

# **Green Hill Solar Farm Preliminary Environmental Information Report**

## **Chapter 25 Cumulative Effects**

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## 25 Cumulative Effects

### 25.1 Introduction

25.1.1 This chapter of the Preliminary Environmental Information Report (PEIR) presents the findings of the Environmental Impact Assessment (EIA) work undertaken to date concerning the potential cumulative effects during the construction, operational and decommissioning phases.

25.1.2 Cumulative effects refer to the potential impacts arising from two or more developments that are reasonably foreseeable and/or consented, but not yet part of the existing baseline environment. These developments, if in close proximity to the Scheme, may lead to cumulative effects on the same receptor. The topic chapters (chapters 7 to 23) of this PEIR will provide high-level conclusions regarding the likelihood of cumulative effects where possible. However, the cumulative assessment will be updated and detailed in the ES once environmental effects following detailed assessments and cumulative developments have been further confirmed.

25.1.3 In-combination effects (or intra-project combined effects) refer to the interaction and combination of different environmental residual (post-additional mitigation) effects from within the Scheme affecting a receptor. These are presented in each of the topic chapters.

25.1.4 There is no widely accepted methodology for assessing cumulative effects but relevant guidance has been considered, including from the Institute of Environmental Management and Assessment (IEMA) (Ref.1) and the assessment guidance set out in Planning Inspectorate Advice on cumulative effects assessment (Ref.2).

25.1.5 This chapter is supported by the following tables:

- **Table 25.1:** Summary of Consultation and Responses; and
- **Table 25.2:** Cumulative Effects Zone of Influence broken down by Environmental Topics.

25.1.6 This chapter is supported by the following figure in PEIR **Volume 2**:

- **Figure 25.1:** Long List Other Developments

### 25.2 Consultation on Cumulative Effects

25.2.1 An EIA Scoping Report was submitted to the Planning Inspectorate (PINS) in July 2024, with a formal request for Scoping Opinion. PINS subsequently issued the Scoping Opinion on the proposed scope on 30<sup>th</sup> August 2024. Consultation undertaken throughout the pre-application and scoping phase for the Scheme has informed the approach to the cumulative effect assessment and the information provided within this chapter.

25.2.2 A summary of consultation and response to the Scoping Report relevant to cumulative effects are outlined below in **Table 25.1**.

**Table 25.1: Summary of Consultation and Responses**

Consultee and Date	Comment	Outcome and any further steps anticipated
The Planning Inspectorate Scoping Opinion 30th August 2024	It is set out that the 'area of influence' for the cumulative assessment to be reported in the ES will be agreed with the Inspectorate (in addition to the host local authorities) and that information relating to other developments will be collected from sources that may include the Inspectorate.  It is assumed the latter reference is to information that is available on the National Infrastructure website. For clarity, the Inspectorate will not comment on the scope of the proposed cumulative assessment other than within this Opinion.	Noted. Information on potential other developments has been gathered from local authority websites and the national infrastructure website.



Consultee and Date	Comment	Outcome and any further steps anticipated
<p>The Planning Inspectorate Scoping Opinion 30th August 2024</p>	<p>Pre-application discussions with North Northamptonshire, West Northamptonshire and Milton Keynes Councils are proposed to be undertaken. The Proposed Development is either on the border of or slightly crosses the Bedford Council administrative boundary and therefore it is recommended that the Applicant also consult Bedford City Council in their pre-application discussions.</p>	<p>Pre-application discussions have been held and are referenced, where relevant, in each of the topic chapter.  Bedford City Council will be consulted as part of the pre-application discussions and engagement between now and the DCO submission.</p>
<p>Bedford Borough Council Scoping Opinion 30th August 2024</p>	<p>Zone of Influence and Cumulative Effect: in terms of in-combination and cumulative effect assessment, the Applicant references Advice Note 17 leading to defining a Zone of Influence. However, throughout the Scoping Report different distances are used, subject to chapter aspects, which makes for complex reading and eventual assessment. It is suggested (§23.3.2) 'At this stage, it is anticipated that the long list will be based on up to a 5km area of search which aligns with the Study Area for landscape and visual amenity and the likely maximum range of any potential significant effects' that this distance is adopted for the Zol in most aspects. A more detailed Zol is set out in §8.3.8. It is suggested that the Applicant clarifies and uses a consistent approach.</p>	<p>The methodology for cumulative effects is detailed in Chapter 2: EIA Process and Methodology.  The Zol for the cumulative effects assessment if detailed in section 25.4 of this chapter.</p>
<p>Natural England Scoping Opinion 30th August 2024</p>	<p>The ES should fully consider the implications of the whole development proposal. This should include an assessment of all supporting infrastructure.  An impact assessment should identify, describe, and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment (subject to available information):</p> <ul style="list-style-type: none"> <li>a. existing completed projects;</li> <li>b. approved but uncompleted projects;</li> <li>c. ongoing activities;</li> <li>d. plans or projects for which an application has been made and which are under consideration by the consenting authorities; and</li> <li>e. plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess</li> </ul>	<p>The methodology for cumulative effects is detailed in Chapter 2: EIA Process and Methodology and further detailed in section 25.4 of this chapter.</p>



Consultee and Date	Comment	Outcome and any further steps anticipated
	the likelihood of cumulative and in-combination effects.	
North Northamptonshire Scoping Opinion 30th August 2024	<p>In respect of cumulative impact, the Council offer the following comments.</p> <p>In addition to in combination cumulative effects from other proposed or permitted schemes in the vicinity of the development, the Environmental Statement should consider the cumulative effect of other large scale solar schemes that are currently in operation in the North Northamptonshire Council district.</p> <p>Whilst it is accepted these schemes are not located within the immediate area of this site, they are similar large-scale projects that will occupy swathes of agricultural land present within the North Northamptonshire Council district. Examples are Land off Gipsy Lane, Irchester and Land off the Ridge, Great Doddington.</p>	<p>Pre-application discussions have been held and are referenced, where relevant, in each of the topic chapter.</p> <p>A preliminary long list has been outlined within Table 25.3 of this chapter.</p> <p>The Applicant wishes to hold further discussions with the local authority to agree the 'long' and 'short' list of cumulative developments.</p>
West Northamptonshire Scoping Opinion 30th August 2024	As set out, the LPA have concerns regarding the cumulative impact on PROW's and the recreational use of the countryside. Though receptive to the idea that Solar Farms require large, rural areas for construction, the overall expanse and easy accessibility that currently the residents of Wellingborough and Northampton have to the countryside may be eroded by the scale of this proposal.	<p>In-combination effects will be assessed fully following detailed assessment for the DCO application.</p> <p>Preliminary assessments have been completed with consideration to potential impacts on PROWs. In combination effects have been considered and presented in the topic chapters.</p>

25.2.3 To date consultation has been undertaken with North Northamptonshire, West Northamptonshire and Milton Keynes Council. These discussions have covered introductions to the Scheme, provision of updates and where possible focused sessions to discuss environmental matters. To date there have not been any discussions with regard to the 'other development list'. The Applicant will seek to utilise the Statutory Consultation as an opportunity for Councils to review the preliminary lists and provide any feedback.

### 25.3 Legislation, Planning Policy and Guidance

25.3.1 This section provides an overview of the legislation, planning policy and guidance against which the Scheme will be considered for cumulative effects.

#### Legislation

##### UK Legislation

##### Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

25.3.2 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (Ref.3) make explicit reference to the requirement for an assessment of the effect interactions between types of effect, and states that the EIA should contain:

*“The EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on the*



following factors- ...*(e) the interaction between the factors referred to in sub-paragraphs (a) to (d).*”

*Schedule 4 Part 5 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 requires an ES to include:*

*“A description of the likely significant effects of the development on the environment resulting from, inter alia: ...*(e) 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... The description of the likely significant effects on the factors specified in regulation 5(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development”.**

### **Planning Policy**

#### **National Policy Statements**

- 25.3.3 The consideration of cumulative effects is addressed under each topic heading within Section 5 of the NPS EN-1: Overarching National Policy Statement for Energy (November 2023) (Ref.4). Paragraph 4.3.3 of NPS EN-1 (November 2023) explains that the EIA Regulations require an assessment of the likely significant effects of the proposed project on the environment. This includes direct, indirect, secondary, *cumulative*, transboundary, short, medium, and long-term, permanent and temporary, positive and negative effects at all stages of the project, as well as measures for avoiding or mitigating significant adverse effects. Footnote 104 in paragraph 4.3.3 refers to guidance on assessing cumulative effects provided in Planning Inspectorate Advice Note 17 Cumulative Effects Assessment (August 2019) (Ref.5).

### **Guidance**

#### **Planning Inspectorate Advice on Cumulative Effects Assessment**

- 25.3.4 Planning Inspectorate Advice on Cumulative Effects Assessment (September 2024) (Ref.2) provides a brief description of the legal context and obligations regarding cumulative effects under national planning policy and the Environmental Impact Assessment (EIA) Regulations 2017. It also offers an overview of the cumulative effects assessment process for Nationally Significant Infrastructure Projects (NSIPs) and advice on a staged approach and the use of consistent templates for documenting the cumulative effects assessment within an applicant’s Environmental Statement.

## **25.4 Assessment Methodology**

- 25.4.1 The methodologies described in the following section have been developed in line with the relevant policy and appropriate industry guidance for assessing potential cumulative effects from the Scheme.

### **Assessment of In-Combination Effects**

- 25.4.2 The evaluation of effect interactions follows the methodology outlined in **Chapter 2: EIA Process and Methodology**. This approach considers changes in baseline conditions at common sensitive receptors, which are those identified as likely to experience significant environmental effects due to the Scheme. Since there are no specific guidelines for assessing effect interactions, the evaluation is conducted qualitatively, using the results from individual assessments and guided by professional judgement. As mentioned above, the evaluation of in-Combination effects are presented in each of the topic chapters and will be summarised in this chapter of the ES.

### **Assessment of Cumulative Effects**

- 25.4.3 **Chapter 2: EIA Process and Methodology** outlines the process used to identify and assess other developments that have the potential to cause cumulative effects with the Scheme. The environmental information that underpins the cumulative effects assessment is taken from



publicly available information from the following sources: submitted planning applications (planning portals) and planning policy documents.

**Study Area**

25.4.4

A topic based approach has been taken to identify the zone of influence for cumulative schemes. **Table 25.2** outlines the Zones of Influence (ZoI) for potential cumulative effects with other developments, categorised by each environmental topic. The largest ZoI, in the case for this Scheme, 10km will represent the search area and will be used to compile the long list of developments.

**Table 25.2 Cumulative Effects Zone of Influence broken down by Environmental Topic**

Environmental Topic	Zone of Influence (largest spatial distance from the Scheme boundary)
Climate Change	Not applicable, as detailed in Chapter 7: Climate Change, greenhouse gas emissions are not restricted to a geographical area.
Landscape and Visual	<p>The Study Areas for Landscape and Visual have been informed through a combination of desktop study, as well as professional judgement on similar scale projects.</p> <p>0.5km</p> <p>A Study Area of 0.5km is proposed from the outer boundary of the Cable Route Search Area. The 0.5km radius is considered appropriate for the Cable Route Search Area, since this involves the construction phase only, which is considered short term and temporary.</p> <p>All Landscape and Visual receptors within this Study Area will be assessed.</p> <p>1km</p> <p>This is the 1km area extending as a radius from the outer boundary of the Sites Green Hill A to G and BESS focusing on impacts upon both Landscape and Visual receptors.</p> <p>2km</p> <p>This is the 2km area extending as a radius from the outer boundary of the Sites Green Hill A to G and BESS.</p> <p>5km</p> <p>This is for the area extending as a radius from the outer boundary of the Sites Green Hill A to G and BESS focusing on impacts upon landscape receptors only.</p>
Ecology and Biodiversity	<p>The following search criteria were used to determine the Study Areas for Ecology and Biodiversity. These are typical distances used in ecological impact assessment for projects of this nature and scale and have been selected following the CIEEM guidelines on Ecological Impact Assessment.</p> <p>International' designated sites (e.g. Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites) were searched for within 10km from each Site.</p> <p>National' sites (e.g. Sites of Special Scientific Interest (SSSIs) and Local Nature Reserves (LNRs) were searched for within 5km from each Site.</p> <p>'Local' sites (Such as Local Wildlife Sites (LWSs) and Wildlife Trust Reserves (WTRs)) were searched for within 2km from each Site.</p> <p>Habitats of Principal Importance (also known as Priority Habitats) within 2km of the Scheme boundary</p> <p>For protected and notable species and Priority Habitats, as well as habitat opportunity areas, data were gathered from within 2km of the Sites.</p>



Environmental Topic	Zone of Influence (largest spatial distance from the Scheme boundary)
	<p>The National Fish Populations Database was consulted for freshwater fish monitoring data within 2km of the Sites.</p> <p>Section 9.9 of Chapter 9: Ecology and Biodiversity further explains the approach to ZoI for cumulative effects which will be further defined for DCO application.</p>
Hydrology, Flood Risk and Drainage	Comprises the land within Scheme boundary (Green Hill A to G and Bess and Cable Route Search Area).
Minerals	500m Study Area from the Scheme boundary. This area is based on the consultation requirements for Northamptonshire Minerals and Waste Local Plan and Milton Keynes Minerals Local Plan.
Cultural Heritage	<p>Records of all designated heritage assets and Conservation Areas within a 2km Study Area from the Scheme boundary.</p> <p>Records of non-designated heritage assets with 1km of the Scheme boundary.</p> <p>Once the Cable Corridor has been refined, a 250m Study Area from the Order Limits will be used for the assessment of heritage assets.</p> <p>The Study Area is considered to be appropriate as it is a standard sized study area for assessments of this type in rural areas of England and aligns with professional practice guidance.</p>
Transport and Access	Defined by identifying the likely routes that may be used by construction traffic and workers travelling to the Site during the construction, operational and decommissioning phases of the Scheme, together with the construction of the cable route. See Chapter 14: Transport and Access.
Noise and Vibration	500m from the Scheme boundary for consideration of potential receptors in line with relevant planning policy and appropriate industry guidance.
Glint and Glare	<p>1km study area for residential dwellings road users, Public Rights of Ways (PRoW), horse facilities, navigable waterways in line with good practice guidance provided by Pager Power.</p> <p>5km for aviation infrastructure in line with updated Civil Aviation Authority guidance.</p>
Electromagnetic Fields	Comprises the land within Scheme boundary (Green Hill A to G and Bess and Cable Route Search Area).
Air Quality	<p>In accordance with the IAQM construction dust guidance the following Study Areas have been applied.</p> <p>250m from the Scheme boundary (based on the worst-case assumption that construction activities would occur at the Scheme boundary) and up to 50m for ecological receptors; and</p> <p>50m of the route(s) used by construction vehicles on the public highway, up to 250m from the site entrances.</p>
Socio-economics, Tourism and Recreation	<p>North Northamptonshire, West Northamptonshire, Milton Keynes City and Bedford Borough local authority areas for socio-economic effects.</p> <p>5km from the Scheme boundary for regionally important tourism and recreation venues.</p> <p>2km from the Scheme boundary for locally important tourism and recreation venues.</p> <p>This has been determined by professional judgement.</p>
Human Health	2km from the Scheme boundary for data across census Lower Super Output Area (LSOA).





Environmental Topic	Zone of Influence (largest spatial distance from the Scheme boundary)
	The Study Areas for human health impacts have been largely influenced by the relevant technical assessment in the rest of the PEIR.
Arboriculture	15m from the Scheme boundary for trees within influencing distance of the Scheme in accordance with BS5837:2012.
Agricultural Circumstances	2km from the Scheme boundary.
Ground Conditions	Comprises the land within Scheme boundary (Green Hill A to G and Bess and Cable Route Search Area).
Major Accidents and Disasters	10km is considered sufficient to consider natural and built environment features.

**Impact Assessment Methodology**

25.4.5 The assessment of cumulative effects is based on the methodology described in **Chapter 2: EIA Process and Methodology**. This methodology has been developed in accordance with Planning Inspectorate advice on cumulative effects assessment (Ref.2) on the assessment of cumulative effects.

25.4.6 A four-stage approach has been adopted for this assessment:

- Stage 1 - Establishing the long list of ‘other existing development and/or approved development’;
- Stage 2 - Establishing a shortlist of ‘other existing development and/or approved development’;
- Stage 3 - Information gathering; and
- Stage 4 – Assessment.

25.4.7 The identified schemes have been categorised into tiers based on the classification provided in PINS Advice Note 17. The three tiers, as detailed in **Chapter 2: EIA Process and Methodology**, range from Tier 1 (most certain) to Tier 3 (least certain), indicating a decreasing level of certainty for the implementation of each development.

25.4.8 This screening exercise will be detailed within the ES and will also be consulted upon as part of pre-application discussions with North Northamptonshire, West Northamptonshire, Milton Keynes Council and Bedford Borough Council.

**25.5 Assumptions and Limitations**

25.5.1 The list of cumulative developments considered in the EIA will be updated before the ES is finalised to account for any changes in the status of developments mentioned in this PEIR or take into the account the inclusion of any new developments that have emerged.

25.5.2 For the PEIR, it is assumed that there will be a temporal overlap between the construction and operational phases of the Scheme and the proposed developments. This assumption will be reviewed and confirmed in the ES.

25.5.3 The ZoI is based on the Study Area of the individual specialist topics. This will be reviewed and confirmed in the ES.

**25.6 Mitigation Measures**

25.6.1 Paragraph 7 of Schedule 4 of the EIA Regulations (Ref.3) notes that an ES should include:

*“A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate,*



*of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced, or offset and should cover both the construction and operational phases.”*

25.6.2 Mitigation measures will be described within the ES and taken account of as part of Scheme when carrying out the assessment of likely effects of the Scheme. The ‘*likely success of mitigation*’ will be considered within the criteria for assessment of cumulative effects.

25.6.3 Mitigation measures have been outlined within individual topic chapters and collated within **Chapter 26 Commitments Register**.

## 25.7 Cumulative Effects Assessment

### Stage 1 - Establishing the long list of ‘other existing development and/or approved development’

25.7.1 Stage 1 focuses on identifying relevant developments and land allocations within the Zol that could generate significant cumulative effects. A preliminary long list of cumulative developments has been prepared and will be discussed with the North Northamptonshire, West Northamptonshire, Milton Keynes and Bedford Borough Councils. The final long list, along with the inclusionary criteria, will be presented in the ES.

25.7.2 At this stage, the preliminary long list is based on up to a 10km area of search which aligns with the Study Area for ecology and biodiversity as outlined in **Table 25.2** above and the likely maximum range of any potential significant effects.

25.7.3 These developments have been screened to assess their potential interaction with the Scheme, focusing on their ability to generate likely significant cumulative effects. This initial screening step considers the development’s scale and potential to cause significant environmental impacts, its location, and how its timeline aligns with the Scheme’s programme. The preliminary long list was developed with consideration to the following criteria:

- Developments currently under construction;
- Approved applications which have not yet been implemented (covering the past five years and taking account of those that received planning consent over three years ago and are still valid but have not yet started construction);
- Submitted applications not yet determined;
- Refused applications, subject to appeal procedures not yet determined;
- Development listed on the National Infrastructure Planning Programme of Projects;
- Strategic developments identified in the relevant Development Plan (and emerging Development Plans); and
- Development identified in other plans and programmes which set the framework for future development consents/approvals, where such development is reasonably likely to come forward.

25.7.4 It is proposed to exclude small-scale planning applications, such as house extensions, cosmetic changes to buildings, works to trees, and the erection of advertisement signs and fencing as these are considered developments of insufficient scale or type to result in cumulative effects with the Scheme.

25.7.5 Minor developments, defined as less than 150 dwellings or less than 5ha for industrial/commercial premises, will not be included in the long list unless they fall within the Scheme boundary or are permitted developments associated with the Scheme. These are deemed too small in scale and nature to have any significant effects through effects interactions with the Scheme.

25.7.6 Searches for relevant ‘other developments’ were conducted online. Searches were undertaken for planning authorities, which are within 10 kilometres of the Scheme. **Volume 3, Appendix 2.2** Long List of Committed Developments presents the identified long list of existing and/or approved



developments within the search area and sets out the threshold criteria applied to identify the short list of existing and/or approved developments for each environmental topic. The geographical location of the long list of developments is shown on **Volume 2, Figure 25.1**.

25.7.7 The preliminary long list (see **Volume 3, Appendix 2.2**) will be further refined through consultation with the relevant local planning authorities to ensure that all developments with the potential to cause significant cumulative effects, when considered alongside the proposed Scheme.

25.7.8 Within the preliminary long list, outlined in **Volume 3, Appendix 2.2**, other developments which have been determined as being progressed to stage 2 have been used by environmental topics to inform their preliminary cumulative assessment where possible.

#### Stage 2 - Establishing a shortlist of 'other existing development and/or approved development'

25.7.9 A shortlist list, of cumulative developments will be prepared and discussed with North Northamptonshire, West Northamptonshire and Milton Keynes and Bedford Borough Councils. The preliminary shortlist will be used by environmental topics to inform their cumulative assessments for DCO Application.

25.7.10 The final shortlist, along with the criteria for inclusion and full justification, will be presented in the ES to ensure a thorough cumulative assessment is conducted.

25.7.11 The shortlist will be finalised prior to the development of the ES. During this stage, any developments that are unlikely to result in significant cumulative impacts will be excluded. This decision will be made after discussions with the relevant local planning authorities and an assessment of the likely ZoI for each environmental topic.

25.7.12 The rationale for including or excluding developments from the long list will be documented in a matrix, based on the example provided in Appendix E of the Planning Inspectorate's Advice Note 17. This matrix will be included in the ES.

#### Stage 3 - Information Gathering

25.7.13 This stage focusses on the gathering of environmental information, where available, for the other developments outlined within the short list. Details to be gathered include:

- Proposed design;
- Location;
- Programme (construction, operation and decommissioning);
- Baseline data; and
- Effects arising from such other developments.

25.7.14 A preliminary review of information has been completed to inform the PEIR, further information will be gathered to inform the assessments for ES.

#### Stage 4: Assessment of Likely Cumulative Likely Effects

25.7.15 Where the Scheme has a negligible effect on an identified receptor, there is not considered to be the potential for any cumulative effects. Therefore, the preliminary cumulative effects assessment has focused only on minor, moderate and major effects identified within the PEIR.

25.7.16 At this stage the long list has been drafted and where practicable, a preliminary assessment has been undertaken by topics utilising the other developments outlined within **Volume 2, Appendix 2.2**. Once stages 1 to 3 have been completed a detailed assessment will be carried out by topics to support the DCO Application.

25.7.17 A detailed assessment of the cumulative effects of the Scheme, along with other developments, will be completed and outlined within the ES following the agreement of the short list with North Northamptonshire, West Northamptonshire and Milton Keynes and Bedford Borough Councils and the completion of Stage 3. The final cumulative assessment will be presented in the ES.



25.7.18 At this stage the following potential cumulative effects have been identified utilising the other developments outlined in **Volume 2, Appendix 2.2**.

**Preliminary Assessment of Likely Effects**

25.7.19 Considering the preliminary long list, the following topics have identified no likely significant cumulative effects:

- **Chapter 7: Climate Change;**
- **Chapter 10: Hydrology, Flood Risk and Drainage;**
- **Chapter 11: Minerals;**
- **Chapter 15: Glint and Glare;**
- **Chapter 21: Electromagnetic Fields;**
- **Chapter 22: Ground Conditions and Contamination;**
- **Chapter 23: Major Accidents and Disasters; and**
- **Chapter 24: Other Environmental Matters** (Light Pollution, Waste Production and Management and Telecommunications, Utilities and Television).

25.7.20 The following chapters will fully assess cumulative effects following the completion of detailed assessments and which will be detailed in the ES **Chapter 13: Transport and Access and Chapter 14: Noise and Vibration and Chapter 16: Air Quality**.

25.7.21 The following topics have identified potential cumulative effects at the PEIR stage which have been detailed within the topic chapters:

- **Chapter 8: Landscape and Visual;**
- **Chapter 9: Ecology and Biodiversity;**
- **Chapter 12: Cultural Heritage;**
- **Chapter 17: Socio-economics, Tourism and Recreation;**
- **Chapter 18: Human Health;**
- **Chapter 19: Arboriculture; and**
- **Chapter 20: Agricultural Circumstances.**

25.7.22 There are two developments within close proximity to the Scheme which have been considered below.

**ID Reference 8 : NW/23/00360/FUL - Grendon Lakes Main Road BESS**

25.7.23 This application is located adjacent to Green Hill BESS. The following topics consider there to be potential likely effects: Landscape and Visual, Cultural Heritage, Socio-economics, Tourism and Recreation, Human Health, Arboriculture and Agricultural Circumstances.

25.7.24 There is potential for cumulative effects on landscape and visual (PRoW and transport) receptors during the construction and operational phase.

25.7.25 The development proposes the removal of 10 trees alongside significant replacement planting of individual trees, native woodland and native scrub to deliver a net gain of trees and canopy cover. Considering this no cumulative effects to arboricultural features are anticipated.

**ID Reference 9: NW/21/00629/SCQ - Land To The East Of Northampton Aquapark (at Grendon Lakes) Main Road Grendon Northampton Northamptonshire**

25.7.26 This application is located adjacent to Green Hill BESS. The following topics consider there to be potential likely effects: Landscape and Visual, Cultural Heritage, Socio-economics, Tourism and Recreation, Human Health, Arboriculture and Agricultural Circumstances.



25.7.27 There is potential for cumulative effects on landscape and visual (PRoW and transport) receptors during the construction and operational phase.

## 25.8 Next Steps

25.8.1 Following consultation with North Northamptonshire, West Northamptonshire and Milton Keynes and Bedford Borough Councils the long and short list (stages 1 and 2) will be defined.

25.8.2 If any new developments are suggested by the Councils, these will be added to the long list and reviewed to determine following the criteria above whether to progress to stages 2,3 and 4. Any additional projects added to the short list will be assessed in the ES.

25.8.3 Following agreement and finalisation of the short list for the ES, information will be gathered (stage 3) to inform the assessment (stage 4). The cumulative assessment will be reported in the ES.

## 25.9 Summary

25.9.1 Following the completion of the assessments to support the DCO application, in-combination effects will be further considered. Where practicable the ES will also consider the cumulative effect of other large scale solar schemes that are currently in operation within the Zol of the relevant topic.

25.9.2 The preliminary long list and short list (Stages 1 and 2 of Planning Inspectorate Advice Note 17) will be finalised at the ES stage, with input from North Northamptonshire, West Northamptonshire, Milton Keynes and Bedford City councils. This ensures all developments with potential significant cumulative effects, when considered with the Scheme, are included in the environmental assessments. At Stage 2, developments unlikely to cause significant cumulative effects will be excluded after review.

25.9.3 Where practicable a preliminary review of cumulative effects has been undertaken, which will be further refined to support the DCO application.

25.9.4 Stage 3 will look to gather and review information on the final shortlisted developments, including their design, location, and timelines for construction, operation, and decommissioning, as well as any environmental assessments conducted.

25.9.5 Stage 4 will assess and identify potentially significant cumulative effects in combination with the Scheme.

25.9.6 The ES will report the assessment results, focusing on significant cumulative effects and the need for mitigation. These effects will be detailed in individual technical chapters, with full details of Stages 1 to 4 and the final development lists outlined in a cumulative effects chapter of the ES.



## References

- Ref.1 Institute of Environmental Management and Assessment (IEMA (2011)). The State of Environmental Impact Assessment Practice in the UK. Available at [iema.net](http://iema.net).
- Ref.2 Planning Inspectorate (2024) Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment. Available from: <https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-cumulative-effects-assessment>
- Ref.3 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.
- Ref.4 EN-1: Overarching National Policy Statement for Energy (November 2023).
- Ref.5 Planning Inspectorate (2015) Advice Note 17: EIA: cumulative effects assessment relevant to nationally significant infrastructure projects.  
[Nationally Significant Infrastructure Projects - Advice Note Seventeen: cumulative effects assessment relevant to nationally significant infrastructure projects - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-note-seventeen-cumulative-effects-assessment-relevant-to-nationally-significant-infrastructure-projects)