZOI for cultural heritage of the Proposed Development, therefore, there is no potential for significant cumulative effects.

and as stated within the oCEMP [\[APP-176\]](#), we have been engaging with them and we will continue to engage and once the information is available to minimise impacts from overlapping construction phases.

The Environmental Statement for the Steeple scheme concluded that even with an overlap of construction phases with the Proposed Development, that *“due to factors including the distance from the Proposed Development, and review of the heritage documentation submitted in support of the schemes: either no heritage effects were identified at all, or no heritage effects or harm were identified to heritage assets identified as experiencing an effect from the Proposed Development.”*

No interproject cumulative significant effects on cultural heritage are anticipated.

Landscape and Visual

The Proposed Development, North Humber to High Marnham project, and the High Marnham substation have the potential to give cumulative effects together. The Steeples scheme ES does state there is potential for cumulative landscape and visual effects with the Proposed Development, as well as there being temporal overlap between the scheme.

The Steeples scheme ES states that due to mitigation measures in place on itself and the Proposed Development, and the small scale of High Marnham substation, all cumulative effects are localised. As a result no significant cumulative effects are predicted during construction and operation.

The Fosse Green scheme, and Great North Road scheme are not located within the Zol for landscape and visual of the Proposed Development, therefore, there is no potential for significant cumulative effects.

Given the scale of the High Marnham substation proposals relative to the Proposed Development and the fact the High Marnham substation proposals is encompassed by the Order Limits of the Proposed Development, it is considered there would be no cumulative landscape and visual effects of the Proposed Development with the High Marnham substation.

The North Humber to High Marnham project incorporates development typologies comparable to those of the Proposed Development, resulting in the potential for both schemes to be perceived within the same landscape character areas and by the same receptor groups. As outlined in Chapter 18: Cumulative Effects [[APP-047](#)] there is the potential for direct effects on the character of the Regional LCT 3a: Floodplain Valley and Regional LCT 4a Unwooded Vales. Both schemes would also have the potential to be experienced by residents of High Marnham, Skegby, Fledborough, Ragnall, Darlton and East Drayton, as well as users of NCN Route 647, and local PRoW. Users of the A57, Fledborough Road and other local roads would also have the potential to experience views of both schemes.

The North Humber to High Marnham project and the High Marnham substation have also not been submitted for approval yet and as stated within the oCEMP [[APP-176](#)], we have been engaging with them and we will continue to

engage and once the information is available to minimise impacts from overlapping construction phases.

A moderate to major adverse cumulative effect (significant) is anticipated in relation to the North Humber to High Marnham scheme, affecting the visual amenity of PRow users south of East Drayton during both construction and operation.

No other inter-project cumulative significant landscape or visual effects are expected for any other schemes.

Transport and Access

The assessment of transport and access effects within the ES presents a worst case scenario whereby the impact of construction traffic flows from the Proposed Development are considered against the future baseline in isolation of any other developments, i.e. there are fewer additional traffic flows on the network so the impact of the Proposed Development is more easily recognised. However for consistency, a “Cumulative Development Sensitivity Test” is presented within the Transport Assessment [\[APP-136\]](#) whereby impact of construction traffic flows from the Proposed Development are considered against the future baseline with Other Developments on the road network. As such, the transport and access assessment already inherently considers the Other Developments.

Whilst the other schemes have been considered in the future baseline and no cumulative effects have been identified, the oCTMP [\[APP-181\]](#) confirms to avoid the need for repetition and delay to existing road users, the Applicant will liaise with other significant developments in the area with a view to coordinating works and deliveries.

No interproject cumulative significant effects on transport and access are anticipated.

Air Quality

The Proposed Development, North Humber to High Marnham project, and the High Marnham substation have the potential to create cumulative effects together in relation to dust emissions and construction traffic.

The Fosse Green scheme, the Steeples scheme and the Great North Road scheme are not located within the Zol for air quality of the Proposed Development, therefore, there is no potential for significant cumulative effects.

The oCEMP [\[APP-176\]](#) will implement robust mitigation measures towards the control of dust emissions which ensure there will be impact to air quality sensitive receptors. These measures will be agreed with the Host Authorities.

As above traffic is already accounted for in the future baseline and no likely significant effects are predicted.

No interproject cumulative significant effects on air quality are anticipated.

Noise and Vibration

The Proposed Development, North Humber to High Marnham project, and the High Marnham substation have the potential to create cumulative effects together during construction if the construction phases overlap.

The Fosse Green scheme, the Steeples scheme and the Great North Road scheme are not located within the Zol for noise and vibration of

There is potential for cumulative noise effects during construction if the construction phases of the various schemes overlap. However, any such effects are expected to be limited in relation to the North Humber to High Marnham project, as works within that part of the Proposed Development site will be restricted to cable installation, which typically generates lower noise levels.

the Proposed Development, therefore, there is no potential for significant cumulative effects.

The North Humber to High Marnham project and the High Marnham substation have also not been submitted for approval yet and as stated within the oCEMP [\[APP-176\]](#), we have been engaging with them and we will continue to engage and once the information is available to minimise impacts from overlapping construction phases.

It is unlikely that there may be cumulative noise effects during operation, due to the distance from the nearest extent of the operational noise study area.

No interproject cumulative significant effects on noise and vibration are anticipated.

Human Health

The Proposed Development, North Humber to High Marnham project, and the High Marnham substation have the potential to create cumulative effects together towards human health with regard to perception of hertiage assets, energy infrastructure benefits, and electro-magnetic field effects.

The North Humber to High Marnham project and the High Marnham substation would increase the contribution towards energy infrastructure, having positive wider societal effects for public health.

The Fosse Green scheme, the Steeples scheme and the Great North Road scheme are not located within the Zol for human health of the Proposed Development, therefore, there is no potential for significant cumulative effects.

It is considered that during more detailed design the final location and design of North Humber to High Marnham project and the High Marnham substation would avoid areas of PRoWs or residential properties where there could be cumulative electro-magnetic field effects. As stated within the oCEMP [\[APP-176\]](#), we have been engaging with them and we will continue to engage and once the information is available to minimise impacts from overlapping infrastructure.

No interproject cumulative significant effects on health are anticipated.

Socioeconomics

The Proposed Development, North Humber to High Marnham project, and the High Marnham substation have a close proximity to each other, overlapping construction phases, and as a result the potential to create cumulative socioeconomics effects with regard to agricultural employment, employment in relation to the construction and operation, public rights of way (PRoW), amenity, and tourism.

The Steeples scheme ES does state there is potential for cumulative socioeconomics effects with the Proposed Development, as well as there being temporal overlap.

No significant cumulative effects are likely between the Proposed Development, North Humber to High Marnham project and High Marnham substation due to there being no large changes in agricultural employment and potential effects (including others, such as amenity) are highly localised to within the Site boundary.

The Proposed Development, North Humber to High Marnham project and High Marnham substation scheme have the potential to generate additional employment during construction and operation, of a range of technical specialisms. The North Humber to High Marnham project

The Fosse Green scheme, and the Great North Road scheme are not located within the Zol for socioeconomics of the Proposed Development, therefore, there is no potential for significant cumulative effects.

and High Marnham substation scheme will be built on the site of a former power station, so is not expected to result in the loss of any agricultural land/jobs, thus there may be a significant net increase in jobs, although no specific information is available to quantify the impacts. There is therefore the potential for significant beneficial cumulative effects on employment in the Local Area, given the positive net change also anticipated as a result of the Proposed Development. Based on the anticipated effects on employment, the Proposed Development, the North Humber to High Marnham project and High Marnham substation scheme may also increase demand for accommodation locally during the construction phase.

The North Humber to High Marnham project and High Marnham substation are not expected to impact any PRoW during either construction or operation. Construction works may overlap with those of the Proposed Development, so additional cumulative effects on amenity are possible. This scheme has the potential to negatively impact amenity and therefore tourism, specifically on visitors to the caravan park in High Marnham. This may be offset somewhat by the increased demand for accommodation during the construction phases of both this scheme and the Proposed Development. The Proposed Development is not expected to have a large impact on this site during operation, so any cumulative effects are not expected to be significant.

The North Humber to High Marnham project and the High Marnham substation have also not been submitted for

approval yet and as stated within the oCEMP [\[APP-176\]](#), we have been engaging with them and we will continue to engage and once the information is available to minimise impacts from overlapping construction phases.

Regarding the construction phase overlap with the Steeples scheme, there is potential for a temporary cumulative effect on accommodation demand with the Proposed Development. However, the worst case is determined when in reality the outlook is likely to be limited in comparison, so much as to avoid any deficit in terms of available bedspaces as a result of accommodating construction workers for the Proposed Development, the Steeples Scheme, North Humber to High Marnham project and High Marnham substation. Pressures on local accommodation from construction will depend on a number of factors. These factors being i) the precise demand for workers over the course of the construction period, ii) from where these workers are likely to be drawn (i.e. the labour catchment area) iii) the number of those workers drawn from outside of the local area and hence require overnight accommodation. This, in turn, depends on iv) the skill levels required for these jobs. It also depends on the same factors – and the precise construction start/end dates in the other schemes.

For these reasons any such effect is uncertain, although the Outline Skills, Supply Chain and Employment Plan [\[APP-180\]](#) acknowledges the importance of collaboration between the Applicant and local communities, to ensure as much of the employment and upskilling opportunities generated by

the Proposed Development are realised within the local area and districts.

Waste

There is the potential for waste to be generated by the other Projects. During the Issue Specific Hearing 1 the Host Authorities raised concern on the cumulative effects of waste generation and the potential for waste facilities to be overburdened and unable to accept materials.

As detailed in the Materials and Waste Impact Assessment [\[APP-082\]](#), a cumulative assessment has been undertaken which considers 37 schemes including Cottam Solar Project, Gate Burton Energy Park, Great North Road Solar and Biodiversity Park, West Burton Solar Project, Fosse Green Energy, Tillbridge Solar, Steeples Renewables Project, North Humber to High Marnham and High Marnham Substation. The assessment shows that under the realistic worst case (with 70% waste recovery), cumulative impacts would not be significant. It should be noted the Applicant is committed that 100% of PV modules will be recycled (see the oDEMP [\[APP-178\]](#)).

Under the absolute worst case assessment (assuming zero recycling/recovery, which would not be realistic due to commitments and regulatory controls on the identified cumulative projects), cumulative impacts would be significant. To ensure waste is managed appropriately, the Applicant commits to working collaboratively to:

- > Share data and reporting on waste types and volumes to support regional waste planning and avoid overburdening local waste infrastructure;
- > Engage with the host authorities and waste planning bodies to ensure consistency with regional waste management strategies and capacity constraints; and
- > Review and update waste mitigation measures regularly through continued dialogue with other developers post-consent.

These measures are detailed within the oCEMP [\[APP-176\]](#), the oOEMP [\[APP-177\]](#) and the oDEMP [\[APP-178\]](#).

No interproject cumulative significant effects on waste are anticipated.

6. Conclusion

- 6.1.1 This report provides detail on how the One Earth Solar Farm interacts between aspects with Cottam Solar Project, Gate Burton Energy Park, Great North Road Solar and Biodiversity Park, West Burton Solar Project, Fosse Green Energy, Tillbridge Solar, Steeples Renewables Project, North Humber to High Marnham and High Marnham Substation addressing the potential for cumulative and interrelated effects. These projects were considered as they are geographically the closest to each other and/or requested by the Host Authorities to be considered within the Joint Interrelationship Report.
- 6.1.2 The Applicant is committed to working with other developers to reduce potential cumulative impacts where possible or practicable. While such engagement has not occurred to date, the Applicant will seek opportunities for collaboration. A commitment to work with other developers is detailed within the oCEMP [\[APP-176\]](#). In addition, the oCTMP [\[APP-181\]](#) confirms to avoid the need for repetition and delay to existing road users, the Applicant will liaise with other significant developments in the area with a view to coordinating works and deliveries.
- 6.1.3 The Proposed Development does not include any shared Order Limits or mitigation measures with other solar DCO projects. This is primarily due to the separation distance between the Proposed Development and nearby schemes, with the closest being the West Burton Solar Project, located approximately 4.68 km from the Proposed Development's Order Limits. In addition, the Proposed Development cannot share a cable corridor with the other solar DCOs due to differences in connection points to the National Grid substation. As above, the Applicant is committed to working with other developers to reduce potential cumulative impacts where possible or practicable, these commitments are set out in the oCEMP and oCTMP.
- 6.1.4 The Proposed Development can be scoped out from cumulative effects with the Cottam Solar Project, the Gate Burton Energy Park, the West Burton Solar Project, and Tillbridge Solar, as the distance between these schemes is sufficient to ensure there are no potential cumulative effects. This is consistent the most recent Joint Interrelationship Report, submitted for Tillbridge Solar on 3 April 2025 as part of Deadline 6.
- 6.1.5 An assessment has been undertaken which considers the potential for inter-project cumulative effects with the other projects identified. This shows there are no inter-project cumulative significant effects on any environmental aspect apart for Landscape and Visual impacts relating to the North Humber to High Marnham project where there is a moderate to major adverse cumulative effect (significant), affecting the visual amenity of PRow users south of East Drayton during both construction and operation.



one earth
solar farm