Meridian Solar Farm

EN010169

Volume 7

Other Documents

7.1 Planning Statement

APFP Regulation 5(2)(q)

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

March 2026

Contents

Executive Summary

The purpose of this Planning Statement is to provide an overview of the need and benefits of the Scheme, its impacts and to demonstrate acceptability of the Scheme when assessed against relevant policies.

This Planning Statement is structured as follows:

- Section 2 describes the Site, including the land within the Order Limits for the Scheme and a summary of the relevant land use and planning designations.
- Section 3 sets out the legislative and policy context against which this application for development consent is to be determined, alongside other important and relevant considerations.
- Section 4 sets out the need for and benefits of the Scheme.
- Section 5 provides an assessment of the Scheme against the relevant legislation and policy.
- Section 6 presents the conclusions of the planning assessment, including a summary of the compelling case for the Scheme and the overall planning balance.

This Planning Statement is supported by the following appendices:

- Appendix A: Planning History;
- Appendix B: National Policy Statement Accordance Tables;
- Appendix C: NPPF and Local Policy Accordance Tables;
- Appendix D: Site Selection Report;
- Appendix E: Heritage Statement of Harm; and
- Appendix F: Mineral Safeguarding Assessment.

The primary aim of the Scheme is to generate low-carbon electricity over an operational period of approximately 40 years, helping to meet the UK's increasing demand for clean energy in line with the overarching ambition within EN-1. The UK's net zero targets principally arise from the Climate Change Act 2008. This commits the UK to reducing its greenhouse gas emissions to net zero by 2050 compared to 1990 levels in line with its obligations under international treaties, most notably the Paris Agreement signed in 2015. The Scheme would deliver up to 750 MW of low carbon electricity with co-located BESS. The Scheme also includes the high voltage transmission infrastructure required to transport the electricity to the NETS.

Further, a record rise in global energy prices has led to an increase in the cost of living in the UK. The UK is dependent on imported oil and gas which leaves it vulnerable to volatile pricing and supply. Further, electricity demand is forecast to surge in light of the AI revolution, with the electricity needs of data centres expected to rise four-fold by 2030. With the rising costs of fossil fuels, low-cost renewables have their role to

play in the reduction of household bills and helping to increase security of domestic supply. Costs to deploy solar have fallen about 50% since 2016 and are estimated to be lower than that of fossil and other non-fossil sources.

The Scheme will also support resilience of the grid. Paragraphs 3.3.25 to 3.3.28 of EN-1 describe the importance of electricity storage in achieving net zero and providing flexibility within the energy system. It supports reduced costs of the electricity system and increases reliability through the storing of surplus electricity in periods of low demand and through the release of electricity when demand is higher.

While the date for the Scheme's energisation has not been confirmed as part of the Connections Reform, there is an opportunity to reapply in 2026, which could confirm an energisation date in advance of 2035. The Applicant remains committed to bringing forward the Scheme as soon as practicable in support of the Clean Power 2030 Action Plan.

The Scheme is ascribed Critical National Priority (CNP) status through EN-1. CNP status applies to electricity generation that does not involve fossil fuel combustion, as well as electricity grid infrastructure associated with nationally significant low carbon infrastructure. Paragraph 4.2.28 of EN-1 relates to the Secretary of State's decision making. It affirms that "*where residual non-HRA or non-MCZ impacts remain after the mitigation hierarchy has been applied, these residual impacts are unlikely to outweigh the urgent need for this type of infrastructure. Therefore, in all but the most exceptional circumstances, it is unlikely that consent will be refused on the basis of these residual impacts*".

This Planning Statement sets out how the Scheme complies with relevant planning policy and other matters that the Applicant considers to be important and relevant to the Secretary of State's decision as to whether to grant development consent. Paragraph 4.1.3 of EN-1 clearly establishes the starting presumption that the Secretary of State should grant consent for energy NSIPs unless other policies within the NPSs clearly indicate that consent should be refused.

The Applicant has applied the mitigation hierarchy as detailed within **ES Chapter 4: Overview of the EIA Process** (Doc Ref. 6.1) and each of the topic-specific ES Chapters. A summary of the mitigation required is recorded in the **Environmental Mitigation and Commitments Register** (Doc Ref. 7.7), with the mitigation measures themselves secured through a suite of environmental management plans that are controlled by the Schedule 2 Requirements to the **Draft DCO** (Doc Ref. 3.1). Outline versions of the relevant management plans are submitted with the DCO Application, with the Requirements providing for the approval of detailed management plans that must be substantially in accordance with the corresponding outline plans.

The Applicant has worked hard to avoid, reduce and mitigate adverse effects through application of the mitigation hierarchy and consideration of good design, but such is the nature of large-scale infrastructure projects. The CNP status is required to be relied

upon where significant adverse residual effects are anticipated after applying mitigation. For this Scheme, these instances occur in relation to the following topics:

- Agriculture and Soils;
- Cultural Heritage;
- Landscape and Visual;
- Noise and Vibration;
- Traffic and Access (in relation to cumulative effects on road safety only); and
- Intra-Project Effects.

The Applicant has prepared **ES Appendix 9-14: HRA Report** (Doc Ref. 6.3), which sets out the Appropriate Assessment undertaken by the Applicant. It concludes no significant adverse effects on the integrity of any Habitats Sites either alone or in-combination with cumulative schemes or plans. Policy compliance is further detailed in Section 5.6 of this Planning Statement.

Crucial in the consideration of the overall planning balance, is the strength of the needs case that has been established through the NPSs and the CNP status that applies to the Scheme. As a CNP project, the Scheme benefits from the strongest policy position set out in EN-1.

It is unequivocal that any residual impacts of CNP infrastructure should not outweigh the urgent need for its delivery. This Planning Statement confirms that the Scheme complies with EN-1, EN-3, EN-5, the NPPF and relevant local planning policy.

As demonstrated through this Planning Statement, there are no residual impacts that are considered to present an unacceptable risk to, or interference with, human health and public safety, defence, public safety, offshore navigation or onshore flood and coastal erosion risk, that would reverse this presumption. Nor are there any other exceptional circumstances which would alter this presumption in favour of granting consent. The Scheme would deliver great benefits including contributing to the urgent need for low carbon infrastructure as established within EN-1. On this basis, it is concluded that development consent should be granted.

1. Introduction

1.1. Overview

1.1.1. This Planning Statement forms part of an application by Meridian Solar Farm Limited to the Secretary of State under the Planning Act 2008 (the 'PA 2008') for a Development Consent Order (the DCO Application) for the Scheme.

1.1.2. The Scheme would comprise the construction, operation (including maintenance) and decommissioning of a solar PV electricity generating station with associated infrastructure, including co-located Battery Energy Storage System (BESS), Inter-Array Connections to link the land parcels that form the Solar Development Areas, and an up to 13 km overhead line Grid Connection (with one short undergrounded section) which would run north towards a point of connection (PoC) at the proposed Weston Marsh B National Grid Electricity Transmission (NGET) substation, to the north of Weston.

1.1.3. The Solar PV generating station, associated BESS, on-site substations and other associated infrastructure would be located within four land parcels (A, B, C and D) referred to collectively as the Solar Development Area, as shown in **ES Figure 1-1** (Doc Ref. 6.2).

1.1.4. The Inter-Arrays would be the areas within which 132 kV connection cables (the 'Inter-Array Connections') would link the land parcels of the Solar Development Area. The configuration of the Inter-Array Connections (132 kV) would comprise underground cabling between Land Parcels A and B ('the Underground Inter-Array') and an overhead line between Land Parcels C and D ('the Overground Inter-Array').

1.1.5. The Grid Connection Route is the area between the Solar Development Area and the National Grid Weston Marsh B Substation in which a 400 kV overhead line (the 'Grid Connection') would be located. There is one section where the Grid Connection would route underground to avoid conflicts with an existing 132 kV overhead line. Cable Sealing End Compounds (CSECs) would join the proposed underground cable at that section with the proposed overhead line.

1.1.6. The Scheme comprises a generating station of more than 100 MW and the installation of above ground electric lines greater than two kilometres in length and a nominal voltage of 132 kV or greater. The Scheme qualifies as an NSIP under sections 14(1)(a), 14(1)(b), 15(2) and 16 of the Act.

1.1.7. The purpose of this Planning Statement is to provide an overview of the need and benefits of the Scheme, its impacts and to demonstrate acceptability of the Scheme when assessed against relevant policies.

1.1.8. This document should be read alongside information that is contained within the other application documents and plans.

1.2. Overview of the Legislative and Policy Context

1.2.1. As the Scheme constitutes an NSIP under sections 14(1)(a), 14(1)(b), 15(2) and 16 of the PA 2008, the Secretary of State is responsible for determining an application for development consent. The Secretary of State will appoint a panel of inspectors ('the Examining Authority') to examine the application and provide a recommendation.

1.2.2. As relevant National Policy Statements (NPSs) are in place for all NSIPs that form part of the Scheme, the application for development consent will be determined in accordance with Section 104 of the PA 2008.

1.3. Structure of this Planning Statement

1.3.1. This Planning Statement is structured as follows:

- Section 2 describes the Site, including the land within the Order Limits for the Scheme and a summary of the relevant land use and planning designations.
- Section 3 sets out the legislative and policy context against which this application for development consent is to be determined, alongside other important and relevant considerations.
- Section 4 sets out the need for and benefits of the Scheme.
- Section 5 provides an assessment of the Scheme against the relevant legislation and policy.
- Section 6 presents the conclusions of the planning assessment, including a summary of the need for and benefits of the Scheme and the overall planning balance.

1.3.2. This Planning Statement is supported by the following appendices:

- Appendix A: Planning History;
- Appendix B: National Policy Statement Accordance Tables;
- Appendix C: NPPF and Local Policy Accordance Tables;
- Appendix D: Site Selection Report;
- Appendix E: Heritage Statement of Harm; and
- Appendix F: Mineral Safeguarding Assessment.

2. Site Context

2.1. Overview

2.1.1. This section summarises the characteristics of the land within the Order Limits ('the Site') and its surrounding context, including policy allocations and designations.

2.1.2. The Order Limits for the Scheme encompasses approximately 1,616 hectares within the administrative areas of South Holland District Council and Lincolnshire County Council as shown on the **Location Plan** (Doc Ref. 2.1).

2.1.3. A full description of the Scheme is set out in **ES Chapter 2: The Scheme** (Doc Ref. 6.1), with detailed descriptions of the baseline environment in each respective ES Chapter.

2.2. The Site

2.2.1. The Site lies within the gently undulating, relatively low-lying farmland landscape of south Lincolnshire. The nearest towns to the Site are Spalding (approx. 1 km west) and Crowland (approx. 1.2 km south). Other settlements consist of small villages and hamlets, as well as individual properties scattered throughout the surrounding area. Villages include Weston, Moulton, Moulton Chapel, Moulton Eaugate, Cowbit, Whaplode Drove, Holbeach Drove, Gedney Hill, Sutton Saint Edmund and Holbeach St Johns, while smaller hamlets consist of Weston Hills, Low Fulney, Peak Hill and Shepeau Stow.

2.2.2. The Site predominantly consists of agricultural fields interspersed with hedgerows, small areas of vegetation and farm access tracks.

2.2.3. The Scheme and its Order Limits comprise land for:

- The 'Solar Development Area', comprising Land Parcels A, B, C and D, which would host the ground-mounted solar PV generation facilities (and associated supporting infrastructure), Battery Energy Storage System ('BESS') and On-Site Substation Compounds (including one 400 kV substation and BESS at Land Parcel B, facilitating connection to the 400 kV overhead line, and three 132 kV substations at the other land parcels).
- The 'Inter-Array Connections', comprising underground cabling with an operating voltage of 132 kV between Land Parcels A and B and an overhead line (with wooden poles) between Land Parcels C and D.
- The 'Grid Connection', a 400 kV overhead line (via steel lattice style towers), along with one undergrounded section, to the planned National Grid Weston Marsh B Substation, east of Spalding.

2.2.4. The Site constitutes the total land area within the Order Limits of the Scheme, including the Solar Development Area, Inter-Array Connections and Grid

Connection Route. A summary of the areas for each part of the Scheme is provided below:

- Solar Development Area - Land Parcel A: 197 ha
- Solar Development Area - Land Parcel B: 335 ha
- Solar Development Area - Land Parcel C: 205 ha
- Solar Development Area - Land Parcel D: 330 ha
- Underground Inter-Array between Land Parcel A and B: 15 ha
- Overhead Inter-Array between Land Parcel C and D: 46 ha
- Grid Connection Route: 510 ha
- Site (total): 1,616h[1]*

2.2.5. The location of each of these parts is illustrated on **ES Figure 1-1: Scheme Location** (Doc Ref. 6.2).

2.2.6. A full description of the Scheme is set out in **ES Chapter 2: The Scheme** (Doc Ref. 6.1).

2.3. Designations and Allocations

2.3.1. The Site has been selected and designed to avoid and minimise impacts to designated features. The following sections briefly describe the statutory and key non-statutory designations at or near the Site. A detailed description of the baseline environment is contained within each topic-specific **ES Chapter** (Doc Ref. 6.1).

Agriculture and Soils

2.3.2. The primary existing land use within the Site is agriculture. Agricultural land can be graded according to its suitability for food production using the UK's Agricultural Land Classification (ALC) system. Grades 1, 2 and 3a are defined as 'best and most versatile'.

2.3.3. Two methodologies can be used to interpret soil sampling – field average and auger point. The Applicant has presented the results of soil sampling using both methods following engagement with Natural England.

2.3.4. The proportion of the Solar Development Area categorised by each grade is summarised in **Table 2-1**.

[1] Note the sum of parts for the areas of the Scheme exceeds the total area of the Order Limits due to an overlap of the Grid Connection Route with Solar Development Area at Land Parcel B.

Table 2-1 ALC Grading for the Solar Development Area

Grade	Proportion of Site (field average)	Proportion of Site (auger point)
Grade 1: Excellent quality	8.9%	11.3%
Grade 2: Very good quality	7.2%	8.7%
Grade 3a: Good quality	19.0%	19.2%
Grade 3b: Moderate quality	53.1%	49.1%
Grade 4: Poor quality	0%	0%
Grade 5: Very poor quality	0%	0%
Non-Agricultural	0.3%	0.3%
Not surveyed	11.4%	11.4%
Overall BMV	**35.2%**	**39.2%**

2.3.5. The ALC grades for the Solar Development Area are shown on **ES Figure 5-1 and ES Figure 5-2** (Doc Ref. 6.2). Soil surveys have not yet been conducted for the Grid Connection Route or Inter-Array Connections, and therefore the Provisional ALC[2] has been considered. This provisionally identifies all land within those areas as either Grade 1 or Grade 2, as shown on **ES Figure 5-3** (Doc Ref. 6.2). Surveys for the Grid Connection Route and the Inter-Array Connections will be undertaken pre-construction during the detailed design phase.

Cultural Heritage

2.3.6. There are two Scheduled Monuments located within Land Parcel C of the Solar Development Area:

- Settlement NE (north-east) of Whitebread Farm; and
- Settlement W (west) of Cate's Cove Corner.

2.3.7. A further Scheduled Monument, 'the medieval boundary earthworks at Queen's Bank, 100 m south-east of Providence House' is also located immediately to the north of Land Parcel C of the Solar Development Area. The 'Wykeham Chapel: a moated monastic grange and retreat house' Scheduled Monument is located immediately adjacent to the Order Limits along the Grid Connection Route. There are three further Scheduled Monuments within 1 km of the Site:

[2] Multi Agency Geographic Information for Countryside (MAGIC), Available at: https://magic.defra.gov.uk/ [Accessed December 2025]

- Settlement in Moulton West Fen (NHLE 1002944), 500 m north of Land Parcel C-2;
- Romano-British Settlement 5 (south) of Shell Bridge (NHLE 1004982), 300 m west of Land Parcel D-3-01; and
- Saint Guthlac's Cross (NHLE 1005052), 650 m north-east of Land Parcel A-1-12.

2.3.8. There are a further 17 Scheduled Monuments within 5 km of the Order Limits.

2.3.9. There are no listed buildings or conservation areas within the Order Limits. However, there are approximately 276 listed buildings and five conservation areas within 5 km of the Site.

2.3.10. The location of these cultural heritage designations is shown on **ES Figure 2-1: Existing Site Constraints, ES Figure 8-4: Designated Heritage Assets Solar Development Area and Inter-Array Connections** and **ES Figure 8-3: Designated Heritage Assets Grid Connection Route** (Doc Ref. 6.2).

2.3.11. There are no Registered Parks or Gardens, World Heritage Sites, Registered Battlefields or Protected Wrecks at or within 1 km of the Site.

2.3.12. Given the presence and potential for archaeology across the Solar Development Area, **ES Chapter 8: Cultural Heritage** (Doc Ref. 6.1) has grouped the Site into eight Archaeological Zones. Zones 1-2 and 4-8 are where deposits of Iron Age and/or Roman date are known to survive and are detailed on **ES Figures 8a-d** (Doc Ref. 6.2). Within Archaeological Zone 3 there is high potential for archaeological deposits relating to the medieval boundary earthworks at Queen's Bank Scheduled Monument. Geophysical and aerial survey results indicate that the boundary of Crowland Abbey extends west from the Queen's Bank Scheduled Monument, towards Saint Guthlac's Cross.

Ecology and Biodiversity

2.3.13. There are no internationally or nationally designated ecological sites at the Site, however there are three internationally designated sites within 20 km:

- The Wash Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site (8.4 km north-east);
- Baston Fen SAC (10 km west); and
- Nene Washes SAC, SPA and Ramsar site (11.8 km south).

2.3.14. The closest nationally designated sites are:

- Surfleet Lows Site of Special Scientific Interest (SSSI) (3.5 km north-west); and
- Cowbit Wash SSSI (3.6 km west).

2.3.15. There are three SSSI Impact Risk Zones (IRZs) that intersect with the Order Limits of the Solar Development Area: IRZ for Deeping Gravel Pits SSSI, IRZ for Cowbit Wash SSSI and an unnamed IRZ. The Grid Connection Route falls partially within the IRZs for Surfleet Lows SSSI, The Wash SSSI, and Cowbit Wash SSSI. The Scheme only meets the relevant development description for the Cowbit Wash SSSI and the unnamed IRZ.

2.3.16. There are 23 Local Wildlife Sites (LWS) within 2 km of the Site, four of which extend within the Order Limits for the Site; Slys Connection, South Holland Main Drain, Lambert Drain to Highstock Drain Connection and Wheatmere Drain.

2.3.17. The location of these ecological designations is shown on **ES Figure 9-1: Internationally Important Wildlife Sites** and **ES Figure 9-2: Nationally Designated and Non-Statutory Sites** (Doc Ref. 6.2).

Landscape and Visual

2.3.18. The topography within the study area is predominantly flat and low lying, which is a key characteristic of the Fens, ranging from 0 m to 10 m Above Ordnance Datum (AOD) across the full extent of the 10 km study area. The embankment associated with the River Welland, on its eastern side, provides an elevated view of the landscape surrounding the Scheme from the PRoW Crow 7/1 and National Cycle Network (NCN) SUSTRANS 12. This elevated river embankment continues north beyond the 5 km study area. Across the Solar Development Areas, there is little fluctuation in topography, adding to the long, open views in this location.

2.3.19. There are no national designations within or adjacent to the Scheme. The closest National Landscape is the Norfolk Coast, located more than 25 km north-east of the Site. The Site is not located within the Green Belt.

2.3.20. One Registered Park and Garden is located within the study area, Grade II Ayscoughfee Hall, which is located 4 km to the west of the proposed Grid Connection Route.

2.3.21. The Site is located within the National Character Area 46 (NCA46) The Fens, which is characterised by its large, low-lying, flat landscape with drainage ditches, dykes and rivers. The location of NCA46 is shown on **ES Figure 12-4: National Landscape Character Areas** (Doc Ref. 6.2).

2.3.22. The Site is located within two regional Historic Landscape Character Areas: The Fens (HCLA9) and The Wash (HCLA10). The location of these two Historic Landscape Characters Areas is shown on **ES Figure 12-5: Regional and County Landscape Character Areas** (Doc Ref. 6.2). Further, the Site is situated within two Historic Landscape Character Zones; The Eastern Fens (FEN2) and Townlands (WSH6), also illustrated on **ES Figure 12-5** (Doc Ref. 6.2).

Public Rights of Way and Common Land

2.3.23. There are numerous public rights of way (PRoW) at or within 500 m of the Site. These take the form of footpaths, bridleways, byways and restricted byways; and are listed in the **Outline Public Rights of Way Management Plan** (Doc Ref. 7.15) and shown on **ES Figure 15-2: Existing Walking and Cycling Network** (Doc Ref. 6.2). The PRoW listed below are located within or directly adjacent to the Scheme:

- Bridleways along the South Holland Main Drain, Flee/6/1, Flee/7/1, Flee/8/1, Flee/8/2, Holb/14/1 and Holb15/1;
- Bridleway east of Queen's Bank, Crow/11/1;
- Footpath between Queen's Bank and Back Bank, Crow/12/1;
- Footpath between Back Bank and Broadgate, Whap/1/1;
- Footpath along Wash Bank, Crow/17/1;
- Bridleway east of Welland Bank, Crow/17/2;
- Footpath east of Welland Bank, Crow/7/1; and
- Footpath Wstn/3/1 at Lord's Drain.

2.3.24. A strip of registered Common Land runs along the eastern verge of Martins Road crossing the access to Solar Development Area Land Parcel C and provides a public access way between Queen's Bank and B1166 Hull's Drove. While common land is not owned by the public, the Countryside and Rights of Way Act 2000 grants the public a right to roam, allowing activities like walking and climbing on most registered common land. Since it performs a similar function to a PRoW, it has been considered within the assessments on PRoWs within this DCO Application.

Water Environment

2.3.25. The Site is located within the Anglian River Basin District, split between the Welland and Nene Management Catchments. The majority of the Site is located within Flood Zone 2 and Flood Zone 3, with medium and high risk of fluvial flooding, respectively.

2.3.26. Most of the Site is at a very low risk of surface water flooding due to a predominantly low-lying landform and lack of undulation. There are only isolated, localised areas at high, medium and low risk of surface water flooding.

2.3.27. The River Welland, located approximately 110 m to the west of the Site at its closest point, is the largest watercourse in the surrounding area. Flood defences are positioned along either bank, as well as against a series of flood storage areas to the west of the Site.

2.3.28. The South Holland Main Drain is located north of the Solar Development Area, and bisects Land Parcel D. The Site is characterised by numerous manmade

agricultural ditches and drains, with water levels across the area generally managed via pumping.

2.3.29. The location of the catchments, rivers and flood zones are shown on **ES Figures 11-1 to 11-5** (Doc Ref. 6.2).

Local Plan Designations and Allocations

2.3.30. The Site is designated as 'countryside' within the South East Lincolnshire Local Plan, with a small part of Land Parcel A falling within a Mineral Safeguarding Area for sand and gravel. There are several LWS which intersect with the Order Limits. These are described further in **ES Chapter 9: Ecology and Biodiversity** (Doc Ref. 6.1).

2.3.31. There are no allocations within the Order Limits.

2.4. Special Category Land

2.4.1. A small area of Common Land lies within the Order Limits. This common land comprises a narrow strip of land along the eastern length of Martins Road. To the best of the Applicant's knowledge, this strip of land was designated as common land to facilitate access to the now decommissioned railway station. It is not in a state which indicates regular use (e.g. overgrown vegetation would prevent crossing).

2.4.2. The Applicant has generally sought to avoid the inclusion of the common land in this area within the Order Limits, but would require use of the areas shown on the **Special Category Land Plans** (Doc Ref. 2.5) to facilitate the construction of an access and above and below ground cabling between the Solar Development Area. During construction, a temporary diversion route would be provided as shown on the **Streets, Rights of Way and Access Plans** (Doc Ref. 2.6) and management measures would be in place to ensure users can continue to cross the common land safely.

2.4.3. Following the completion of works, the Applicant would seek permanent rights across these parts of the land to enable continuous access to those assets. Once the works are complete, users would be entitled to use the common land as they can currently because:

- The presence of overhead and underground cabling would not limit the use of the land as it would be at a height/depth that would not restrict users from walking, cycling or horse riding at those locations.
- The presence of a new at-grade access would not present a barrier to users from continuing their journey along the strip of common land. The Applicant proposes the erection of signage for vehicles using the access point to ensure right of way is given to users of the common land. It is noted that similar access points exist at various points across the common land.

2.4.4. Considering the above, it is concluded that the land when burdened with the right sought by the Applicant will be no less advantageous to the users of the Common Land. Temporary possession would be controlled with access reinstated. Functionality, accessibility and quality would be preserved. This demonstrates that the tests under Section 132 of the PA 2008 are met. As a result, the requirement to undertake Special Parliamentary Procedure is not invoked and exchange land is not required. Further details on the Special Category Land is provided within the **Statement of Reasons** (Doc Ref. 4.1).

2.5. Relevant Planning History

2.5.1. The planning history for the Site is limited due to the majority of land being for agricultural use. **Appendix A: Planning History** (Doc Ref. 7.1) details the planning history for the Site.

3. Legislative and Policy Context

3.1. Overview

3.1.1. This section outlines the legislative framework and planning policy context for the Scheme. Section 3.2 sets out the relationship of the Scheme to the PA 2008. Sections 3.3. to 3.5 introduces the relevant national and local planning policy context. Section 3.6 introduces other legislation and national policy documents that may be considered important and relevant to the Secretary of State's decision.

3.2. Planning Act 2008

3.2.1. The PA 2008 establishes the legal framework for applying for, examining and determining applications for NSIPs. As set out in Section 1, the Scheme qualifies as NSIP development; therefore, a DCO is required.

3.2.2. As relevant NPSs are in place for all NSIPs that form part of the Scheme, the application for development consent will be determined in accordance with Section 104 of the PA 2008. Section 104(2) states:

"In deciding the application, the Secretary of State must have regard to –

(a) any national policy statement which has effect in relation to development of the description to which the application relates (a "relevant national policy statement"),

(aa) the appropriate marine policy documents (if any), determined in accordance with section 59 of the Marine and Coastal Access Act 2009;

(b) any local impact report (within the meaning given by section 60(3)) submitted to the Secretary of State before the deadline specified in a notice under section 60(2),

(c) any matters prescribed in relation to development of the description to which the application relates, and

(d) any other matters which the Secretary of State thinks are both important and relevant to the Secretary of State's decision."

3.2.3. The relevant NPSs are:

- Overarching NPS for Energy (EN-1)[3];

[3] Overarching National Policy Statement for Energy (EN-1) (December 2025). Accessed at: Overarching National Policy Statement for Energy (EN-1) – December 2025 [Accessed January 2026]

- NPS for Renewable Energy Infrastructure (EN-3)[4]; and
- NPS for Electricity Networks Infrastructure (EN-5)[5].

3.2.4. In addition, the Applicant considers the following planning policy documents to be important and relevant to the Secretary of State's decision:

- National Planning Policy Framework[6];
- Lincolnshire Minerals and Waste Local Plan (Core Strategy and Development Management Policies) (adopted 2016)[7];
- South East Lincolnshire Local Plan 2011-2036[8].

3.2.5. The Applicant anticipates both South Holland District Council and Lincolnshire County Council will submit Local Impact Reports (LIRs) as the host authorities. Neighbouring local authorities may also submit LIRs.

Associated Development

3.2.6. Section 115 of the PA 2008 allows for Associated Development to be included within the application for development consent. Further guidance is provided in *'Planning Act 2008: Guidance on associated development applications or major infrastructure projects*[9]*'* which sets out four principles for Associated Development.

3.2.7. The proposed Battery Energy Storage System (BESS) is considered to meet the tests and examples provided in aforementioned guidance to be classed as Associated Development for the Scheme.

3.2.8. Further detail in relation to Associated Development which forms part of the Scheme is set out in the **Explanatory Memorandum** (Doc Ref. 3.2).

[4] National Policy Statement for Renewable Energy Infrastructure (EN-3) (December 2025). Accessed at: National Policy Statement for Renewable Energy Infrastructure (EN-3) [Accessed January 2026]
[5] National Policy Statement for Electricity Networks Infrastructure (December 2025). Accessed at: National Policy Statement for Electricity Networks Infrastructure (EN-5) – December 2025 [Accessed January 2026]
[6] National Planning Policy Framework (December 2024). Accessed at: National Planning Policy Framework [Accessed January 2026]
[7] Lincolnshire County Council (2016). Lincolnshire Minerals and Waste Local Plan (Core Strategy and Development Management Policies). Accessed at: Lincolnshire Minerals and Waste Local Plan [Accessed January 2026]
[8] South East Lincolnshire Joint Strategic Planning Committee (2019). South East Lincolnshire Local Plan 2011-2036. Accessed at: Adopted Plan - South East Lincolnshire Local Plan [Accessed January 2026]
[9] Department for Communities and Local Government (2013). Guidance on associated development applications for major infrastructure projects. Accessed at: Planning Act 2008: Guidance on associated development applications for major infrastructure projects [Accessed January 2026]

3.3. National Policy Statements

3.3.1. The suite of energy NPSs set out the Government's policy of the delivery of energy infrastructure and provide the legal framework for planning decisions for major infrastructure projects. The latest versions of the energy NPSs came into force 6 January 2026.

3.3.2. EN-1, EN-3 and EN-5 provide the primary policy basis for deciding the application for development consent for the Scheme. EN-1 sets out technology-agnostic policy across all energy infrastructure, while EN-3 forms the relevant policy basis for the solar generation component of the Scheme, and EN-5 relevant to the transmission and distribution of electricity from the Scheme.

Overarching National Policy Statement for Energy (EN-1)

3.3.3. EN-1 sets out national policy for energy infrastructure, including solar renewable electricity generation. It has effect for all decisions by the Secretary of State on application for energy projects under the PA 2008.

3.3.4. Part 3 of EN-1 describes the need for new nationally significant energy infrastructure projects. Paragraphs 3.2.8 to 3.2.10 of EN-1 stress:

"3.2.8. The Secretary of State should assess all applications for development consent for the types of infrastructure covered by this NPS on the basis that the government has demonstrated that there is a need for those types of infrastructure which is urgent, as described for each of them in this Part.

3.2.9. In addition, the Secretary of State has determined that substantial weight should be given to this need when considering applications for development consent under the Planning Act 2008.

3.2.10. The Secretary of State is not required to consider separately the specific contribution of any individual project to satisfying the need established in this NPS."

3.3.5. Further, it ascribes Critical National Priority (CNP) status to electricity generation that does not involve fossil fuel combustion as well as electricity grid infrastructure associated with nationally significant low carbon infrastructure (see paragraph 4.11.4 of EN-1).

National Policy Statement for Renewable Energy Infrastructure (EN-3)

3.3.6. EN-3 provides a framework for the assessment and determination of renewable energy infrastructure. It includes policies specific to solar PV generation. It states the importance of electricity generation from renewables sources at Paragraph 1.1.2:

"Electricity generation from renewable sources is an essential element of the transition to net zero and meeting our statutory targets for the sixth carbon budget (CB6). Our analysis suggests that demand for electricity is likely to increase

significantly over the coming years and could more than double by 2050. This could require a fourfold increase in low carbon electricity generation, with most of this likely to come from renewables."

3.3.7. Sections 2.1 to 2.6 of EN-3 set out policies applicable to all renewable energy projects, with Section 2.10 setting out the policies specific to the assessment and determination of solar PV generation.

National Policy Statement for Electricity Network Infrastructure (EN-5)

3.3.8. EN-5 provides the primary policy basis for decisions on NSIP transmission and distribution systems. EN-5 is relevant to the Scheme due to the grid connection and inter-array connection infrastructure which qualify as NSIPs. Paragraph 1.1.4 states:

"1.1.4 In addition to offshore wind, new networks infrastructure is needed in support of the development of generation by other technologies, including those in EN-3."

3.3.9. It goes onto reiterate the importance of electricity infrastructure as CNP:

"1.1.5… as all new grid projects will contribute towards greater efficiency in constructing, operating and connecting low carbon infrastructure to the National Electricity Transmission System. These are viewed by the government as being CNP infrastructure and should be progressed as quickly as possible."

3.4. National Planning Policy Framework

3.4.1. The NPPF was last updated 12 December 2024. Paragraph 5 of the NPPF confirms that it does not contain specific policies for NSIPs, but that the NPPF may be a relevant matter in decision making. It is supported by the Planning Practice Guidance (PPG).

3.4.2. In December 2025, Government launched a consultation on revisions to the NPPF[10]. While these policies do not have effect, the Applicant has reviewed the draft revisions and notes that the relevant policies do not materially differ from the previous version.

3.5. Local Planning Policy

3.5.1. While the primary basis for decision making is the relevant NPSs, local planning policy may be considered an important and relevant consideration for the

[10] Ministry of Housing, Communities and Local Government (2025). National Planning Policy Framework – Consultation. Accessed at: National Planning Policy Framework: draft text for consultation.[Accessed January 2026]

Secretary of State's decision. The following local planning policy documents have been considered:

- South East Lincolnshire Local Plan (Adopted 2019); and
- Lincolnshire Minerals and Waste Local Plan (Adopted 2016).

3.6. Other Relevant Legislation and Policy

3.6.1. This section sets out the other legislation and policy that the Applicant considers is likely to be important and relevant to the Secretary of State's decision.

Climate Change Act 2008

3.6.2. The Climate Change Act 2008[11] set up a framework for the UK to achieve its long-term goals of reducing greenhouse gas emissions and to ensure steps are taken towards adapting to the impact of climate change. The Act committed the UK to reducing its greenhouse gas emissions by 80% by 2050 compared to 1990 levels.

3.6.3. In June 2019, legislation was passed to amend the Climate Change Act 2008 requiring the UK to bring all greenhouse gas emissions to net zero by 2050 (i.e. a 100% reduction), compared with the previous level of 80% reduction from the 1990 levels.

National Infrastructure Strategy (November 2020)

3.6.4. The National Infrastructure Strategy[12] (NIS) sets out the plans to transform UK infrastructure. It includes an aim for the UK to be on the path to meet its net zero emissions target by 2050. The NIS acknowledges that the UK's commitment to achieving net zero emissions by 2050 will require profound changes that will provide huge opportunities for the UK to build back better. The NIS identifies that to deliver net zero, the share of generation from renewables needs to dramatically increase and notes that greater generation capacity will need to come from onshore wind and solar.

Energy White Paper: Power Our Net Zero Future (December 2020)

3.6.5. The Energy White Paper[13] provides further clarity on the strategy for the wider energy system that transforms energy, supports a green recovery and creates a fair deal for consumers.

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[11] Climate Change Act 2008. Accessed at: Climate Change Act 2008 [Accessed January 2026]
[12] HM Treasury (2020). National Infrastructure Strategy – Fairer, Faster, Greener. Accessed at: https://assets.publishing.service.gov.uk/media/5fbf7591e90e077ee2eadc44/NIS_Report_Web_Accessible.pdf [Accessed January 2026]
[13] HM Government (2020) The Energy White Paper: Powering Our Net Zero Future. Accessed at: https://assets.publishing.service.gov.uk/media/5fdc61e2d3bf7f3a3bdc8cbf/201216_BEIS_EWP_Command_Paper_Accessible.pdf [Accessed January 2026]

3.6.6. It describes the case for tackling climate change and Government's ambition that '*clean electricity will become the predominant form of energy'* (page 10) and expects that a net zero system '*is likely to be composed predominantly of wind and solar*' (page 43).

Environment Act 2021

3.6.7. The Environment Act 2021[14] makes provisions about targets, plans and policies for improving the natural environment. Schedule 15 of the Environment Act 2021 explains biodiversity net gain in nationally significant infrastructure projects. Although these provisions are not yet in force, it is expected that they will come into force in May 2026 at which point they will lead to an imposition of a requirement on new projects submitted beyond that date for the '*biodiversity value attributable to the development [to] exceed the pre-development biodiversity value of the on-site habitat by at least 10%*'.

Net Zero Strategy: Build Back Greener (October 2021)

3.6.8. The Net Zero Strategy[15] builds upon the commitments made within the Energy White Paper (2020) and sets out the long-term strategy, policy and proposals to keep the UK on track for future carbon budgets and then sets a vision for a decarbonised economy in 2050.

3.6.9. It recognises that the Sixth Carbon Budget (CB6) requires a sustained increase in the deployment of land-based renewables, including solar (paragraph 36). The strategy also recognises the role that increased solar will play in bringing down the cost of electricity.

British Energy Security Strategy (April 2022)

3.6.10. The British Energy Security Strategy[16] sets out the key actions to accelerate delivery of domestic clean energy, recognising its importance in delivering Britain's climate goals whilst providing energy security and securing greater energy independence.

3.6.11. In terms of solar renewable technology, the strategy sets out that the Government expects a 'five-fold increase in deployment' to 70 gigawatts ('GW') by 2035. The strategy confirms that the Government will continue to support the '*effective use of land by encouraging large scale projects to locate on previously developed, or lower value land, where possible'*. The strategy also notes that the

[14] Environment Act 2021. Accessed at: Environment Act 2021 [Accessed January 2026]
[15] HM Government (2020). Net Zero Strategy: Build Back Greener. Accessed at: https://assets.publishing.service.gov.uk/media/6194dfa4d3bf7f0555071b1b/net-zero-strategy-beis.pdf [Accessed January 2026]
[16] HM Government (2022). British Energy Security Strategy. Accessed at: https://assets.publishing.service.gov.uk/media/6194dfa4d3bf7f0555071b1b/net-zero-strategy-beis.pdf [Accessed January 2026]

Government will support solar that is co-located with other functions, including storage.

Powering Up Britain (March 2023)

3.6.12. Powering up Britain[17] sets out the Government's plan to enhance the UK's energy security, seize economic opportunities in the transition and deliver on net zero commitments. The paper is focused on the transition between UK oil and gas to renewable energy sources. To meet the Government's goal of quintupling its solar power by 2035, the paper states, regarding largescale solar development: "*Government seeks large scale solar deployment across the UK, looking for development mainly on brownfield, industrial and low/medium grade agricultural land. The Government will therefore not be making changes to categories of agricultural land in ways that might constrain solar deployment*" (page 20).

Clean Power 2030 Action Plan (December 2024)

3.6.13. The Clean Power 2030 Action Plan[18] sets out a pathway to a clean power system by 2030. The action plan will herald a new era of clean energy independence and tackle three major challenges: the need for a secure and affordable energy supply, the creation of essential new energy industries, supported by skilled workers in their thousands, the need to reduce greenhouse gas emissions and limit our contribution to the damaging effects of climate change.

3.6.14. It sets out an ambition to secure between 45-47 GW of solar power by 2030.

UK Infrastructure: A 10 Year Strategy (June 2025)

3.6.15. Published in June 2025, the UK Infrastructure: 10 Year Strategy[19] sets out the Government's priorities and spending commitments for this decade.

3.6.16. Chapter 4 of the UK Infrastructure: 10 Year Strategy states (paragraph 4.3) '*Electrification will be the primary route to decarbonisation, with electricity demand expected to at least double by 2050'*. It estimates that around twice as much new transmission infrastructure will be needed by 2030 as has been built in the past decade (Paragraph 4.10).

[17] HM Government (2023). Powering Up Britain. Accessed at: https://assets.publishing.service.gov.uk/media/642468ff2fa8480013ec0f39/powering-up-britain-joint-overview.pdf [Accessed January 2026]
[18] UK Government (2024). Clean Power 2030 Action Plan: A New Era of Clean Electricity. Accessed at: https://assets.publishing.service.gov.uk/media/677bc80399c93b7286a396d6/clean-power-2030-action-plan-main-report.pdf [Accessed January 2026]
[19] HM Treasury (2025). UK Infrastructure: A 10 Year Strategy. Accessed at: https://assets.publishing.service.gov.uk/media/6853c5db99b009dcdcb73649/UK_Infrastructure_A_10_Year_Strategy_Web_Accessible.pdf [Accessed January 2026]

Solar Roadmap: UK Powered by Solar (June 2025)

3.6.17. The Solar Roadmap[20] is a collaborative strategy developed by Government and the solar industry. It is intended to guide the deployment of solar across the UK to 2030 and supports the Clean Power 2030 Action Plan by outlining measures to increase solar capacity from the current 18 GW to 45-47 GW (or more) by 2030.

3.6.18. The Solar Roadmap sets out more than 70 actions for both Government and industry to maximise opportunities for solar while addressing barriers that could constrain its deployment.

Noise Policy Statement for England

3.6.19. The Noise Policy Statement for England[21] (NPSE) seeks to clarify the underlying principles and aims in existing policy documents, legislation and guidance that relate to noise. It has three aims:

- avoid significant adverse impacts on health and quality of life;
- mitigation and minimise adverse impacts on health and quality of life; and
- where possible, contribute to the improvement of health and quality of life.

[20] Department for Energy Security and Net Zero (2025) Solar Roadmap: United Kingdom Powered by Solar. Accessed at: https://assets.publishing.service.gov.uk/media/685d6e483e6b7941f4e00afb/35.87_DESNZ_UK_Solar_Roadmap_final.pdf [Accessed January 2026]

[21] Noise Policy Statement for England (NPSE) (March 2010). Accessed at: https://assets.publishing.service.gov.uk/media/5a7956e0ed915d0422067947/pb13750-noise-policy.pdf [Accessed January 2026]

4. Need and Benefits

4.1. Overview

4.1.1. This section sets out the need for the Scheme and how it is supported by relevant legislation and policy at both national and local levels.

4.1.2. The principle of the need for new renewable energy is firmly established in EN-1 and EN-3. EN-5 sets out the need for new transmission infrastructure to support the delivery of the Clean Power 2030 Action Plan and net zero, while maintaining energy security.

4.1.3. The energy NPSs confirm that large-scale ground-mounted solar farms have a critical role to play in achieving the Government's aims, acknowledging their benefits which include decarbonisation, energy security and affordability. Paragraph 3.3.23 of EN-1 recognises that solar is one of most cost-efficient ways to generate electricity, with a '*secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar*'.

4.1.4. Solar PV generation is ascribed CNP status. CNP status is relevant to the Secretary of State's decision making, "*specifically in reference to any residual impacts that have been identified*" (Paragraph 4.2.20 of EN-1) and will "*continue to consider the impacts and benefits of all CNP infrastructure applications on a case-by-case basis*" (Paragraph 4.2.27 of EN-1).

4.1.5. The need for new renewable energy generation and electricity networks infrastructure is set out in full within EN-1, EN-3 and EN-5, and is not reproduced in full within this Planning Statement. The following sections describes the need and benefits of the Scheme.

4.2. Need for the Scheme

4.2.1. The primary aim of the Scheme is to generate low-carbon electricity over an operational period of approximately 40 years, helping to meet the UK's increasing demand for clean energy.

4.2.2. The following section describes the need for the Scheme which primarily stems from the two overarching goals set by UK Government - to achieve net zero and energy security.

Net Zero

4.2.3. The UK's net zero targets principally arise from the Climate Change Act 2008 which commits the UK to reducing its greenhouse gas emissions to net zero by 2050 compared to 1990 levels in line with its obligations under international treaties, most notably the Paris Agreement signed in 2015.

4.2.4. The Net Zero Strategy (2021) sets out the need for net zero and the strategy to achieve net zero by 2050. It emphasises the need to act urgently to reduce

emissions globally to limit further global warming and its impacts, many of which are evidenced today with increased frequency of events such as extreme heat, floods and wildfires across the world.

4.2.5. Delivering a decarbonised power system by 2035 is one of the key actions to achieve net zero by 2050. This brings forwards Government's previous commitment to a fully decarbonised power system by 15 years. A four-fold increase in low carbon electricity generation and significant expansion of the electricity networks that transport it to where is needed. It confirms at paragraph 11 of Chapter 3(i):

"A low-cost, net zero consistent electricity system is most likely to be composed predominantly of wind and solar generation, whether in 2035 or 2050".

4.2.6. This highlights the role that solar plays in achieving this goal.

4.2.7. In December 2024, the Government published a policy paper titled The Clean Power 2030 Action Plan ('the Action Plan'), which outlines steps to achieve clean power by 2030. The Action Plan provides further clarity to the net zero targets by defining a clean power target, with a specific target for solar between 45 GW and 47 GW by 2030. In 2024, when the plan was produced, the UK only had an installed solar capacity of 16.6 GW. This highlights the need for mass deployment of solar to achieve this target.

4.2.8. The Scheme would deliver up to 750 MW of low carbon electricity with co-located BESS. The Scheme also includes the high voltage transmission infrastructure required to transport the electricity to the NETS.

4.2.9. While the date for the Scheme's energisation has not been confirmed as part of the Connections Reform, there is an opportunity to reapply in 2026, which could confirm an energisation date in advance of 2035. The Applicant remains committed to bring forward the Scheme as soon as practicable in support of the Clean Power 2030 Action Plan. Further detail regarding this process is set out in the **Grid Connection Statement** (Doc Ref. 7.5).

Energy Security

4.2.10. A record rise in global energy prices has led to an increase in the cost of living in the UK. The UK is dependent on imported oil and gas which leaves it vulnerable to volatile pricing and supply. Further, electricity demand is forecast to surge in light of the AI revolution, with the electricity needs of data centres expected to rise four-fold by 2030[22].

[22] NESO (2024). Clean Power 2030: Advice on Achieving Clean Power for Great Britain by 2030. Accessed at: https://www.neso.energy/document/346651/download [Accessed January 2026[

4.2.11. The British Energy Security Strategy[23] sets out the Government's plan to reduce dependence on import and secure a resilient domestic energy supply. Its goals include *"a low-cost, net zero electricity system, most likely to be composed predominantly of wind and solar generation"* and sets an ambition for 70GW of solar by 2035. The need for energy security and resilience across the energy system is echoed in EN-1 (see Section 2.4) and the Clean Power 2030 Action Plan. These foresee increased threats to resilience arising from climate change and national security (including cyber threats).

4.2.12. In 2024, solar made up 5% of electricity generation within the UK[24]. Increasing the share of solar generation will support diversification of electricity generation mix supporting reduced exposure to the volatility of fossil fuel markets, geopolitical uncertainty and disruption to supply.

4.2.13. A diversity of energy sources can also aid ensuring affordability of electricity. Global energy costs soared following the reopening of economies following COVID-19 and the invasion of Ukraine, necessitating a greater focus on domestic energy production (paragraph 2.4.5 of EN-1).

4.2.14. Ground-mounted solar is one of the cheapest electricity sources to build and operate at scale. Paragraph 3.3.23 of EN-1 recognises that "*wind and solar are the lowest cost ways of generating electricity, helping reduce costs and providing a clean and secure source of electricity supply*". Paragraph 2.10.1 of EN-3 echoes this claim describing solar power as "*a cost-effective, versatile and effective technology*" at the core of the Clean Power 2030 mission.

4.2.15. With the rising costs of fossil fuels, low-cost renewables have their role to play through the reduction of household bills and helping to increase security of domestic supply. Costs to deploy solar have fallen about 50% since 2016 and estimated to be lower than that of fossil and other non-fossil sources[25].

4.2.16. Further, the construction programme and timescales to energisation are comparably shorter than that of other energy types, such as nuclear.

4.2.17. Flexibility and accelerating the provision of electricity network infrastructure to support it are two key principles of resilience outlined in the Clean Power 2030 Action Plan.

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[23] UK Government (2022). British Energy Security Strategy. Accessed at: https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy [Accessed January 2026]

[24] NESO (2025). Britain's Electricity Explained: 2024 Review. Accessed at: https://www.neso.energy/news/britains-electricity-explained-2024-review [Accessed January 2026]

[25] Department for Energy Security and Net Zero (2025) Solar Roadmap: United Kingdom Powered by Solar. Accessed at: https://assets.publishing.service.gov.uk/media/685d6e483e6b7941f4e00afb/35.87_DESNZ_UK_Solar_Roadmap_final.pdf [Accessed January 2026]

4.2.18. The Scheme will support resilience of the grid. Paragraphs 3.3.25 to 3.3.28 of EN-1 describe the importance of electricity storage in achieving net zero and providing flexibility within the energy system. It supports reduced costs of the electricity system and increases reliability through the storing of surplus electricity in periods of low demand and through the release of electricity when demand is higher.

4.2.19. The integrated BESS will allow surplus renewable electricity produced by the solar PV panels to be stored and then supplied to the grid when generation elsewhere in the network is lower or demand is higher, enhancing the effectiveness of the Scheme by supporting the balancing of the NETS.

4.2.20. The Scheme will also deliver an above-ground electric transmission line to connect the Scheme to the NETS, the need for which is well-established by EN-5. Paragraph 1.1.1 of EN-5 makes clear that:

"the security and reliability of the UK's current and future energy supply is highly dependent on having an electricity network which will enable the new electricity generation, storage, and interconnection infrastructure….to meet the rapid increase in electricity demand required to transition to Clean Power by 2030 and net zero, while maintaining energy security".

4.2.21. As stated in paragraph 2.1.5 of EN-5 *"to support the urgent need for new low carbon infrastructure, all power lines in scope of EN-5 including electricity network reinforcement and upgrade works, and associated infrastructure such as substations, are considered to be CNP infrastructure".* The two overhead lines provided within the Grid Connection and Inter Array Connections and their associated development (including substations) fall within this scope. Therefore, the need afforded to CNP infrastructure applies for this component of the Scheme.

4.3. Benefits of the Scheme

4.3.1. The following subsections describe the benefits of the Scheme which are additional to the points raised above.

Co-Located Battery Energy Storage System (BESS)

4.3.2. As well as generating up to 750 MW of low carbon electricity, the Scheme includes the co-location of a Battery Energy Storage System (BESS). The combination of solar PV and BESS can result in increased energy efficiency, reduced wastage and provide greater revenue potential.

4.3.3. Solar PV follows a predictable generation pattern, producing electricity only during daylight hours. However, energy demand often peaks in the early morning and evening when solar generation is minimal. This misalignment between energy generation and peak consumption periods creates an opportunity for the BESS to bridge this gap.

Therefore, benefits of co-locating BESS include the sharing of grid infrastructure; 'load-shifting' and smoothing out the generation of electricity to meet demand; and security of supply and reducing the risk of blackouts and brownouts.

Skills and Employment Generation

4.3.4. **ES Chapter 14: Socio-Economics and Land Use** (Doc Ref. 6.1) sets out the economic benefits of the Scheme, and the context and characteristics of the local community and economy in which it is located. The Applicant is committed to implementing a Skills, Supply Chain and Employment Plan (SSCEP) for the construction of the Scheme which will maximise and pro-actively expand the economic benefits of the Scheme for the local community.

4.3.5. An **Outline SSCEP** (Doc Ref. 7.17) accompanies the DCO Application. Its implementation will be secured by a requirement imposed on the DCO, which confirms that no part of the authorised development shall commence until a full SSCEP has been submitted to and approved by the relevant local planning authority. The SSCEP will be substantially in accordance with the **Outline SSCEP** (Doc Ref. 7.17).

4.3.6. The plan identifies the potential opportunities for activities relating to skills, supply chain and employment which the Applicant intends to take forward post-consent. These activities will help local individuals and businesses access the SSCE benefits associated with the Scheme.

4.3.7. Specifically, the **Outline SSCEP** (Doc Ref. 7.17) sets out seven potential opportunities relating to skills, supply chain and employment, the objectives and activities set out will be confirmed when the full SSCEP is developed. The potential opportunities include:

- ensuring the principal and sub-contractors working on the Scheme will offer apprenticeship opportunities;
- requirement for contractors to provide opportunities for the creation of training during construction and decommissioning;
- potential for a programme of activities which promote science, technology, engineering and mathematics (STEM) education and careers;
- promote take up of jobs generated by the Scheme by local people;
- seeking opportunities to maximise the diversity of the workforce;
- working with local partners to communicate purchasing and contracting opportunities arising from the Scheme to local businesses; and
- developing an ethical procurement policy.

Permissive Path

4.3.8. The Scheme will include recreation and amenity improvements through the creation of a permissive path. This path will connect the PRoW between Queens Bank and Shepeau Stow, following the boundary of the Settlement West of Cate's Cover Corner Scheduled Monument. The path will be suitable for pedestrians, cyclists and horse riders and provide information boards on the historic and natural environment of the surrounding area. The indicative alignment of the permissive path is shown in Annex A of the **Outline Landscape and Ecology Management Plan** (LEMP) (Doc Ref. 7.16).

4.3.9. The proposed permissive path will enhance public access across the landscape, supporting local green infrastructure strategies and planning policies which promote rural access and recreational amenity. The path forms part of a cohesive landscape strategy for the Site which retains and enriches the existing landscape fabric, introduces new accessible routes, and provides long-term environmental and community benefits. Importantly, its location near to the Scheduled Monument will offer increased opportunities for people to experience and appreciate the heritage asset, thereby enriching the area's cultural capital alongside its ecological and recreational value.

Biodiversity and Landscape Enhancements

4.3.10. The Scheme will deliver biodiversity improvements including landscaping, habitat management and biodiversity enhancement to retain and enhance ecological and recreational connectivity.

4.3.11. As captured and secured within the **Outline LEMP** (Doc Ref. 7.16), the Scheme provides several biodiversity benefits including new planting of shrubs, scattered trees, species rich grassland, semi-improved grassland, new and/or upgraded water course crossings with up to 15 m habitat enhancement buffer up and downstream (subject to agreement with the relevant Internal Drainage Boards), retained agricultural land and retained pastureland. Areas of new woodland have not been proposed to avoid the permanent loss of best and most versatile agricultural land.

4.3.12. The Scheme would also deliver a Biodiversity Net Gain (BNG) in excess of 10% for area-based habitats and watercourses, and in excess of 400% for hedgerows, as secured within Schedule 2 of the **Draft DCO** (Doc Ref. 3.1). This has been assessed through the **Biodiversity Net Gain Report** (Doc Ref. 7.9) which calculates that the Scheme would deliver a net gain of 14.60% for habitat area units, a net gain of 477.94% for hedgerow units, and a net gain of 11.42% for watercourse units on the basis of the illustrative design.

Recovery of Agricultural Land

4.3.13. Due to the locational constraints required for development of solar farms, the requirement for their siting away from higher grade agricultural land is not

always possible. However, unlike most forms of development which are permanent and/or have much more widespread disturbance during construction, the installation of a solar farm causes minimal long-term damage to soils if appropriately manged during construction. Therefore, at the end of the solar farm's operational period, given their simple construction and decommissioning techniques, all infrastructure can be removed and agricultural activity recommenced.

4.3.14. A report by Solar Energy UK (2024)[26] found that solar farms can give intensively farmed land the opportunity to recover and for carbon to be stored over the operational life of the project. Opportunities for biodiversity enhancements and continued livestock grazing further add to the benefits during this period. Defra's UK Food Security Report (2021)[27] further highlights that the production of wheat can actually have a significant environmental impact due to the lack of biodiversity in conventional grain fields, damage to soil through ploughing, environmental harms caused by fertilisers and pesticides. Therefore, the temporary nature of solar farms can provide much-needed restoration of agricultural land, ensuring their value and efficiency in the long-term.

4.3.15. **ES Chapter 5: Agriculture and Soils** (Doc Ref. 6.1) reports benefits associated during the operation of the Scheme due to the improvement to soil structure and carbon sequestration because of the temporary restriction on agricultural use.

4.3.16. In addition to the environmental recovery for the agricultural land, the Solar Energy UK (2024) report highlights that solar farms can provide diversification for landowners by adding a consistent income stream to their business which is not dependant on agriculture. This provides longer-term security against volatile wholesale food commodity markets and yields and offers support to their wider farming business. **ES Chapter 14: Socio-Economics and Land Use** (Doc Ref. 6.1) reports beneficial (not significant) impacts associated with the diversification of income for landowners within the Solar Development Area.

Community Benefit Fund

4.3.17. While not a consideration for the decision on the Scheme by the Secretary of State, the Applicant is committing to a Community Benefit Fund of

[26] Solar Energy UK (2024). Factsheet: Solar Farms and Agricultural Land. Accessed at: https://solarenergyuk.org/wp-content/uploads/2024/06/FactSheet-Solar-Farms-and-Agricultural-Land-2024.pdf [Accessed January 2026]

[27] Department for Environment Food and Rural Affairs (2021). Uk Food Security Report 2021. Accessed at: https://assets.publishing.service.gov.uk/media/62874ba08fa8f55622a9c8c6/United_Kingdom_Food_Security_Report_2021_19may2022.pdf [Accessed January 2026]

approximately £500,000 per year of operation of the Scheme (up to £20 million in total assuming a 40-year operational period) should the Scheme gain consent.

4.3.18. Suggested uses for the fund identified through consultation activities include: improvements to existing community facilities (such as village halls); sports facilities (such as all-weather 3G pitches); subsidised solar PV panels and electric vehicle charging points for community use; traffic calming measures through local villages and road improvements; support for community gardens and food growing; and wider STEM training and education opportunities (such as a nature education fund). The Applicant has engaged, and continues to, with interested stakeholders, and the annual money available is likely to be administered via a number of different organisations in order to benefit as much of the community in the vicinity of the project and impacts as possible. This will include local parish council's, local authorities, and independent third-party community fund managers.

4.3.19. It is recognised by the Applicant, that the Community Benefit Fund sits outside of the DCO Application. Therefore, the Secretary of State cannot apply any positive weight to the provision of the fund when considering the Scheme and the planning balance.

4.4. Conclusion

4.4.1. National policy is unequivocal that climate change and energy security are two of the most important issues the UK is facing.

4.4.2. Not only does national policy establish an urgent need for new, low carbon energy infrastructure, it specifically identifies solar energy as a core part of its strategy for low-cost decarbonisation. It is essential to move at pace to rapidly deliver between 45-47 GW of solar energy generation by 2030. The Scheme strongly supports all of these ambitions, meeting the definition of critical national priority infrastructure. Therefore, substantial weight should be ascribed.

4.4.3. The Scheme would also provide further benefits in addition to its urgent need including the co-located BESS to support load-shifting and smoothing the generation of the grid, a new permissive path, biodiversity net gain, commitments to skills and employment, and allow the land to recover from agricultural use throughout the lifetime of the Scheme. These wider benefits of the Scheme are also considered to carry substantial weight.

5. Planning Assessment

5.1. Overview

5.1.1. This section presents an appraisal of compliance of the Scheme with the main policy requirements that are applicable to the Scheme, which have emerged from a review of the documents identified in Section 3 of this Planning Statement. Those specific policy requirements are detailed in the sections below, with analysis of compliance provided at **Appendix B: National Policy Statement Accordance Tables** and **Appendix C: NPPF and Local Policy Accordance Tables** to this **Planning Statement** (Doc Ref. 7.1).

5.1.2. As explained in Section 3 of this Planning Statement, EN-1, EN-3, and EN-5 provide the primary policy basis for deciding the DCO Application. EN-1 provides the overarching policy position for energy projects and, specifically, confirms that onshore renewable electricity generation (which includes solar) and electricity transmission infrastructure are designated as CNP infrastructure. Alongside the NPSs, the NPPF and local policies have also been used to assess the Scheme.

5.1.3. The following section does not provide an assessment against the Generic Impacts set out in Section 5.5 Civil and Military Aviation and Defence Interests of EN-1 as the Scheme would not have an impact on civil or military aerodromes, or defence sites. The consideration of glint and glare impacts on airfields is covered in the section below titled 'Glint and Glare'. Further, the relevant generic impacts from Section 5.7 Dust, Odour, Artificial Light, Smoke, Steam and Insect Infestation are dealt within in the sections on statutory nuisance, landscape and visual, and air quality below.

5.2. Overarching Considerations

5.2.1. The below sections evaluate the Scheme against the overarching considerations contained within EN-1. Where further policies relevant to these considerations are contained within the technology-specific NPSs (EN-3 and EN-5), they have been referenced and considered within the sections below.

General Principles and Considerations

5.2.2. Reflective of the level and urgency of need for low carbon energy infrastructure, paragraph 4.1.3 of EN-1 directs the Secretary of State to:

"*start with a presumption in favour of granting consent to applications for energy NSIPs. That presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused*".

5.2.3. When weighing the adverse impacts against the benefits of energy NSIPs, paragraph 4.1.5 of EN-1 states that the Secretary of State should take into

account both the potential benefits, including the contribution to meeting the need for the Clean Power 2030 Mission and net zero, energy infrastructure, job creation, reduction of geographical disparities, environmental enhancements, and any long-term or wider benefits. Additionally, any potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce, mitigate, or compensate for any adverse impacts, following the mitigation hierarchy, should be taken into account.

5.2.4. Importantly, in relation to CNP infrastructure, paragraph 4.1.7 of EN-1 states that "*it is likely that the need case will outweigh the residual effects not capable of being addressed by application of the mitigation hierarchy, in all but the most exceptional cases*". This presumption does not apply to residual impacts which present an unacceptable risk to, or interference with, human health and public safety, defence, public safety, offshore navigation or onshore flood and coastal erosion risk.

Critical National Priority for Low Carbon Infrastructure

5.2.5. Paragraphs 4.2.24 - 4.2.26 of EN-1 cover the Applicant's assessment and require the applicant to show how their proposals meet the requirements of the NPS, applying the mitigation hierarchy and any other relevant legal requirements. Applicants are required to "*apply the mitigation hierarchy and demonstrate that it has been applied. They should also seek the advice of the appropriate SNCB or other relevant statutory body when undertaking this process. Applicants should demonstrate that all residual impacts are those that cannot be avoided, reduced or mitigated*".

5.2.6. Paragraph 4.2.28 of EN-1 relates to the Secretary of State's decision making. It affirms that "*where residual non-HRA or non-MCZ impacts remain after the mitigation hierarchy has been applied, these residual impacts are unlikely to outweigh the urgent need for this type of infrastructure. Therefore, in all but the most exceptional circumstances, it is unlikely that consent will be refused on the basis of these residual impacts*".

5.2.7. The Applicant has applied the mitigation hierarchy as detailed within **ES Chapter 4: Overview of the EIA Process** (Doc Ref. 6.1) and each of the topic-specific ES Chapters. A summary of the mitigation required is recorded in the **Environmental Mitigation and Commitments Register** (Doc Ref. 7.7), with the mitigation measures themselves secured through a suite of environmental management plans that are controlled by the Schedule 2 Requirements to the **Draft DCO** (Doc Ref. 3.1). Outline versions of the relevant management plans are submitted with the DCO Application, with the Requirements providing for the approval of detailed management plans that must be substantially in accordance with the corresponding outline plans.

5.2.8. The CNP status is required to be relied upon where significant adverse residual effects are anticipated after applying mitigation. These instances occur in relation to the following topics:

- Agriculture and Soils;
- Cultural Heritage;
- Landscape and Visual;
- Noise and Vibration;
- Traffic and Access (in relation to cumulative effects on road safety only); and
- Intra-Project Effects.

5.2.9. With regard to Habitats Regulations Assessment (HRA) derogations for CNP infrastructure, paragraphs 4.2.31 and 4.2.32 of EN-1 require applicants to continue to assess HRA residual impacts under the Habitats Regulations framework, and if following an Appropriate Assessment, there is a residual adverse impact on the integrity of a site (either alone or in-combination), the Secretary of State can consider making a derogation case.

5.2.10. If required to consider making a derogation case, the Secretary of State is expected to have a starting position "*that energy security and decarbonising the power sector to combat climate change'*:

- *Requires a significant number of deliverable locations for CNP Infrastructure and for each location to maximise its capacity. This NPS imposes no limit on the number of CNP infrastructure projects that may be consented. Therefore, the fact that there are other potential plans or projects deliverable in different locations to meet the need for CNP Infrastructure is unlikely to be treated as an alternative solution. Further, the existence of another way of developing the proposed plan or project which results in a significantly lower generation capacity is unlikely to meet the objectives and therefore be treated as an alternative solution; and*
- *Are capable of amounting to imperative reasons of overriding public interest (IROPI) for HRAs, and, for MCZ assessments, the benefit to the public is capable of outweighing the risk of environmental damage, for CNP Infrastructure*" (paragraph 4.2.34).

5.2.11. Where Imperative Reasons Overriding Public Interest (IROPI) can be demonstrated, compensatory measures must be secured.

5.2.12. The Applicant has prepared **ES Appendix 9-14: HRA Report** (Doc Ref. 6.3), which sets out the Appropriate Assessment undertaken by the Applicant. It concludes no significant adverse effects on the integrity of any Habitats Sites either alone or in-combination with cumulative schemes or plans. Policy compliance is further detailed in Section 5.6 of this Planning Statement.

Environmental Effects/Considerations

5.2.13. Paragraphs 4.3.1 and 4.3.2 of EN-1 require projects subject to the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 to be accompanied by an ES describing the aspects of the environment likely to be significantly affected by that project.

5.2.14. The Applicant has prepared and submitted an ES which comprises **Volume 6** of this Application for development consent. Where flexibility has been sought, justification is provided in **ES Chapter 2: The Scheme** (Doc Ref. 6.1) and **ES Chapter 4: Overview of the EIA Process** (Doc Ref. 6.1), which includes details regarding the application of the 'Rochdale Envelope' approach.

Consideration of Alternatives

5.2.15. Paragraph 4.3.9 of EN-1 establishes there is no "*general requirement to consider alternatives or to establish whether the proposed project represents the best option from a policy perspective. Although there are specific requirements in relation to compulsory acquisition and habitats sites, the NPS does not change requirements in relation to compulsory acquisition and habitats sites*". The specific circumstances which require the Applicant to consider alternatives are:

- Where a proposal would involve the compulsory acquisition of land or interests in land (paragraph 4.3.9 of EN-1). The Applicant is seeking powers of compulsory acquisition as part of this DCO Application. The justification for the powers sought is set out in the **Statement of Reasons** (Doc Ref. 4.1), within **Appendix D: Site Selection Report** (Doc Ref. 7.1) and **ES Chapter 3: Alternatives and Design Evolution** (Doc Ref. 6.1) setting out details of alternatives considered. Together, these documents demonstrate there are no alternatives to compulsory acquisition.
- Where a development would be located near a sensitive receptor site for air quality (paragraph 5.2.7 of EN-1). The Site is not located within or near an Air Quality Management Area, therefore, alternatives are not required to be considered further from an air quality perspective.
- Where the development would lead to significant harm to biodiversity and ecological conservation interests (Section 5.4 of EN-1). **ES Chapter 9: Ecology and Biodiversity** (Doc Ref. 6.1) does not report any significant harm to biodiversity or conservation interests, therefore, the consideration of alternatives is not required in this respect.
- Where a development would be located wholly or partly within Flood Zone 2 or Flood Zone 3 (Section 5.8 of EN-1). The majority of the Site is within Flood Zone 2 and Flood Zone 3, therefore, the Sequential Test must be exercised. If following application of the Sequential Test it is not possible for the Scheme to be located in areas of lower flood risk (outside of Flood Zone 3 for critical infrastructure), the Exception Test must be applied. This

provides a method of allowing necessary development, including essential infrastructure, to proceed in situations where suitable sites at a lower risk of flooding are not available. Section 5.10 of this Planning Statement discusses the Sequential Test and Exception Test, and should be read in conjunction with **ES Appendix 11-3: Flood Risk Assessment** (Doc Ref. 6.3).

- Where a development would be located within a National Park, the Broads, or a National Landscape (Section 5.10 of EN-1). The Scheme is not located in or near any national landscape designations, therefore no further consideration of alternatives is required in respect of these landscape designations.

5.2.16. Notwithstanding, paragraphs 4.3.15 to 4.3.17 of EN-1 sets out the requirement for applicants to provide detail of the consideration of any reasonable alternatives studied. It recognises that other NPSs may set out a specific requirement for the consideration of alternatives.

5.2.17. Paragraphs 2.9.14 and 2.9.15 of EN-5 require that where the nature or proposed route of an overhead line will likely result in particularly significant landscape and visual effects, applicants should demonstrate that they have given due consideration to the costs and benefits of feasible alternatives to the overhead line. This should be set out in the ES including the rationale for eschewing feasible alternatives and the mitigation cost-calculation methodology this rationale may rely upon. This policy requirement is addressed in Section 5.11 of this Planning Statement and details regarding the selection of an overhead line are provided in **ES Chapter 3: Alternatives and Design Evolution** (Doc Ref. 6.1).

5.2.18. Paragraph 4.3.22 of EN-1 helps set the framework for Secretary of State decision making when considering alternatives, and should "*be guided by the following principles when deciding what weight should be given to alternatives*:

- *the consideration of alternatives in order to comply with policy requirements should be carried out in a proportionate manner; and*
- *only alternatives that can meet the objectives of the proposed development need to be considered*."

5.2.19. The Applicant has set out the reasonable alternatives studied in **ES Chapter 3: Alternatives and Design Evolution** (Doc Ref. 6.1) in line with the requirements of EN-1, EN-5 and the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations 2017). **Appendix D: Site Selection Report** (Doc Ref. 7.1) describes the Applicant's approach to site selection taking into account the relevant policies within the NPSs (i.e. Section 2.2 of EN-3 and Section 2.3 of EN-5). The **Design Approach Document** (Doc Ref. 7.3) also provides a narrative regarding alternatives and design development of the Scheme.

Health

5.2.20. Paragraphs 4.4.1 to 4.4.3 of EN-1 recognise the health benefits of access to energy, but notes that the construction of energy infrastructure and its production, distribution and use may have adverse impacts on human health, including indirect impacts such as on access to public services, transport or open space.

5.2.21. Paragraph 4.4.4 of EN-1 requires an ES to assess the effects on human health for each element of the project. This should include the cumulative impact on health where one or more projects could impact people simultaneously (paragraph 4.4.5 of EN-1).

5.2.22. When making its decision, the Secretary of State shall take into account that "*those aspects of energy infrastructure which are most likely to have a significantly detrimental impact on health are subject to separate regulation (for example for air pollution) which will constitute effective mitigation of them, so that it is unlikely that health concerns will either by themselves constitute a reason to refuse consent or require specific mitigation under the Planning Act 2008*" (paragraph 4.4.7 of EN-1).

5.2.23. The Applicant has prepared **ES Chapter 10: Human Health** (Doc Ref. 6.1). It reports on the likely human health effects associated with the following topics:

- Air quality, dust and odour;
- Electric and magnetic fields;
- Employment and training opportunities;
- Landscape and visual;
- Noise and vibration;
- Access to PRoW and active travel;
- Traffic and access;
- Social infrastructure; and
- Mental health.

Air Quality, Dust and Odour

5.2.24. Air quality impacts arising during the construction and decommissioning phases would be temporary in nature and following the good practice measures secured within the **Outline CEMP** (Doc Ref. 7.10) and **Outline DEMP** (Doc Ref. 7.12), any impacts relating to dust soiling or human health from dust would not be significant. Overall, the likely effect on human health arising from impacts on air quality, dust and odour during the construction and decommissioning phases is assessed to be negligible (not significant) for the general population and minor adverse (not significant) for the vulnerable population.

5.2.25. Dust emissions during operation will be managed, as set out in the **Outline OEMP** (Doc Ref. 7.11), including ensuring vehicles entering and leaving the Site are covered to prevent the escape of materials during transport. Therefore, there are no likely significant residual air quality impacts predicted during operation and maintenance. No effect on human health due to air quality, dust or odour is predicted during the Scheme's operation.

Electric and Magnetic Fields

5.2.26. **ES Chapter 16: Other Environmental Topics** (Doc Ref. 6.1) and the **Electric and Magnetic Fields Compliance Assessment** (Doc Ref. 7.8) identified no potential significant effects. The Scheme will comply with the UK public exposure limits for EMFs. For users of PRoWs, any EMF effects are expected to be minimal and not significant due to their transient exposure. Therefore, it is considered that EMFs will have no effect on human health.

Employment and Training Opportunities

5.2.27. The employment requirements associated with the Scheme's construction and decommissioning are relatively small compared to the labour pool of construction workers in the area. The **Outline SSCEP** (Doc Ref. 7.17) sets out a variety of interventions which the Applicant may pursue post-consent to maximise the economic benefits of the Scheme, for example promoting local employment, apprenticeships, and education. As reported in **ES Chapter 14: Socio-Economics and Land Use** (Doc Ref. 6.1), this results in a short-term temporary minor beneficial effect for both the general population and vulnerable groups which is considered not significant.

5.2.28. During operation, the additional jobs generated by the Scheme would contribute to local job growth. However, the overall change would be very small in the context of the total number of jobs locally. Operational employment as a result of the Scheme has been assessed as a long-term negligible beneficial effect, which is not significant.

Landscape and Visual

5.2.29. During the construction and decommissioning phases, although significant adverse effects are reported within **ES Chapter 12: Landscape and Visual** (Doc Ref. 6.1), the likely landscape and visual effects on human health is assessed to be short-term and temporary. Further, the number of receptors likely to experience significant adverse effects is also deemed to be a small minority of the study area population overall. The effect on human health is therefore considered to be minor adverse (not significant) effect.

5.2.30. During the operational phase, significant landscape and visual effects are reported. The number of receptors likely to experience significant adverse effects is also deemed to be a small minority of the study area population overall. As the effects would be long-term but reversible, the likely effect on health

arising from landscape and visual effects is reported as minor adverse and not significant.

Noise and Vibration

5.2.31. **ES Chapter 13: Noise and Vibration** (Doc Ref 6.1) assesses potential direct effects due to construction noise and vibration emissions, and indirect effects due to construction traffic noise. It concludes that construction activities are likely to result in significant effects at residential receptors along Broad Gate (RG53) during night-time horizontal directional drilling (HDD) construction activity (if these works are required), and traffic noise effects at residential receptors along Langary Gate Road. Despite the measures outlined within the **Outline CTMP** (Doc Ref. 7.13), residual effects are predicted to remain significant at the residential receptors along Langary Gate Road due to the proximity of the site access and intensity of temporary construction traffic flows during the peak. Construction activities are anticipated to result in negligible or minor adverse (not significant) effects at all other receptors.

5.2.32. **ES Chapter 13: Noise and Vibration** (Doc Ref 6.1) explains that groups vulnerable to noise and vibration impacts include night shift workers (including those working on the Scheme), elderly residents, populations with higher levels of deprivation, unemployed residents, and those with health conditions limiting daily activities. These vulnerable groups are likely to have a high sensitivity to noise impacts due to a greater proportion of time typically spent at home, existing health conditions, reduced ability to adapt to environmental changes, higher risk of sleep disturbance, and increased susceptibility to stress from environmental changes.

5.2.33. A small minority of the study area population will be affected (16 of the 460 homes which fall into the study area). The effects during the decommissioning phase are expected to be similar to, or lower than, those identified for the construction phase. Overall, the likely effect on health arising from noise and vibration effects during the construction and decommissioning phases of the Scheme is assessed to be short-term temporary minor adverse (not significant) for the general population and vulnerable groups.

5.2.34. A material change in the experience of using the PRoW as a whole as a result of noise emissions from the Scheme, which could affect PRoW users' health or quality of life, is not anticipated. This is owing to the linear nature of PRoWs, the range of noise impacts along them that forms the ambient noise environment, and the transient usage of a PRoW.

5.2.35. During the operational phase, noise levels from operational plant would be mitigated through the measures set out within the **Outline OEMP** (Doc Ref. 7.11). Overall, the likely effect on health arising from impacts on noise during the operation phase of the Scheme is assessed to be long-term minor adverse for both the general population and vulnerable groups, which is considered not significant.

Access to PRoW and Active Travel

5.2.36. No PRoW will be subject to permanent diversions or closures. It is anticipated that no PRoW within the Order Limits of the Scheme will require temporary closure or diversions, with the exception of PRoW Wstn/3/1 and PRoW Crow/12/1. As set out in the **Outline PRoW Management Plan (MP)** (Doc Ref. 7.15), PRoW Wstn/3/1 and PRoW Crow/12/1 are footpaths located within the Grid Connection Route and Inter-Array Connections respectively, and, if required, may be closed for 4 to 8 weeks during construction to enable stringing activities.

5.2.37. In addition, a temporary diversion corridor has been identified for the Common Land on Martins Road to facilitate construction activities. The PRoWs and Common Land will be managed in a similar manner during the decommissioning phase. The overall effect on PRoW and active travel routes as a result of the construction and decommissioning of the Scheme is considered negligible for all PRoW and minor adverse for the Common Land on Martins Road for both the general population and vulnerable groups, both of which are considered not significant.

5.2.38. The Scheme has been designed to ensure that there is no requirement for diversions or closures to PRoW during operation. All PRoW temporarily affected during construction would be fully reinstated to their permanent alignments for the operational phase, as set out in **Outline PRoWMP** (Doc Ref. 7.15).

5.2.39. A permissive path will be provided connecting PRoWs between Queens Bank and Shepeau Stow, following the boundary of the Settlement of Cate's Cove Corner Scheduled Monument. The permissive path will be located within a corridor that measures approximately 20m in width and will be suitable for pedestrians, cyclists and horse riders, also providing information boards on the historic and natural environment. A long-term minor beneficial (not significant) effect on access to PRoW and active travel for the general population and vulnerable groups as a result of the Scheme's operation.

Traffic and Access

5.2.40. During construction and decommissioning, temporary road closures will be for very short periods within the construction phase with alternative routes provided and mitigation measures set out in the **Outline CTMP** (Doc Ref. 7.13), **Outline CEMP** (Doc. Ref. 7.10) and **Outline DEMP** (Doc Ref. 7.12).

5.2.41. The likely effect is on human health associated with traffic and access during construction is considered to be minor adverse (not significant). This includes effects on driver and passenger delay, severance, non-motorised user amenity, fear and intimidation, road safety, and large loads.

5.2.42. During operation, the Scheme would generate a low level of vehicle trips and the overall effect on health for all populations as a result of transport and access is negligible adverse, which is not significant.

Social Infrastructure

5.2.43. For vulnerable groups, the impact during construction and decommissioning on the availability of social infrastructure (including healthcare facilities, schools, open spaces and community and leisure assets) and accessibility is deemed a minor adverse (not significant effect) owing to the pattern of workforce demand and the temporary nature of the impacts. For the general population, this is deemed to be a negligible adverse (not significant) effect.

5.2.44. Given the limited number of operational workers likely to be generated from outside the study area, alongside the not significant traffic and access impacts, it is assessed that the Scheme would have no effect on the general population and vulnerable groups.

Mental Health

5.2.45. The construction and decommissioning phases of the Scheme have the potential to give rise to both adverse and beneficial effects on mental health. Potential adverse mental health effects relate to noise and vibration, access to PRoW and active travel, traffic and access; landscape and visual and social infrastructure impacts. However, there would be potential beneficial mental health effects associated with the employment and training opportunities due the increased income, sense of purpose and community associated with these opportunities.

5.2.46. The Scheme's impact on mental health is considered to be low, when considering the overall balance of adverse and beneficial effects. It is considered that the Scheme would have minor adverse effects on both the general population and on vulnerable groups. These are considered not significant.

Summary

5.2.47. **ES Chapter 10: Human Health** (Doc Ref. 6.1) reports no significant adverse effects on human health following the application of mitigation measures and there is no reason to refuse consent or require specific mitigation in relation to health as per paragraph 4.4.7 of EN-1.

Environmental and Biodiversity Net Gain

5.2.48. Paragraph 4.6.1 of EN-1 directs projects to "*not only avoid, mitigate and compensate harms, following the mitigation hierarchy, but also consider whether there are opportunities for enhancements*". While biodiversity net gain is not a mandatory requirement for NSIP projects within England at the point of application, paragraph 4.6.6 of EN-1 directs energy NSIPs to "*seek opportunities to contribute to and enhance the natural environment by providing net gains for biodiversity, and the wider environment where possible*". It allows for biodiversity net gain to be delivered on-site, or wholly or partially off-site, with details to be

provided within the application for development consent (paragraph 4.6.11 of EN-1).

5.2.49. Within EN-3, paragraph 2.10.81 recognises "*solar farms have the potential to increase the biodiversity value of a site, especially if the land was previously intensively managed. In some instances, this can result in significant benefits and enhancements beyond biodiversity net gain, which result in wider environmental gains which is encouraged*". Paragraph 2.5.1 of EN-5 endorses the biodiversity net gain requirements in EN-1 and recognises that the linear nature of electricity networks can provide for opportunities to reconnect important habitats and connect people to the environment.

5.2.50. The Scheme has committed to deliver a Biodiversity Net Gain (BNG) of at least 10% for area-based habitats and watercourses, and at least 400% for hedgerows, as secured within Schedule 2 of the **Draft DCO** (Doc Ref. 3.1). This has been assessed through the **Biodiversity Net Gain Report** (Doc Ref. 7.9) which calculates that the Scheme could deliver a net gain of 14.60% for habitat area units, a net gain of 477.94% for hedgerow units, and a net gain of 11.42% for watercourse units on the basis of the illustrative design.

Good Design

5.2.51. Paragraphs 4.7.1 to 4.7.4 of EN-1 emphasise the importance of good design of energy projects. Paragraph 4.7.2 states the application of good design of "*should produce sustainable infrastructure sensitive to place, including impacts on heritage, efficient in the use of natural resources, including land-use, and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible*". It goes on to acknowledge that "*the nature of energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area*".

5.2.52. Paragraph 4.7.7 of EN-1 requires applicants to "*demonstrate in their application documents how the design process was conducted and how the proposed design evolved. Where a number of different designs were considered, applicants should set out the reasons why the favoured choice has been selected*". Applicants should also consider any advice provided within the technology-specific NPSs.

5.2.53. Paragraph 2.5.2 of EN-3 states "*proposals for renewable energy infrastructure should demonstrate good design, particularly in respect of landscape and visual amenity, opportunities for co-existence/co-location with other marine and terrestrial uses, and in the design of the project to mitigate impacts such as noise and effects on ecology and heritage*". Specifically in relation to solar, paragraph 2.10.52 sets out additional factors when considering the design and layout of sites, including proximity to available grid capacity to accommodate the scale of generation, orientation, topography, previous land–use, and ability to mitigate environmental impacts and flood risk.

5.2.54. The Applicant has prepared and submitted a **Design Approach Document** (Doc Ref. 7.3), which describes the how the Applicant has taken into account good design and how the Scheme has evolved to respond to stakeholder and consultation feedback, and environmental constraints. Design Principles have evolved throughout the design process, being informed and refined by stakeholder engagement, consultation feedback, technical studies and environmental assessments. They have been used to steer and influence the design of the Scheme to avoid and reduce adverse impacts wherever practicable, make the most of the opportunities for enhancement and balance the need for flexibility and certainty within the DCO Application.

5.2.55. As a result of the design approach adopted by the Applicant, the Scheme would deliver a number of environmental, social and economic benefits in addition to the generation of secure, low cost, decarbonised, clean, renewable energy. These include significant areas of new habitats that respect and enhance features within the landscape, delivering a BNG and improvements in ecological connectivity.

5.2.56. The **Design Approach Document** (Doc Ref. 7.3) is supported by the **Design Parameters** (Doc Ref. 7.4), which secures the design-related commitments to be adhered to post-consent in accordance with paragraph 4.7.5 of EN-1.

5.2.57. Paragraph 2.4.2 of EN-5 requires consideration of the Holford and Horlock Rules and Electricity Transmission Design Principles when developing electricity networks projects. At the time of writing the Electricity Transmission Design Principles have not been published. The Applicant has provided an assessment of the Scheme against the Holford and Horlock Rules within the appendices to the **Design Approach Document** (Doc Ref. 7.3).

5.2.58. A guiding principle of the Applicant's design for the transmission infrastructure is the "*government's position that overhead lines should be the strong starting presumption for electricity networks developments in general*" as stipulated within paragraph 2.9.21 of EN-5. This presumption is reversed when a proposed development will cross part of a nationally designated landscape. The Scheme does not cross part of a nationally designated landscape, and therefore this strong starting presumption in favour of overhead lines remains applicable. In any case, **ES Chapter 3: Alternatives and Design Evolution** (Doc Ref. 6.1) considers alternatives in line with paragraph 2.9.14 and 2.9.15 of EN-5 and concludes that an overhead line remains appropriate.

Climate Change Adaptation and Resilience

5.2.59. Section 4.10 of EN-1 emphasises the importance of ensuring new energy infrastructure is resilient to the possible impacts of climate change. With the UK already experiencing changes to weather pattens, which is likely to accelerate with increased global carbon emissions, it is necessary for adaptation to manage the potential impacts of these changes which are already occurring.

5.2.60. Paragraph 4.10.12 of EN-1 affirms it is appropriate to take a risk-adverse approach to elements of infrastructure which are critical to the safety of its operation.

5.2.61. Further to the policies within EN-1, both EN-3 and EN-5 contain technology-specific policies.

5.2.62. Paragraph 2.4.11 of EN-3 acknowledges that that solar PV sites may be proposed in low lying areas. Where this is the case, applicants should consider how proposals would be resilient to:

- increased risk of flooding; and
- impact of higher temperatures.

5.2.63. Paragraph 2.3.2 of EN-5 sets out specific requirements for electricity networks where they may be vulnerable:

- flooding, particularly for substations that are vital to the network; and especially in light of changes to groundwater levels resulting from climate change;
- the effects of wind and storms on overhead lines;
- higher average temperatures leading to increased transmission losses;
- earth movement or subsidence caused by flooding or drought (for underground cables); and
- coastal erosion – for the landfall of offshore transmission cables and their associated substations in the inshore and coastal locations respectively.

5.2.64. **ES Chapter 7: Climate Change** (Doc Ref. 6.1) assesses the impacts of the Scheme within the context of climate change. The chapter is supported by **ES Appendix 7-2: Climate Change Risk Register** (Doc Ref. 6.3), which considers the impacts of climate change on the Scheme. In addition, **ES Appendix 7-3: In-Combination Climate Impacts** (Doc Ref. 6.3) provides further detail on impacts on surrounding receptors whilst combining the effects of the Scheme and climate change. **ES Appendix 11-3: Flood Risk Assessment** (Doc Ref. 6.3) assesses the flood risk impacts associated with the Scheme.

5.2.65. No significant adverse effects are reported within **ES Chapter 7: Climate Change** (Doc Ref. 6.1) in relation to climate risk to the Scheme or the climate risk on surrounding receptors. A significant beneficial effect is reported in relation to residual greenhouse gas emissions. This is due to the Scheme's ability to lower the carbon intensity of UK grid electricity and aid in the pathway to net zero by 2050.

Network Connection

5.2.66. Section 4.11 of EN-1 acknowledges the importance of a network connection for energy generation projects, with transmission network infrastructure associated

with nationally significant low carbon infrastructure considered as CNP infrastructure (paragraph 4.11.4 of EN-1).

5.2.67. The Applicant has submitted a **Grid Connection Statement** (Doc Ref. 7.5), which provides details of how the Scheme will be connected to the NETS. The Applicant initially received a grid connection offer in November 2022 which confirmed a connection would be facilitated by a spare bay within the design of the planned Weston Marsh 400 kV Substation. The offer stipulated a 750 MW export and 350 MW import BESS capacity with a connection date of 2033.

5.2.68. As part of the Connections Reform process by NESO, the Applicant's offer was varied to a Gate 1 offer. This initially indicates a connection date post 2035 (as Gate 2 offers were made up to the period ending 2035). However, an earlier connection may be possible within the 2031 to 2035 window should the Applicant be successful in reapplying through future Gate 2 application rounds.

5.2.69. For the avoidance of doubt, the Applicant intends to submit a Gate 2 application at the earliest possibility. The exact dates for future application rounds will be confirmed by NESO once there is greater clarity on the available connection capacity of the relevant grid infrastructure beyond 2030. The Applicant notes that a wide range of both NSIP and non-NSIP energy projects have been placed in a similar position, at this stage of the Connections Reform, with ongoing uncertainty across the energy industry as to final connection dates and application rounds.

5.2.70. Paragraph 4.11.6 of EN-1 recognises that "*applicants may wish to take a commercial risk where they have not received or accepted a formal offer of a grid connection from the relevant network operator at the time of the application. In this situation applicants should provide information as part of their application confirming that there is no obvious reason why a network connection would not be possible*".

5.2.71. The Applicant is of the view that Meridian Solar Farm would be a good candidate for a Gate 2 offer at the next round for the following reasons:

- There has been no formal change to the completion date for the Grimsby to Walpole project which would provide the PoC (as the project is delivering two new Weston Marsh substations) and the capacity for transmission from the Scheme. The anticipated date for completion of the Grimsby to Walpole project and associated substations is 2033. Engagement with National Grid has indicated that ongoing planning under that project is continuing to accommodate sufficient capacity for Meridian Solar within the substation designs, in line with the original offer received by Meridian Solar.
- NESO have indicated there will be further opportunities to reapply indicating that there is potential for spare capacity once initial offers are confirmed and/or there is further certainty in respect of the capacity and timeframes of the upgraded grid infrastructure. Continued journey through

the planning process further demonstrates readiness in support of future applications to NESO.

5.2.72. This demonstrates that there is no clear reason why a network connection (Gate 2 offer) would not be granted by NESO as part of the next available application round or for the period beyond 2035.

5.2.73. The **Draft DCO** (Doc Ref. 3.1) as submitted proposes a seven-year implementation period for the commencement of construction from the grant of consent. This enables flexibility for the Scheme to commence construction in 2028 in time for a connection date of 2033, as per its original offer, or to delay commencement of construction up until 2034 should any final offer propose a post-2035 connection date. The Applicant has considered how a change in the assessment years would alter the conclusions of the ES should the latter be the case (further details are set out in **ES Chapter 4: Overview of the EIA Process** (Doc Ref. 6.1)).

5.2.74. This accords with the requirements of paragraph 4.11.6 of EN-1, which also allows for applicants to take a commercial risk where they have not received or accepted a formal offer of a grid connection at the time of application. The position of the Applicant is not unusual in the context of the Connection Reforms process, and several renewable energy DCOs have been granted over the past year subject to similar uncertainty as to the outcomes of that process. It is ultimately the commercial risk of the Applicant to proceed subject to a final formal offer, and in the very unlikely circumstance that such an offer is not received (for the reasons outlined above) the DCO would not be implemented.

5.2.75. Paragraph 4.11.8 of EN-1 recognises that it may not be possible to coordinate applications and "*different elements of a project may have different lead-in times and be undertaken by different legal entities subject to different commercial and regulatory frameworks*" as is the case with this Scheme. NGET is the entity which will consent and deliver the planned Weston Marsh substations, to which the Scheme would connect. It released further detail on the siting of the substations as part of its targeted consultation held in November 2025, however, engagement with NGET has indicated that these substations, and the final routing of the Grimsby to Walpole and Weston Marsh to East Leicestershire overhead lines are still subject to ongoing design work which may result in future consultations by NGET. The Applicant has sought a proportionate degree of flexibility within its DCO Application (and fully assessed within its ES) to accommodate this uncertainty, providing flexibility for different routing alignments in the final section of the Grid Connection Route. However, it was not considered appropriate or feasible to seek to align the consultation and application programmes of these schemes entirely, particularly where NGET's programme remains subject to further change.

5.2.76. Further, paragraph 4.11.8 goes on to state that "*Applicants may therefore decide to submit separate applications for each element. Where this is the case, the*

applicant should include information on the other elements and explain the reasons for the separate application confirming that there are no obvious reasons for why other elements are likely to be refused". NGET's most recent consultations for Grimsby to Walpole and the Weston Marsh area confirm it intends to progress its plans. Further, there are other NSIPs that rely on the delivery of Grimsby to Walpole and the Weston Marsh Substations including Outer Dowsing Offshore Wind Farm and Ossian Offshore Wind Farm. There is no obvious reason why the Weston Marsh Substations (to be delivered by NGET) would not come forward.

5.2.77. In addition to the policies within EN-1, paragraphs 2.10.13 to 2.10.18 of EN-3 describe how network connection may influence site selection and the design of solar PV development. Paragraph 2.10.16 of EN-3 recognises that "*the connection voltage, availability of network capacity, and the distance from the solar farm to the existing network can have a significant impact on the commercial feasibility of a development proposal*".

5.2.78. As explained in **Appendix D: Site Selection Report** (Doc Ref. 7.1), these factors have influenced site selection including that:

- the Applicant's initial grid connection agreement which required the Scheme to connect to the NETS at 400 kV (noting there has been no indication from National Grid that this requirement would change as part of ongoing engagement);
- there is limited land available that can accommodate large scale solar within close proximity to the planned Weston Marsh Substations; and
- the choice of overhead transmission lines to connect the Scheme to the planned Weston Marsh Substation considers the commercial feasibility of the Scheme.

5.2.79. As set out above, submitting a DCO Application without a grid connection, or with some uncertainty over the exact location, is not incompatible with the relevant policies within the NPSs. The Applicant has prepared a DCO Application which adopts a proportionate approach, identifying the likely location for the Weston Marsh B Substation, based on the information provided by NGET, so that the ES appropriately reflects the likely significant adverse effects associated with the Grid Connection Route near Weston Marsh. This approach was recently confirmed as appropriate by the Secretary of State at paragraph 6.21 of its decision letter for the Five Estuaries Offshore Wind Farm project:

"The Secretary of State considers that the Applicant's reasoning is compelling and has therefore accepted the Applicant's position in relation to this matter. The Secretary of State considers the precise location and layout of the EACN Substation is not yet known yet and the Applicant does not and cannot have a point of connection at this time, and therefore flexibility is required. The Secretary of State

notes the Applicant needs to be able to access the cables, and rights for the cables and for access, are therefore required over the whole area, but would only be taken over the final route and access route".

Pollution Control and Other Environmental Regulatory Regimes

5.2.80. Section 4.12 of EN-1 explains that the planning and pollution control systems, while separate, are complementary to one another. Issues relating to discharges or emissions from a proposal may be subject to separate regulation under the pollution control framework.

5.2.81. Paragraph 4.12.9 of EN-1 states that the Secretary of State should focus on whether the development itself is an acceptable use of the land and the impact of that use, rather than the control of processes, emissions and discharges themselves. Paragraph 4.12.10 notes that the Secretary of State should work on the assumption that the relevant pollution control regime will be properly applied and enforced by the relevant regulator. There are no specific pollution control related policies within EN-3 or EN-5.

5.2.82. The **Schedule of Other Consents and Licences** (Doc Ref. 3.3) provides details of the other consents, licences and permits likely to be required to undertake the Scheme which are not incorporated into the **Draft DCO** (Doc Ref. 3.1).

5.2.83. Construction phase environmental impacts would be primarily managed through the implementation of the CEMP. An **Outline CEMP** (Doc Ref. 7.10) has been submitted as part of the DCO Application which sets out the measures, based on good practice guidance, to control the environmental effects arising from the construction of the Scheme. The CEMP will be prepared in accordance with the requirements of the **Outline CEMP** (Doc Ref. 7.10), and approved by the relevant authority in accordance with Schedule 2 of the **Draft DCO** (Doc Ref. 3.1).

5.2.84. Ongoing impacts that may arise during the operation of the Scheme would be controlled through an OEMP and impacts during the decommissioning phase would be controlled through a DEMP. The Applicant has submitted an **Outline OEMP** (Doc Ref. 7.11) and an **Outline DEMP** (Doc Ref. 7.12) as part of the DCO Application.

Safety

5.2.85. Paragraph 4.13.2 of EN-1 recognises that some technologies "*will be regulated by specific health and safety legislation. The application of these regulations is set out in the technology specific NPSs where relevant*". The Scheme is not subject to any specific regulation including the Control of Major Accident Hazards (COMAH) Regulations 2015.

5.2.86. The Applicant has included an assessment of major accidents and disasters within **ES Chapter 16: Other Environmental Topics** (Doc Ref. 6.1), which

concludes that no major accident and disaster effects would arise from the Scheme.

5.2.87. The DCO Application is accompanied by an **Outline Battery Safety Management Plan** (BSMP) (Doc Ref. 7.18) which sets out the key fire safety provisions for the BESS including measures to reduce fire risk and fire protection measures. The Applicant has consulted Lincolnshire Fire and Rescue Service on the contents of this management plan.

5.2.88. Specific to electricity networks infrastructure, paragraph 2.4.3 of EN-5 directs the Secretary of State to "*bear in mind that electricity networks infrastructure must in the first instance be safe and secure, and that the functional design constraints of safety and security may limit an applicant's ability to influence the aesthetic appearance of that infrastructure*". Ensuring the safe and efficient operation of the infrastructure has been a key design principle influencing design development as described within the **Design Approach Document** (Doc Ref. 7.3).

Hazardous Substances

5.2.89. Paragraph 4.14.1 of EN-1 states that all establishments wishing to hold stocks of certain hazardous substances above a certain threshold require hazardous substances consent. The Scheme has no requirement for the storage or use of hazardous substances at or above Controlled Quantities and therefore does not require a hazardous substances consent.

Common Law Nuisance and Statutory Nuisance

5.2.90. Section 158 of the PA 2008 confers statutory authority for carrying out a development consented by a DCO, for the purpose of providing a defence in any civil or criminal proceedings for nuisance, including under Part III of the Environmental Protection Act 1990.

5.2.91. Paragraph 4.15.5 of EN-1 requires applications for energy NSIPs to identify possible sources of nuisance under Section 79(1) of the Environmental Protection Act 1990, including how they may be mitigated or limited so that appropriate requirements can be included in any subsequent DCO.

5.2.92. The Applicant has provided a **Statutory Nuisance Statement** (Doc Ref. 7.6) in accordance with APFP Regulation 5(2)(f) and paragraph 4.15.5 of EN-1.

5.2.93. Article 8 of the **Draft DCO** (Doc Ref. 3.1) deals with defence to proceedings in respect of statutory nuisance and provides that no person is able to bring statutory nuisance proceedings under the Environmental Protection Act 1990 in respect of noise, if the noise is created in the course of carrying out construction, maintenance or decommissioning of the Scheme and for which notice has been given under Section 60 of the Environmental Protection Act 1990 or consent has been obtained under Section 61(9) of the Control of

Pollution Act 1974 or which cannot be reasonably avoided as a consequence of the authorised development.

5.2.94. In these circumstances, statutory authority is conferred by section 158 of the PA 2008. Any potential nuisance effects arising from the authorised development are regulated through the DCO framework and associated requirements, rather than through separate statutory nuisance proceedings under the Environmental Protection Act 1990. This ensures that appropriate controls and remedies remain in place while avoiding parallel regulation of authorised development.

Security Considerations

5.2.95. Paragraph 4.16.1 of EN-1 states that national security considerations apply across all national infrastructure sectors. Paragraph 4.16.4 of EN-1 explains that Government policy is to design proportionate protective security measures into new infrastructure projects at an early stage, where possible.

5.2.96. Paragraphs 2.10.38 to 2.10.40 of EN-3 also emphasise security as a key consideration for developers of solar PV infrastructure, and requiring applicants to assess the landscape and visual impacts of any proposed security measures.

5.2.97. Security measures for the Scheme are embedded into the design of the proposals from the outset and are considered proportionate. Fencing and CCTV would be provided across the Scheme to secure and monitor the solar infrastructure as secured by the **Design Parameters** (Doc Ref. 7.4). The impacts of such are considered and assessed within **ES Chapter 12: Landscape and Visual** (Doc Ref. 6.1).

5.3. Agricultural Land and Soils

5.3.1. Agricultural land quality is assessed by the system of Agricultural Land Classification (ALC) produced by Natural England. The ALC grading system divides land into one of five grades. Soils which are graded either Grade 1, Grade 2 or Grade 3a are considered to be 'best and most versatile' (BMV), meaning that land is of higher quality and versatile for a range of agricultural uses.

5.3.2. Paragraph 5.11.34 of EN-1 requires applicants provide justification for the siting of schemes on BMV land, and directs the Secretary of State to take into account the economic and other benefits of that land.

5.3.3. Paragraph 2.10.21 of EN-3 gives preference to the development of solar PV generation on poor quality land in order to avoid the use of BMV land where possible, but is explicit that "*land type should not be predominating factor in determining the stability of the site*".

5.3.4. Paragraph 2.9.26 of EN-5 states one of the considerations that the Secretary of State should take into account when determining whether to grant consent for

an underground section of a proposed line over an overhead alternative is an applicant's commitment to mitigate potential detrimental effects of undergrounding works on any relevant agricultural land and soils, including BMV land.

5.3.5. As set out in **Appendix D: Site Selection Report** (Doc Ref. 7.1), the Applicant considered Defra's Provisional ALC Mapping when identifying potential sites for development. Taking into account the location of the Applicant's PoC, there is no land of sufficient scale for a 750 MW solar farm that is located within proximity to the PoC which does not have a high likelihood of being BMV land, making complete avoidance of BMV agricultural land impossible for the Scheme.

5.3.6. The Applicant undertook detailed ALC surveys for the Solar Development Area. The results are presented in two formats within **ES Chapter 5: Agriculture and Soils** (Doc Ref. 6.1):

- ALC Grade by Soil Type
- ALC Grade by Individual Auger Point

5.3.7. Both sets of analysis comprise similar levels of BMV land within the Order Limits for the Solar Development Area as summarised below in **Table 5-1**.

Table 5-1 Summary of ALC Grade for the Solar Development Area

ALC Grade	Area Percentage (by soil type)	Area Percentage (by individual auger point)
Grade 1	8.9%	11.3%
Grade 2	7.2%	8.7%
Subgrade 3a	19.0%	19.2%
Subgrade 3b	53.1%	49.1%
Grade 4	0%	0%
Grade 5	0%	0%
Non-agricultural	0.3%	0.3%
Not surveyed	11.4%	11.4%
Total area BMV	**35.2%**	**39.2%**

5.3.8. The Applicant has secured a commitment within the **Outline SMP** (Doc Ref. 7.14) to undertake soil sampling within the Inter-Array Connections and Grid Connection Route post-consent once the siting of the infrastructure which may interfere with soils is better known (e.g. once detailed design confirms final pylon locations). For the purposes of assessment, it has been assumed on a conservative basis that all of the land within the Inter-Array Connections and Grid Connection Route is BMV land (see **ES Figure 5-3** (Doc Ref. 6.2)).

5.3.9. Given the high variability of soils as presented in **ES Chapter 5: Agriculture and Soils** (Doc Ref. 6.1) and illustrated on **ES Figure 5-1** and **ES Figure 5-2** (Doc Ref. 6.2) it is not possible to site the Scheme wholly on land of poorer land quality without substantial fragmentation. Therefore, land type has not been a predominating factor in determining the suitability of the site for hosting the Scheme more generally. Consideration has been given to the siting of more impactful infrastructure (such as the On-Site Substations and BESS Compound) on land of the highest ALC grades, but consideration is also given to other constraints that must be addressed to ensure the safe and efficient operation of the Scheme, e.g. flood risk. These constraints which need to be balanced are described in more detail within the **Design Approach Document** (Doc Ref. 7.3).

5.3.10. **ES Chapter 5: Agriculture and Soils** (Doc Ref. 6.1) reports that significant effects on BMV land would be realised in relation to the very high sensitivity Grade 1 and 2 land (which are not differentiated within the ISEP guidelines). Although Subgrade 3a land is also BMV land (and high sensitivity), the magnitude of impacts is such that effects are minor and not significant. The conclusions reached in the assessment are the same whether the survey data is attributed by field-scale soil type or by individual auger points.

5.3.11. In accordance with paragraph 2.10.119 of EN-3, the assessment takes into account mitigation presented within the **Outline SMP** (Doc Ref. 7.14) which outlines a comprehensive set of measures across the lifetime of the Scheme for the preservation of the soil resource within the Order Limits, avoiding both the loss of soil material and the loss of soil functional capacity for soil retained within the Order Limits. It includes the following measures:

- details of the soil resources present;
- roles and responsibilities (and required competencies and training) of on-site personnel responsible for the implementation of the **Outline SMP** (Doc Ref. 7.14);
- how topsoil and subsoil will be stripped and stockpiled;
- suitable conditions for when handling soil will be undertaken, for example avoiding handling of waterlogged soil;
- how soil stockpiles will be designed taking into consideration site conditions and the nature/composition of the soil;
- suitable protective surfacing where soil stripping can be avoided, based on sensitivity of the environment and proposed works; and
- approach to reinstating soil that has been compacted, where required.

5.3.12. The Solar Development Area would be established as grassland sward under PV arrays and comprise access roads. The effect of this conversion would limit farming options for BMV land, particularly Grade 1 and Grade 2. This represents

a long-term but reversible land use transition for approximately 142ha of Grade 1 and 2 land, which is classed as a moderate adverse significant effect.

5.3.13. Hardstanding is required for the On-Site Substations and BESS Compounds, Solar Stations and CSEC Compounds. Where Grade 1 and 2 soils cannot be completely avoided through micro-siting during detailed design, these areas of hardstanding have been assessed on a precautionary basis to result in a permanent moderate adverse significant effect for approximately 12 ha of Grade 1 and 2 land. Whilst the intended outcome is to restore the land to the original ALC grade following decommissioning, there is uncertainty over long-term impacts of soil sealing which may inhibit restoration to the same grade.

5.3.14. The presence of pylons, wooden poles, working areas, access roads and vegetation are considered to have negligible to minor adverse (not significant) effects on agricultural land.

5.3.15. **ES Chapter 5: Agriculture and Soils** (Doc Ref. 6.1) does not report any significant adverse effects on soil resources. The assessment reports a minor beneficial effect on changes to the soil resource as a result of improvement to soil structure and increase in soil carbon due to the change in land use during the operational phase. This effect is also deemed to be not significant.

5.3.16. The cumulative impact on agricultural land and soils is considered within Section 5.11 of **ES Chapter 5: Agriculture and Soils** (Doc Ref. 6.1). Based on previous reporting as part of other NSIPs in Lincolnshire and the extrapolation of available mapping, the proportion of BMV land in the county is estimated to be in the order of 71%. It is estimated that the cumulative impact of solar schemes will account for approximately 3% of all BMV land in Lincolnshire. Whilst there is a measure of uncertainty around this proportion, it is indicative that the solar schemes represent a small proportion of agricultural and BMV land in the county.

5.3.17. Having regard to the factors influencing site selection outlined in EN-3, the Applicant has sought to identify land for development outside of Grade 1 agricultural land as outlined within **Appendix D: Site Selection Report** (Doc Ref. 7.1). Following identification of land for the Order Limits and detailed soil surveys, the Applicant has sought to prioritise development, particularly that which includes hardstanding, on areas of lower grade land where possible in line with paragraph 2.10.21 of EN-3.

5.3.18. It has not been completely possible to remove all BMV land from the Order Limits as it would result in fragmentation of the development or reduce the renewable energy generation capability at a location where there is available grid capacity. This is consistent with paragraph 2.10.23 of EN-3 which recognises NSIP scale solar projects are likely to use some agricultural land.

5.3.19. While the Scheme would result in moderate adverse effects which are significant in relation to the presence of solar infrastructure and hard standing

on very high sensitivity agricultural land (i.e. Grades 1 and 2), the Applicant has appropriately balanced the use of this agricultural land with other constraints including flood risk and the presence of heritage assets within the Order Limits. The **Outline SMP** (Doc Ref. 7.14) provides measures to mitigate the impact on soil resources, and the land can be returned to agricultural use following the decommissioning of the Scheme.

5.3.20. For renewable energy generation of this scale to be achieved, some BMV land is required to deliver the Scheme. Without it, the electricity output would not fulfil the available grid capacity which would be an inefficient use of land from an energy generation perspective.

5.4. Air Quality

5.4.1. Policy relating to air quality impacts of energy infrastructure is set out in Section 5.2 of EN-1. EN-3 does not contain technology-specific air quality policies for solar PV development but is to be read in conjunction with EN-1, which provides the relevant assessment principles for air quality impacts. Similarly, EN-5 does not introduce separate air quality policies for electricity network infrastructure, and reliance is place on the generic policies within EN-1.

5.4.2. Paragraph 5.2.9 of EN-1 requires applicants, when carrying out an assessment of air quality impacts, to describe:

"existing air quality concentrations and the relative change in air quality from existing levels;

any significant air quality effects, mitigation action taken and any residual effects, distinguishing between the project stages and taking account of any significant emissions from any road traffic generated by the project;

the predicted absolute emissions, concentration change and absolute concentrations as a result of the proposed project, after mitigation methods have been applied; and any potential eutrophication impacts".

5.4.3. **ES Chapter 6: Air Quality** (Doc Ref. 6.1) considers fugitive dust during the construction phase, and traffic emissions during both the construction and decommissioning phases. No assessment of operational phase traffic emissions is required due to traffic movements being below screening criteria. Unplanned fire emissions arising from the BESS Compound are considered within **ES Chapter 16: Other Environmental Topics** (Doc Ref. 6.1) and supported by **ES Appendix 16-4: Unplanned Emissions Assessment from BESS** (Doc Ref. 6.3).

5.4.4. Paragraph 5.2.16 of EN-1 states that the Secretary of State should give substantial weight to air quality considerations where a project would lead to a deterioration in air quality.

5.4.5. The assessment contained within **ES Chapter 6: Air Quality** (Doc Ref. 6.1) demonstrates that, with embedded mitigation, the effect of fugitive dust on

receptors during construction and decommissioning would be minor adverse and not significant. The assessment also demonstrates that traffic emissions during construction and decommissioning would be negligible and not significant. No further mitigation is required.

5.4.6. The Applicant's proposed mitigation measures include good practice measures secured within the **Outline CEMP** (Doc Ref. 7.10). These measures are taken from the IAQM's 'highly recommended' and 'desirable' list of measures for a high-risk category site, but represent good practice as widely employed across most large construction sites in the UK. The proposed good practice measures are in relation to: communications, site management, monitoring, site preparation and maintenance, operating vehicles and machinery, sustainable travel, operations, waste management, earthworks, track out and construction.

5.4.7. Further, **ES Appendix 16-4: Unplanned Emissions Assessment from BESS** (Doc Ref. 6.3) considers potential impacts from toxic emissions released in the unlikely event of a BESS fire. This document demonstrates that after a distance of approximately 200 m from the fire, any toxic emissions (hydrogen fluoride used as a proxy) would reduce to below the acute exposure guideline levels published by Public Health England[28]. Given that the BESS Compound would be sited a minimum of 350 m from residential receptors, concentrations will be below relevant health thresholds at any existing residential receptor location.

5.4.8. In summary, the Scheme would not generate any significant effects in relation to air quality nor would it exceed any relevant statutory air quality limits, objectives or targets. Therefore, there is no requirement for weight to be afforded against the Scheme in the planning balance in relation to air quality.

5.5. Cultural Heritage

5.5.1. As described in Section 2, there is high potential for widespread archaeological deposits within the Order Limits. These are described in full within **ES Chapter 8: Cultural Heritage** (Doc Ref. 6.1), **ES Appendix 8-2: Cultural Heritage Desk Based Assessment** (Doc Ref. 6.3) and **ES Appendix 8-3: Summary of Solar Development Area Heritage** (Doc Ref. 6.3).

5.5.2. The design of the Scheme has taken into account the presence of significant heritage assets and avoids directly impacting the two Scheduled Monuments (1004979 and 1004978) within the Order Limits. The layout of the solar PV modules has also been designed to avoid impacts on dense groupings of buried archaeological remains that have been identified within the Solar Development Area. A combination of aerial photographs and geophysical surveys identified a concentration of likely Romano-British settlement remains within the eastern

[28] Public Health England (2021) Hydrogen Fluoride Incident Management.

sections of Land Parcel C, and therefore solar PV modules and supporting infrastructure will not be installed in these areas. Solar PV modules have also been removed from the north of Field C-2, where the aerial assessment has also identified a density of likely Romano-British remains.

5.5.3. Field D-4 has been discounted from being used for solar PV modules due to research indicating a crash site of a German Dornier 217 bomber aircraft which poses a UXO risk. Further, Field A-1-11 is the location of an air crash between two Lancaster bombers and a buffer is proposed around this site. Appropriate measures in relation to residual UXO risk at both fields are secured within the **Outline CEMP** (Doc Ref. 7.10).

5.5.4. Paragraph 5.9.11 of EN-1 requires applicants to undertake an assessment of any likely significant heritage impacts arising from the Scheme as part of the Environmental Statement. Paragraph 5.9.12 of EN-1 requires applicants to "*provide a description of the significance of the heritage assets affected by the proposed development, including any contribution made by their setting. The level of detail should be proportionate to the importance of the heritage assets and no more than is sufficient to understand the potential impact of the proposal on their significance*".

5.5.5. **ES Chapter 8: Cultural Heritage** (Doc Ref. 6.1) provides an assessment of the likely significant effects on heritage assets. The assessment is supported by **ES Appendix 8-2: Historic Environment Desk Based Assessment** (Doc Ref. 6.3) n. Given the large number of heritage assets present, those assets which would not experience a likely significant impact to their cultural significance/interest either physically or through changes to their setting are described in **ES Appendix 8-4: Summary of Heritage Setting Assessment** (Doc Ref. 6.3).

5.5.6. The assessment reports the following significant adverse effects in relation to cultural heritage following the application of mitigation:

- Archaeological Zones 1 and 2 (Land Parcels B and C), Archaeological Zones 4-8 (Land Parcel D) and other areas of high archaeological potential for deposits of late Prehistoric to Roman date within the Solar Development Area (Land Parcels B, C and northern area of Land Parcel D): Permanent moderate adverse effect on buried archaeological deposits due to galvanised steel poles to support the PV modules.
- Historic landscape of the former precinct of Crowland Abbey:
    - Short term, temporary moderate adverse effect from construction and decommissioning activities that will cease after the works.
    - Moderate adverse for the lifetime of the Scheme due to solar PV modules and supporting infrastructure.
- Solar Development Area - Historic Landscape Character – The Fens:

  - Short term, temporary moderate adverse effect from construction activities that will cease after the construction phase.
  - Moderate adverse for the lifetime of the Scheme due to solar PV modules and supporting infrastructure.
- Grid Connection Route – Historic Landscape Character – The Fens and The Wash:
  - Temporary moderate adverse for construction and decommissioning activities that will cease after construction phase.
  - Moderate adverse for the lifetime of the Scheme due to Grid Connection infrastructure.
- Scheduled Monuments 'Settlement W of Cate's Cove Corner' (1004979) and 'Settlement NE of Whitebread Farm' (1004978):
  - Temporary moderate adverse for construction and decommissioning activities that will cease after the construction phase.
  - Moderate adverse over the lifetime of the Scheme due to infrastructure.
- Scheduled Monument 'Medieval boundary earthworks at Queen's Bank, 100m southeast of Providence House' (1009980):
  - Temporary moderate adverse for construction and decommissioning activities that will cease after the construction phase.
  - Moderate adverse over the Scheme lifetime due to infrastructure.
- Scheduled Monument 'St Guthlac's Cross' (1005052):
  - Temporary moderate adverse for construction and decommissioning activities that will cease after the construction phase.
  - Moderate adverse over the Scheme lifetime due to infrastructure.
- Complex of assets 'Wykeham Chapel: a moated monastic grange and retreat house' (1019096) and Grade I Listed Chapel (1064471):
  - Temporary moderate adverse during construction and decommissioning phase that will cease after construction phase.
  - Moderate adverse over the Scheme lifetime due to infrastructure.

5.5.7. **ES Chapter 8: Cultural Heritage** (Doc Ref. 6.1) also reports the potential for increased in-combination effects on the Fenland historic landscape character area and the setting of Scheduled Monuments ('Wykeham Chapel: a moated monastic grange and retreat house' (1019096) and Grade I Listed chapel (1064471)) as a result of other NSIP scale infrastructure proposed near the Weston Marsh B Substation.

5.5.8. Paragraph 2.10.152 of EN-3 states that "*Solar farms are generally consented on the basis that they will be time-limited in operation. The Secretary of State should therefore consider the length of time for which consent is sought when considering the impacts of any indirect effect on the historic environment, such as effects on the setting of designated heritage assets*". The Applicant is seeking a time limited consent of 40 years. While there would be some permanent adverse effects on heritage assets (i.e. at the assets listed in the first bullet point above that would be directly impacted), the majority of impacts are temporary in nature and would be reversed upon either the completion of construction or decommissioning of the Scheme.

5.5.9. The Applicant proposes good practice measures regarding the protection of heritage assets within the **Outline CEMP** (Doc Ref. 7.10), **Outline OEMP** (Doc Ref. 7.11) and **Outline DEMP** (Doc Ref. 7.12).

5.5.10. Further, the Applicant is proposing to implement mitigation measures through an **Outline Archaeological Mitigation and Management Strategy** (to be submitted during examination following the completion of field evaluation reporting) which will set out procedures should any undiscovered heritage assets be encountered in accordance with paragraph 5.9.22 of EN-1.

5.5.11. An additional phase of archaeological evaluation will be undertaken ahead of construction including:

- geophysical survey within the Grid Connection Route;
- archaeological evaluation trenching within the Grid Connection Route;
- archaeological evaluation trenching on the Underground Inter-Array Connection between Land Parcels A and B;
- archaeological evaluation trenching of the fields delayed due to the risk of unexploded ordnance; and
- archaeological evaluation trenching within the 150 m buffer that has been maintained around the crash site of a Lancaster Bomber in Field A-1-11. Any further evaluation in this area will be undertaken under a 1986 Protection of Military Remains Act (POMRA86) licence.

5.5.12. The analysis of this additional evaluation will inform a detailed Archaeological Mitigation and Management Strategy building upon the outline version secured through the **Draft DCO** (Doc Ref. 3.1). Examples of mitigation that could arise include:

- Additional design measures such as micro-siting of Scheme elements to avoid archaeological remains altogether or the use of pre-cast concrete blocks over piled mounts for the solar PV panels (subject to ground conditions and the nature of the deposits).

- A programme of archaeological investigation, recording and reporting. This would not result in a reduction in the physical impacts to archaeological remains but would partially compensate for their loss as it would provide greater understanding and appreciation of the evidential value of the affected archaeological remains.
- Archaeological excavation within the Archaeological Zones where the archaeological deposits have been identified as being of high importance and the impact of the Scheme is considered to be significant. This would be limited to areas of groundbreaking and open excavation activities such as substations, BESS, compounds, cabling, tracks and drainage.
- Archaeological excavation in areas of high archaeological potential where the archaeological deposits have been identified as being potentially of high or medium importance and the impact of the Scheme is considered to be significant. This would be limited to areas of groundbreaking and open excavation activities such as substations, BESS, compounds, cabling, tracks and drainage.
- A programme of archaeological watching brief in locations where archaeological deposits of high or medium importance, or high or medium potential and the impact of the Scheme is considered not to be significant. This would be limited to areas of groundbreaking and open excavation activities such as substations, BESS, compounds, cabling, tracks and drainage.
- Paleoenvironmental environmental sampling based on recommendations from the archaeological evaluation phase.
- An Archaeological Clerk of Works during the construction phase.
- Community engagement activities (e.g. open days, temporary exhibitions, presentations, school visits), publication and information boards positioned in appropriate and accessible locations.

Substantial Harm and Loss of Significance of Designated Heritage Assets

5.5.13. Further to the policies above regarding the assessment of impacts on heritage assets, paragraphs 5.9.28 and 5.9.29 of EN-1 require the Secretary of State to give considerable importance and weight to the desirability of preserving all heritage assets. Any harm or loss of significance of designated heritage asset (from its alteration or destruction or from development within its setting) should require clear and convincing justification.

5.5.14. Further, paragraph 5.9.8 of EN-1 says "*Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments or Protected Wreck Sites should be considered subject to the policies for designated heritage assets. The absence of designation for such heritage*

assets does not indicate lower significance or necessarily imply that it is not of national importance".

5.5.15. **Appendix E: Heritage Statement of Harm** (Doc Ref. 7.1) which supports this Planning Statement provides this policy assessment.

5.5.16. It discusses harm in relation to designated assets and non-designated assets of archaeological interest, which are demonstrably of equivalent significance to Scheduled Monuments. This accords with paragraph 5.9.34 of EN-1 which states "*in weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset*".

5.5.17. In planning terms, there is no definition of 'substantial harm'. *Bramshill v SSHCLG* [2021] EWCA Civ 320 states that "*what amounts to 'substantial harm' or 'less than substantial harm' in a particular case will always depend on the circumstances. Whether there will be such 'harm', and if so, whether it will be 'substantial', are matters of fact and planning judgement. The NPPF does not direct the decision-maker to adopt any specific approach to identifying 'harm' or gauging its extent*".

5.5.18. Additionally, guidance is set out in the PPG at paragraph 018[29] which details "*in general terms, substantial harm is a high test, so it may not arise in many cases. The implication being that 'substantial' harm represents a very high degree of impact*".

5.5.19. While there is no direct correlation between the significance of effect in EIA terms and the degree of harm referenced within national planning policy, it is acknowledged that those heritage assets which are identified as experiencing a significant adverse effect in **ES Chapter 8: Cultural Heritage** (Doc Ref. 6.1) are more likely to experience substantial harm.

5.5.20. **ES Chapter 8: Cultural Heritage** (Doc Ref. 6.1) demonstrates that impacts/harm is generally avoided or minimised, with no direct impacts to the buried archaeological deposits of Scheduled Monuments within the Solar Development Area and no direct harm to the fabric of Listed Buildings or Conservation Areas. Remaining harm is principally related to setting, to non-designated archaeology or is temporary in nature.

5.5.21. The following non-designated heritage assets are considered to be demonstrably of equivalent significance to the Scheduled Monuments:

- Potential Iron Age or Roman settlement in the northern end of Field B-5; aerial photograph and geophysical surveys identified features likely to be of equivalent cultural significance to the archaeological deposits identified across the Solar Development Area.

[29] Planning Practice Guidance (2019). Historic Environment. Reference ID 18a-018-20190723.

- Archaeological Zone 1: Considered to be of equal importance to the Scheduled Monuments 'Settlement NE of Whitebread Farm' (1004978) and 'Settlement W of Cate's Cove Corner' (1004979), due to its features being contiguous with those identified for these Scheduled Monuments despite being beyond the scheduled areas.
- Archaeological deposits north of High Road: The area is likely to have archaeological deposits of Palaeolithic, Mesolithic, Iron Age, Roman, medieval or post-medieval date. Based on a worst-case assessment, it is considered that archaeological deposits within this area would be of medium importance.

5.5.22. The following subsections describe the assets and any harm or loss of significance to them, with detailed assessment contained with **Appendix E: Heritage Statement of Harm** (Doc Ref. 7.1).

Potential Iron Age or Roman Settlement in the Northern End of Field B-5

5.5.23. The assessment within **ES Chapter 8: Cultural Heritage** (Doc Ref. 6.1) identifies a reduction in the potential moderate adverse (significant) effect on this asset to a residual minor adverse (not significant) effect following an appropriate programme of archaeological mitigation prior to construction. However, mitigation does not reduce the harm caused to the asset through loss of significance.

5.5.24. The works proposed that would impact this asset include the construction of a 400 kV substation and adjacent BESS Compound, access tracks and below ground cabling. These physical works would cause harm to the cultural significance of the buried archaeological deposits directly within the footprint of the Scheme infrastructure but would not result in the total or near loss of the physical remains, their stratigraphic relationship or their evidential value which extend between and beyond the footprint of the infrastructure and the Order Limits. For this reason, **Appendix E: Heritage Statement of Harm** (Doc Ref. 7.1) concludes that the harm would be less than substantial with the cultural significance of the asset not significantly affected when considered in the context of the wider historic landscape.

Archaeological Zone 1

5.5.25. The assessment within **ES Chapter 8: Cultural Heritage** (Doc Ref. 6.1) identifies a reduction in the potential moderate adverse (significant) effect on this asset to a residual minor adverse (not significant) effect following an appropriate programme of archaeological mitigation prior to construction. However, mitigation does not reduce the harm caused to the asset through loss of significance.

5.5.26. The works proposed that would impact this asset include the construction of a 132 kV substation and adjacent temporary construction compound, access tracks, solar PV modules and below ground cabling. At the locations to be used

to accommodate a 132 kV substation and adjacent construction compound, access tracks and below ground cabling there would be a greater magnitude of impact as a result of the more extensive ground disturbance required. These works have the potential to disturb or remove any surviving archaeological remains within the footprint of the Scheme infrastructure. As a result, the impact would be limited to locations of these elements. Across the rest of Archaeological Zone 1 and through the wider extent of Parcels B and C, solar PV modules, supporting infrastructure and landscape mitigation are proposed and the impact would be less as archaeological deposits will be preserved *in situ* between the galvanised steel poles used to mount the solar PV modules and cable trenches. Any archaeological deposits extending outside the Order Limits would also be preserved.

5.5.27. This physical impact would slightly affect the ability to understand and appreciate the assets and would cause harm to the cultural significance of the asset. However, the works would not result in the total or near total loss of the physical remains, their stratigraphic relationship or their evidential value and therefore **Appendix E: Heritage Statement of Harm** (Doc Ref. 7.1) concludes that the harm would be less than substantial, with the cultural significance of the buried archaeological deposits not significantly affected when considered in the context of the extent of the archaeological deposits and the wider historic landscape.

Archaeological Deposits North of High Road

5.5.28. The assessment within **ES Chapter 8: Cultural Heritage** (Doc Ref. 6.1) identifies a permanent moderate adverse effect, which would be significant. The assessment reduces the potential moderate adverse (significant) effect on this asset to a residual minor adverse (not significant) effect following an appropriate programme of archaeological mitigation prior to construction.

5.5.29. Should the design require the Grid Connection Route to be constructed underground between High Road and the Weston Marsh B Substation, there would be a direct impact on any surviving archaeological deposits. This impact would be greater than the impact of an overhead line in this location.

5.5.30. These works have the potential to disturb or remove the significance any surviving archaeological remains within this footprint. Much of the archaeological interest of deposits outside of these specific construction footprints and beyond the Scheme boundary will be preserved therefore retaining their archaeological interest.

5.5.31. Overall, this would not result in total or near-total loss of the physical remains, their stratigraphic relationship or their evidential value and the archaeological deposits extend between and beyond the footprint of the infrastructure and the Order Limits. Therefore, **Appendix E: Heritage Statement of Harm** (Doc Ref. 7.1) concludes that harm will be less than substantial with the cultural

significance of the asset not being significantly affected when considered in the context of the extent of the archaeological deposits within the wider archaeological context.

5.5.32. Paragraph 5.9.31 of EN-1 states that substantial harm to or loss of significance of assets of the highest significance including Scheduled Monuments "*should be wholly exceptional*". Further, paragraph 5.9.32 of EN-1 requires the following in relation to substantial harm to or total loss of significance of a designated heritage asset:

"Where the proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset the Secretary of State should refuse consent unless it can be demonstrated that the substantial harm to, or loss of, significance is necessary to achieve substantial public benefits that outweigh that harm or loss, or all the following apply:

- *The nature of the heritage asset prevents all reasonable uses of the site;*
- *No viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation;*
- *Conservation by grant-funding or some sort of not for profit, charitable or public ownership is demonstrably not possible; and*
- *The harm or loss is outweighed by the benefit of bringing the site back into use".*

5.5.33. Where a proposed development would lead to less than substantial harm to the significance of the heritage asset, "*this harm should be weighed against the public benefits of the proposal, including, where appropriate securing its optimum viable use*" (paragraph 5.9.33 of EN-1).

5.5.34. Additionally, paragraph 2.3.8 of EN-3 states "*In considering the impact on the historic environment as set out in Section 5.9 of EN-1 and whether the Secretary of State is satisfied that the substantial public benefits would outweigh any loss or harm to the significance of a designated heritage asset, the Secretary of State should take into account the positive role that large-scale renewable projects play in the mitigation of climate change, the delivery of energy security, and the urgency of meeting the Clean Power 2030 Mission and net zero target*".

5.5.35. The Applicant has identified less than substantial harm to the Potential Iron Age or Roman settlement in the northern end of Field B-5, Archaeological Zone 1 and the archaeological deposits to the north of High Road within **Appendix E: Heritage Statement of Harm** (Doc Ref. 7.1). This harm would be outweighed by the substantial public benefits of the Scheme as detailed with Section 4 of this Planning Statement.

5.5.36. As the harm identified is less than substantial, the Applicant is not required to demonstrate exceptional or wholly exceptional circumstances in line with the tests set out in paragraph 5.9.32 of EN-1. In determining any weight against the making of the DCO, the Secretary of State should take into account the role that

the Scheme would play in the mitigation of climate change, the delivery of energy security, and the urgency of meeting the Clean Power 2030 Mission and net zero target in accordance with paragraph 2.3.8 of EN-3.

5.6. Ecology, Biodiversity and Geological Conservation

5.6.1. The Applicant's assessment of potential impacts and likely significant effects on ecology and biodiversity is reported in **ES Chapter 9: Ecology and Biodiversity** (Doc Ref. 6.1).

5.6.2. Paragraph 5.4.43 of EN-1 requires application of the mitigation hierarchy to aim to avoid significant harm to biodiversity and geological conservation interests, including through consideration of reasonable alternatives. Where significant harm cannot be avoided, impacts should be mitigated, and compensation measures sought as a last resort.

5.6.3. Further, paragraph 5.4.45 of EN-1 requires any mitigation or biodiversity net gain measures to be appropriately secured to ensure they are delivered and maintained.

5.6.4. There are technology-specific policy considerations set out within EN-3 for ecology in addition to those described within Section 5.4 of EN-1. These include demonstrating good design to mitigate impacts such as noise and effects on ecology (paragraph 2.5.3), consideration of security and lighting features on local ecology (paragraph 2.10.74) and management of site boundaries to facilitate the movement of fauna (paragraph 2.10.75).

5.6.5. Paragraph 2.10.61 of EN-3 also recognises in some instances, it may be less harmful for ecology to keep or retain certain types of infrastructure (such as underground cabling) as part of decommissioning. The **Outline DEMP** (Doc Ref. 7.12) provides a framework for managing the environmental effects of decommissioning at the appropriate time. The mode of any underground cable decommissioning would be determined having regard to Government policy and best practice applicable at that time, and would be subject to landowner agreement and the requirements of the DCO. Where required, underground cables would be removed by opening the ground at regular intervals and pulling the cable through an extract point, avoiding the need to open up the entire length of the cable route.

5.6.6. Specific to electricity network infrastructure, paragraph 2.9.3 of EN-5 recognises that electricity network infrastructure may pose a risk to birdlife due to collisions and recommends at paragraph 2.10.3 of EN-5, the consideration of measures such as bird flappers or diverters to make lines more visible.

5.6.7. The design of the Scheme takes into account ecological receptors and measures are embedded to minimise impacts on ecology and biodiversity. These measures are secured through a variety of control documents including the **Outline CEMP** (Doc Ref. 7.10), **Outline OEMP** (Doc Ref. 7.11), **Outline LEMP** (Doc Ref. 7.16),

Design Parameters (Doc Ref. 7.4), **ES Appendix 11-4: Outline Drainage Strategy** (Doc Ref. 6.3) and **Outline DEMP** (Doc Ref. 7.12). Key embedded mitigation measures include:

- retention of existing vegetation, where reasonably practicable;
- retention of trees with potential roost features for bats;
- typical 10 m stand-off to drains where practicable;
- riparian enhancements;
- pre-construction checks;
- micro-siting to avoid, where practicable, woodland blocks, hedgerows, tree lines, reedbeds and Habitats of Principal Importance;
- targeted bird flight diverters along the Grid Connection;
- mammal-permeable fencing where required to maintain connectivity;
- bat sensitive lighting;
- provision of an extensive scheme of landscape planting across the Solar Development Area. This includes over 170 ha dedicated for habitat management, out of which over 150 ha is set aside for improving habitats for ground-nesting birds, such as skylark.

5.6.8. The following subsections provide an assessment of compliance against the relevant policies organised by receptor type.

Habitats Sites

5.6.9. Paragraph 5.4.4 of EN-1 confirms the highest level of biodiversity protection is afforded to the sites identified through international conventions and that the Habitats Regulations identify the sites for which an HRA will assess the implications. Paragraph 5.4.51 of EN-1 requires the Secretary of State to consider "*whether the project is likely to have a significant effect on a protected site which is part of the National Site Network (a habitat site), a protected marine site, or any site to which the same protection is applied as a matter of policy, either alone or in combination with other plans or projects*".

5.6.10. The Applicant has prepared **ES Appendix 9-14: HRA Report** (Doc Ref. 6.3) to support the Application and to inform the Secretary of State's duties under Regulation 63 of the Habitats Regulations.

Stage 1: Screening for Likely Significant Effects

5.6.11. The Stage 1 HRA Screening Assessment considers whether the Scheme is likely to have a significant effect on Habitats Sites, either alone or in-combination with other plans or projects. The following sites were considered as part of the Stage 1 Screening Assessment on the basis of their distance from the Order Limits:

- The Wash and North Norfolk Coast SAC;

- The Wash SPA and Ramsar;
- Baston Fen SAC;
- Nene Washes SPA and Ramsar; and
- Nene Washes SAC.

5.6.12. The Stage 1 Screening Assessment concluded that likely significant effects could not be ruled out for qualifying passage and wintering bird populations associated with The Wash SPA and Ramsar and the Nene Washes Ramsar, as a result of the risk of collision with the proposed overhead lines. These sites were taken forward to Stage 2 Appropriate Assessment.

Stage 2: Appropriate Assessment

5.6.13. The Stage 2 Appropriate Assessment considers whether the Scheme, either alone or in-combination with other plans or projects, would adversely affect the integrity of the interest features of The Wash SPA and Ramsar and Nene Washes Ramsar, having regard to their conservation objectives.

5.6.14. The Appropriate Assessment focuses on the risk of injury and mortality of qualifying wintering bird species as a result of collision with the overhead line proposed for the Grid Connection Route. Collision risk modelling has been undertaken to identify locations where potentially significant conflicts could occur between the proposed overhead line and areas of passage and wintering bird activity.

5.6.15. The modelling identifies higher densities of golden plover to the west of Vantage Point 2, south of Weston Hills (see detailed locations and modelling outputs at **ES Appendix 9-14: HRA Report** (Doc Ref. 6.3)). Surveys also indicate movement of a range of birds, including higher collision risk cranes, geese and swans, potentially birds using flooded land along the River Welland, at the southern end of the Grid Connection Route.

5.6.16. In terms of design refinement and mitigation, the design of the overhead line route has taken account of options to reduce collision risk and disturbance of birds by refining the proposed route to the east of the selected Grid Connection Route corridor, away from areas of golden plover activity south of Weston Hills (west of the road called Delgate Bank).

5.6.17. Further changes to the configuration of the Grid Connection Route to reduce collision risk were considered but it was concluded that the most appropriate and effective mitigation measure will be the installation of line markers at locations identified as having increased risk of collision south of Weston Hills and at the southern end of the Grid Connection Route.

5.6.18. The proposed location of the line markers is shown within Appendix 1 of the **ES Appendix 9-14: HRA Report** (Doc Ref. 6.3). This approach aligns with the recommended mitigation for bird collision risk within paragraph 2.10.3 of EN-5:

"Making lines more visible by methods such as the fitting of bird flappers and diverters to the earth wire, which swivel in the wind, glow in the dark and use of fluorescent colours designed specifically for bird vision can also reduce the risk of bird collisions and number of potential deaths. The design and colour of the diverters will be specific to the conditions – the line and pylon/transmission tower specifications and the species at risk".

5.6.19. In reaching a conclusion on impacts to the integrity of the Habitats Sites, and with this design measure in place, the collision risk modelling demonstrates that any increase in the mortality rate for golden plover would remain below the 1% lower limit of meaningful variation. On this basis, **ES Appendix 9-14: HRA Report** (Doc Ref. 6.3) concludes that the Scheme would not adversely affect the integrity of the qualifying features of The Wash SPA and Ramsar or Nene Washes Ramsar as a result of bird collision risk from the Scheme alone.

5.6.20. The Appropriate Assessment also takes into account the potential for in-combination effects with other proposals for plans or projects that could have an additive or cumulative effect. **ES Appendix 9-14: HRA Report** (Doc Ref. 6.3) reviews other projects to determine whether any could contribute to cumulative collision risk and concludes that, taking into account of the proposed mitigation, the Scheme would not result in an adverse effect on integrity of the relevant Habitats Sites in-combination with other plans or projects.

5.6.21. As the Appropriate Assessment concludes that there would be no adverse effect on the integrity of any Habitats Site, either alone or in-combination, the requirements of Regulation 63 are satisfied, and it is not necessary to proceed consideration of alternatives or derogation under Regulation 64.

National Designations

5.6.22. Paragraphs 5.4.7 and 5.4.8 of EN-1 state that SSSIs should be given a high degree of protection. Development on land which is likely to have an adverse effect on a SSSI should not normally be permitted. The exception to this is where the benefits (including need) of the development clearly outweigh both its likely impact on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs.

5.6.23. There are no nationally designated ecological sites within the Order Limits, however there are two Impact Risk Zones (IRZs) associated with SSSIs that overlap with the Order Limits, where the Scheme meets the development description for consultation. The IRZ overlays are illustrated on **ES Figure 9-2** (Doc Ref. 6.2). The assessment also scopes in the Wash SSSI and the Nene Washes SSSI.

5.6.24. The assessment confirms that stand off measures and controls contained within the **Outline CEMP** (Doc Ref. 7.10) and **Outline OEMP** (Doc Ref. 7.11), the **Outline DEMP** (Doc Ref. 7.12), along with the proposed line markers for

transmission lines within the Grid Connection Route would result in a negligible to minor adverse effects on the SSSIs and IRZs.

Regional and Local Sites

5.6.25. Paragraph 5.4.14 of EN-1 recognises the contribution that Local Wildlife Sites make to ecological networks and nature recovery. There are four Local Wildlife Sites which cross the Order Limits; Slys Connection, South Holland Main Drain, Lambert Drain to Highstock Drain Connection and Wheatmere Drain. Paragraph 5.4.54 of EN-1 requires the Secretary of State to "*give due consideration to regional or local designations. However, given the need for new nationally significant infrastructure, these designations should not be used in themselves to refuse development consent*".

5.6.26. Interfaces with the Scheme would be managed through standoffs, method statements and pollution prevention measures secured within the **Outline CEMP** (Doc Ref. 7.10), **Outline OEMP** (Doc Ref. 7.11) and **Outline DEMP** (Doc Ref. 7.12). Effects on local ecological sites are expected to be minor adverse (not significant), where interfaces occur, and negligible (not significant), where not directly impacted.

Veteran Trees and Other Irreplaceable Habitats

5.6.27. Paragraph 5.4.15 of EN-1 explains that "*irreplaceable habitats are habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity*". Further 5.4.16 of EN-1 recites Government's policy within Keepers of Time to "*maintain and enhance the existing resource of known ancient and veteran trees*". In making its decision, the "*Secretary of State should not grant development consent for any development that would result in the loss or deterioration of any irreplaceable habitats, including ancient woodland, and ancient and veteran trees unless there are wholly exceptional reasons and a suitable compensation strategy exists*" (paragraph 5.4.55).

5.6.28. The Applicant has prepared **ES Appendix 12-8: Arboricultural Impact Assessment** (Doc Ref. 6.3) which describes the nature of and impact to trees and vegetation within the Order Limits. Ancient/veteran individual trees were identified within or adjacent to the Site during arboricultural surveys specifically, seven veteran and four ancient trees within the Order Limits. These trees were assessed during the arboricultural and ecological surveys and were not considered to provide bat roost potential. In the absence of confirmed roost features or other notable protected species interest, the trees are considered to be of local importance.

5.6.29. No direct impacts are reported on any individual ancient or veteran trees. The potential for indirect impacts (e.g. compaction, accidental damage from nearby works) would be managed through the adherence to stand-offs/buffers which are secured within the **Outline CEMP** (Doc Ref. 7.10). **ES Chapter 9: Ecology**

and Biodiversity (Doc Ref. 6.1) reports a negligible effect on ancient and veteran trees. No potential impacts were identified for the operational phase.

5.6.30. The Scheme would not result in the loss or deterioration of any irreplaceable habitats and therefore accords with paragraph 5.4.55 of EN-1.

Habitats and Species

5.6.31. Paragraph 5.4.35 of EN-1 requires applicants to give consideration to improvements to, and impacts on, habitats and species in, around and beyond developments, beyond those under protection and identified as being of principal importance.

5.6.32. The Applicant has considered the impact on habitats and those of local importance within **ES Chapter 9: Ecology and Biodiversity** (Doc Ref. 6.1). Habitats assessed include aquatic marginal vegetation, hedgerows (including species rich), lines of trees (local), and lowland mixed deciduous woodland (local). No significant adverse effects are reported during construction.

5.6.33. The **Outline LEMP** (Doc Ref. 7.16) secures the creation and subsequent management of habitats. The delivery of these enhancements would see a minor beneficial significant effect in the case of hedgerows and lines of trees. A minor but not significant beneficial effect is reported for riparian enhancements proposed.

5.6.34. The Applicant has considered the impact on protected species and those of local importance within **ES Chapter 9: Ecology and Biodiversity** (Doc Ref. 6.1). The Applicant has proposed habitat enhancement areas within the Order Limits to provide alternative nesting habitat for farmland birds, such as skylark. These areas are secured and detailed in the **Outline LEMP** (Doc Ref. 7.16) and in summary would see:

- Retention of arable/open fields to be managed as farmland bird mitigation areas.
- The creation of skylark plots in cereals (each approximately 16-25 m^2) greater than 50 m from field boundaries, spaced approximately 100 m apart.
- Conservation headlands with margins of 6 to 10 m.
- Limited disturbance during April to July, including avoidance of mowing, cutting and cultivation, and no routine night lighting in these areas.

5.6.35. The Applicant also proposes measures to minimise the impact on other protected species including badger (local), barn owl (Schedule 1, local), bats - foraging/commuting assemblage (national), bats – tree roost features (local), breeding birds (local), otter (local), reptiles – common species (local), water vole (local), and wintering birds. The **Outline LEMP** (Doc Ref. 7.16) secures the creation and subsequent management of habitats. The establishment of this habitat would see a moderate beneficial significant effect on these species.

5.6.36. No other significant effects on protected species or habitats are reported.

Summary

5.6.37. With the embedded and additional mitigation measures in place, as described, the Scheme would not result in any significant adverse effects on any habitats or species, including statutory or non-statutory designated sites. A moderate beneficial effect and a minor beneficial effect on habitats, both of which are significant, is anticipated as a result of the proposed habitat enhancement measures set out in the **Outline LEMP** (Doc Ref. 7.16). This accords with the policy support for enhancements beyond biodiversity net gain within paragraph 2.10.81 of EN-3.

5.6.38. The Applicant has submitted **ES Appendix 9-14: HRA Report** (Doc Ref. 6.3), which has been prepared to inform the Secretary of State's duties under Regulation 63 of the Habitats Regulations. The Stage 1 Screening Assessment identified likely significant effects that could not be ruled out for certain Internationally Important Wildlife Sites, and these sites were therefore taken forward to the Stage 2 Appropriate Assessment. The Appropriate Assessment concludes that, with the application of mitigation, the Scheme would not adversely affect the integrity of any Habitats Site, either alone or in-combination with other plans or projects.

5.6.39. On this basis, it is considered that the Scheme complies with the relevant NPSs, the NPPF and local policies relating to ecology, biodiversity and designated nature conservation sites.

5.7. Electric and Magnetic Fields

5.7.1. Paragraph 2.10.11 of EN-5 sets out considerations for applicants' assessments in relation to electric and magnetic fields (EMF). Applicants should consider measures to ensure compliance with the Electricity Safety, Quality and Continuity Regulations 2002 (including height, position, insulation and protection), optimal phasing of high voltage overhead lines, and any new advice that may emerge from the Department of Health and Social Care insofar it relates to EMF exposure guidelines.

5.7.2. Paragraph 2.10.12 of EN-5 states "*Where it can be shown that the line will comply with the current public exposure guidelines and the policy on phasing, no further mitigation should be necessary*".

5.7.3. Section 16.3 of **ES Chapter 16: Other Environmental Topics** (Doc Ref. 6.1) provides a summary of the effects of the Scheme on EMF as detailed within the **EMF Compliance Assessment** (Doc Ref. 7.8).

5.7.4. The Grid Connection Route is designed with a minimum vertical clearance requirement of 8.1 m above ground. A minimum vertical clearance of 6.7 m above ground has been adopted for the Inter-Array Connection 132 kV

overhead line. These clearance requirements are secured within the **Design Parameters** (Doc Ref. 7.4). Furthermore, electrical equipment within solar stations, on-site substations and BESS Compounds will be CE marked (Conformité Européene, or European Conformity marking), and/or 'UKCA' marked (UK Conformity Assessed). With these measures embedded within design, no significant adverse effects from EMF from the Scheme have been identified on sensitive receptors, such as residential properties and users of PRoW.

5.7.5. The Applicant considered the potential cumulative impact of the Scheme with National Grid's planned Grimsby to Walpole and Weston Marsh to East Leicestershire 400 kV overhead lines which would run parallel to the northern extent of the Grid Connection Route. The ICNIRP 1998 reference limits[30] were not predicted to be exceeded, and as such, no significant effects were identified.

5.8. Glint and Glare

5.8.1. Paragraph 2.10.150 of EN-3 requires the Secretary of State to "*assess the potential impact of glint and glare on nearby homes, motorists, public rights of way, and aviation infrastructure (including aircraft departure and arrival flight paths)*". No more than limited weight is likely to be given to claims of aviation interference "*unless a significant impairment can be demonstrated*" (paragraph 2.10.151).

5.8.2. Section 16.4 of **ES Chapter 16: Other Environmental Topics** (Doc Ref. 6.1) presents the findings of the Applicant's assessment of glint and glare within **ES Appendix 16-2: Glint and Glare Assessment** (Doc Ref. 6.3). It considers impacts on the following receptor groups during the operational phase of the Scheme:

- Ground-based receptors, including residential receptors, local roads and bridleway users within 1 km of the Solar Development Areas. No rail receptors were identified within the study area; and
- Aviation receptors within 30 km, with detailed assessment for large international aerodromes within 20 km, military aerodromes within 10 km and 5 km for small aerodromes.

5.8.3. Only Crowland Airfield (adjacent to Land Parcel A) and Fenland Airfield (approximately 1.5 km northeast of the Site) are within the safeguarding buffer zones. Embedded mitigation measures include the provision of offsets from residential properties, vegetation and highways, as well as the use of anti-reflective coating as secured within the **Design Parameters** (Doc Ref. 7.4).

[30] ICNIRP (1998) ICNIRP Guidelines for limiting exposure to time-varying electric, magnetic and electromagnetic fields (up to 300 GHz) (amended in 1999). Health Physics 74 (4):494-522; 1998. Available at: https://www.icnirp.org/cms/upload/publications/ICNIRPemfgdl.pdf [Accessed 15/10/25]

5.8.4. No significant glint and glare effects are reported on residential, bridleway or road user receptors.

5.8.5. With respect to aviation receptors, potential yellow glare[31] impacts are expected to occur from the solar PV panels at Land Parcels A, B and C at three of the approach paths for the Crowland Airfield. However, taking into account the hours of operation of the airfield (08:30 to 17:00 UTC), the times of the day when yellow glare impacts are predicted to occur, historic weather, and typical mitigation techniques used by pilots when flying in the direction of the sun, the effects of the Scheme on the runway approach path at Crowland Airfield are considered to be not significant. No significant effects were predicted at Fenland Airfield.

5.8.6. The residual effect of glint and glare on all receptors is not significant or none. No significant impairment on aviation receptors is identified within **ES Chapter 16: Other Environmental Topics** (Doc Ref. 6.1) or **ES Appendix 16-2: Glint and Glare Assessment** (Doc Ref. 6.3), and the Scheme accords with policy on glint and glare as set out with EN-3.

5.9. Greenhouse Gas Emissions

5.9.1. Paragraph 5.3.4 of EN-1 requires applicants to include a greenhouse gas assessment as part of DCO Applications for energy projects. The assessment "*should be used to drive down GHG emissions at every stage of the proposed development and ensure that emissions are minimised as far as possible for the type of technology, taking into account the overall objectives of ensuring our supply of energy always remains secure, reliable and affordable, as we transition to net zero*" (paragraph 5.3.5 of EN-1).

5.9.2. The Applicant has undertaken a lifecycle greenhouse gas assessment within **ES Chapter 7: Climate Change** (Doc Ref. 6.1). It details embedded mitigation measures secured within the outline management plans which form part of this application for development consent. Measures to be employed include:

- where practicable, the use of alternative materials with lower transport greenhouse gas emissions such as locally sourced products and materials with a higher recycled content;
- low carbon design specifications, such as energy-efficient lighting and durable construction materials to reduce maintenance and replacement cycles;

[31] Yellow glare refers to glare with a luminance and angular size sufficient to stimulate the retina strongly enough to create a potential for an after-image.

- adopting the Considerate Constructors Scheme (CCS) to assist in reducing pollution, including GHGs, from the Scheme by employing good industry practice measures which go beyond statutory compliance;
- using of shuttle buses to reduce the use of private vehicles by construction workforce for travelling to Site. In addition, promoting the goal that all construction staff are encouraged to use lower carbon modes of transport by identifying and communicating local bus and rail connections and pedestrian and cycle access routes to/from the Scheme;
- switching vehicles and plant off when not in use and ensuring construction vehicles conform to European Union (EU) vehicle emissions standards for the types of plant vehicles to be used;
- increasing recyclability by segregating construction waste to be reused and recycled where reasonably practicable;
- designing, constructing and implementing the Scheme in such a way as to minimise the creation of waste.

5.9.3. The Secretary of State can be content that the Applicant has taken all reasonable steps to reduce the greenhouse gas emissions arising from the construction and decommissioning stages of the Scheme in accordance with paragraph 5.3.9 of EN-1. The measures detailed above are secured within the outline management plans including the **Outline CEMP** (Doc Ref. 7.10), the **Outline DEMP** (Doc Ref. 7.12) and the **Outline CTMP** (Doc Ref. 7.13).

5.9.4. The Applicant's lifecycle greenhouse gas assessment concludes that the carbon intensity of the Scheme would represent an 87% saving against the baseline of current UK grid carbon intensity. The current grid mix includes heavy fossil fuel generation types (such as unabated combined cycle gas turbines). A comparison against a current grid mix, or the equivalent emissions generated by fossil fuel generation has been accepted as appropriate by the Secretary of State in the Morecambe Offshore Windfarm Generation Assets Order 2025, even where the project was anticipated to connect in the future, where the grid mix may have decarbonised in line with the current 2030 goals and therefore a GHG assessment would result net positive emissions due to the embedded carbon of components. It was accepted by the Secretary of State that such a scenario is not a true comparison for emissions benefits, because for a low carbon transition to (and maintenance of) a net zero grid to occur, renewable energy projects like that of Morecambe or of this Scheme need to come forward.

5.9.5. Greenhouse gas emissions during the construction, operation and decommissioning of the Scheme are therefore considered to be 'offset' by the net positive impact of the Scheme on greenhouse gas emissions and the UK's ability to meet its carbon targets.

5.9.6. The Scheme has very low emissions relative to the sectoral carbon budget totals, and while the Scheme will result in residual emissions post 2050, as with the UK

carbon budgets, it will achieve substantial emissions reductions relative to the without-project baseline. The Applicant concludes the Scheme would have a significant beneficial impact on the climate.

5.10. Hydrology and Flood Risk

5.10.1. Paragraph 5.16.3 of EN-1 requires applicants to undertake an assessment of the existing status of, and impacts of a proposed project on, water quality, water resource and physical characteristics of the water environment as part of the Environmental Statement. **ES Chapter 11: Hydrology and Flood Risk** (Doc Ref. 6.1) provides this assessment of the Scheme on the water environment during the construction, operation and decommissioning phases. Paragraph 5.16.7 of EN-1 prescribes details of what should be included within the scope of the assessment.

5.10.2. EN-3 contains limited technology-specific hydrology and flood risk policies. Paragraphs 2.10.76 to 2.10.80 promote the use of sustainable drainage systems, recognise the limited impact that solar PV panels on drainage systems, and seek to avoid or limit the culverting of existing watercourses. There are no hydrology or flood risk policies within EN-5.

5.10.3. Mitigation relating to the construction phase is principally secured within the **Outline CEMP** (Doc Ref. 7.10). These measures focus on managing the risk of pollution to surface water and the groundwater environment. It also considers the management of activities within Flood Zones 2 and 3.

5.10.4. The design of the Scheme takes into account flood risk present at the Site by incorporating measures within the design of the Scheme for flood protection, including (but not limited to) providing flood protection for the On-Site Substation and BESS Compounds and solar stations, excluding infrastructure from areas at higher risk of flooding, where practicable, and specifying a minimum height above ground for solar panels in areas at higher risk of flooding. All infrastructure will be offset from watercourses by 10 m, where reasonably practicable, other than where crossings or drainage outfalls are required. These design measures are secured within the **Design Parameters** (Doc Ref. 7.4). **ES Appendix 11-4: Outline Drainage Strategy** (Doc Ref. 6.3) sets out principles for surface water runoff attenuation to ensure no increase in surface water discharge rates and for water quality treatment of runoff water. The drainage strategy for the BESS Compound also sets out principles for any fire water containment. Further management measures are contained within the **Outline OEMP** (Doc Ref. 7.11) and **Outline DEMP** (Doc Ref. 7.12).

5.10.5. **ES Chapter 11: Hydrology and Flood Risk** (Doc Ref. 6.1) does not report any significant adverse effects on the water environment during the construction, operation or decommissioning of the Scheme.

5.10.6. The Scheme is also required to satisfy requirements under the Water Framework Directive (WFD) in terms of flood risk. The following subsections summarise the Applicant's compliance with these tests.

Water Framework Directive

5.10.7. Paragraph 5.16.13 of EN-1 directs the Secretary of State to give impacts on the water environment more weight where a project would have an adverse effect on the achievement of the environmental objectives established under the WFD. **ES Appendix 11-2: Water Framework Directive Report** (Doc Ref. 6.3) provides an assessment of the Scheme under the WFD, including a screening and scoping exercise followed by an impact assessment and an assessment against the WFD objectives.

5.10.8. Taking into account the mitigation proposed, which includes development of a Water Management Plan post-consent in accordance with the **Outline CEMP** (Doc Ref. 7.10), the assessment concludes that there would not be a deterioration in WFD status of water bodies. The risk of WFD impacts is low owing to the low quality and sensitivity of the watercourses which have the potential to be affected. Therefore, greater weight is not required to the impacts on the water environment.

Flood Risk Assessment

5.10.9. Paragraph 5.8.13 of EN-1 requires a site-specific flood risk assessment to accompany all applications for energy projects in Flood Zones 2 and 3 as well as those within Flood Zone 1 where additional criteria is met. Paragraphs 5.8.14 and 5.8.15 of EN-1 detail the scope and minimum requirements for a Flood Risk Assessment (FRA).

5.10.10. In determining an application for development consent, paragraph 5.8.36 of EN-1 requires the Secretary of State to be satisfied that:

- *"The application is supported by an appropriate FRA;*
- *The Sequential Test has been applied and satisfied as part of site selection;*
- *A sequential approach has been applied at the site level to minimise risk by directing the most vulnerable uses to areas of lowest flood risk;*
- *The proposal is in line with any relevant national and local flood risk management strategy;*
- *SuDS have been used unless there is clear evidence that their use would be inappropriate;*
- *In flood risk areas the project is designed and constructed to remain safe and operational during its lifetime, without increasing flood risk elsewhere;*

- *The project includes safe access and escape routes where required, as part of an agreed emergency plan, and that any residual risk can be safely managed over the lifetime of the development;*
- *Land that is likely to be needed for present or future flood risk management infrastructure has been appropriately safeguarded from development to the extent that development would not prevent or hinder its construction, operation or maintenance."*

5.10.11. The likely effects of the Scheme associated with flood risk have been assessed in **ES Appendix 11-3: Flood Risk Assessment** (Doc Ref. 6.3). The FRA concludes that the land hosting the Scheme would remain safe for its lifetime, does not increase flood risk elsewhere, and fulfils the Government's wider criteria for sustainable development.

5.10.12. Nonetheless, as the Scheme is located within Flood Zones 2 and 3, the Applicant is required to demonstrate application of the Sequential Test and the Exception Test, both of which are stepped through in the below subsections.

Sequential Test

5.10.13. Paragraph 5.8.6 of EN-1 requires applicants to set out the 'sequential' approach taken to direct new energy infrastructure to areas with the lowest risk of flooding. Paragraph 5.8.7 of EN-1 goes on to states that only in 'exceptional' circumstances where it is necessary to site this infrastructure in areas of flood risk, the development has to be made safe for the duration of its lifetime without increasing flood risk elsewhere and should seek to reduce flood risk overall. It should also be designed and constructed to remain operational in times of flood.

5.10.14. The Flood Risk and Coastal Change section of the PPG sets out detailed guidance on the application of the Sequential Test in paragraphs 023 and 024. Paragraph 024 requires applicants to steer new development to areas with the lowest risk of flooding. Where this is not possible, the Sequential Test should compare reasonably available sites within medium risk areas in the first instance, and then, only where there are no reasonably available sites in low and medium risk areas, within high-risk areas. Paragraph 028 of the Flood Risk and Coastal Change section of the PPG provides clarification on the definition of 'reasonably available' sites:

"Sites should be considered 'reasonably available' for the purposes of the sequential test if their location is suitable for the type of development proposed, they are able to meet the same development needs and they have a reasonable prospect of being developed at the same time as the proposal.

In considering whether alternative lower-risk sites (which could, where relevant, be a series of two or more smaller sites) would be capable of accommodating the proposed development, such alternative sites do not need to be owned by the applicant to be considered 'reasonably available'."

5.10.15. While the Applicant acknowledges this guidance, further subdivision of the Solar Development Area beyond that proposed would not be viable. Although the Scheme comprises four land parcels, these function as a single generating station connected by inter-array cabling. Additional fragmentation of the Scheme into smaller or separate developments would result in increased cabling requirements, greater generation losses and higher infrastructure and associated costs. This could have a significant effect on the commercial feasibility of the proposals as acknowledged in footnote 89 to paragraph 2.10.16 of EN-3.

5.10.16. As explained in **Appendix D: Site Selection Report** (Doc Ref. 7.1), at a macro level there are very few areas of land outside of Flood Zone 2 and 3 which are capable of hosting utility scale solar infrastructure that would enable the Applicant to maximise its grid connection agreement**.** Availability of land needs to be considered alongside the presence of other constraints such as environmental designations.

5.10.17. **ES Appendix 11-3: Flood Risk Assessment** (Doc Ref. 6.3) describes in more detail the susceptibility of the Site to flooding and how the Scheme has been designed to avoid, for the most part, areas with the greatest risk of flooding. Priority has been given to locating critical infrastructure such as the substations and solar stations outside of Flood Zone 3b, however it is not practicable to locate all infrastructure outside areas with the highest risk of flooding without reducing the renewable energy generation of the Scheme or impacting other environmental constraints (such as Scheduled Monuments).

5.10.18. The assessment contained in **ES Appendix 11-3: Flood Risk Assessment** (Doc Ref. 6.3) and the narrative provided within the **Design Approach Document** (Doc Ref. 7.3) and **Site Selection Report** (Doc Ref. 7.1) demonstrates that consideration has been given to reasonably available sites, noting the Applicant's strong preference to enter into voluntary land agreements for the Solar Development Area.

5.10.19. The Applicant has undertaken flood modelling which has supported the application of the Sequential Test to site the most critical solar infrastructure outside of areas with the highest risk of flooding. This includes the 400 kV substation and BESS Compound, the 132 kV substations and the solar stations. **ES Appendix 11-3: Flood Risk Assessment** (Doc Ref. 6.3) sets out the indicative location of critical infrastructure in relation to the functional floodplain extents.

5.10.20. It demonstrates that all critical infrastructure can be sited outside of Flood Zone 3b extents with the exception of six solar stations within the Gotts Catchment at Land Parcel D. It has not been possible to locate these solar stations outside of the functional floodplain without either acquiring additional land (noting the surrounding land is also within Flood Zone 3b) or removing these land parcels from the Solar Development Area altogether, which would reduce the generating capacity of the Scheme.

Exception Test

5.10.21. Paragraph 5.8.9 of EN-1 states "*if, following application of the Sequential Test, it is not possible, (taking into account wider sustainable development objectives) for the project to be located in areas of lower flood risk, the Exception Test can be applied … The test provides a method of allowing necessary development to go ahead in situations where suitable sites at lower risk of flooding are not available*".

5.10.22. In applying the Exception Test, Annex 3 of the NPPF classifies 'solar farms and essential utility infrastructure (including for generation)' as essential infrastructure, including the BESS. Table 2 of Annex 3 states the Exception Test must be applied to essential infrastructure sited in Flood Zone 3a or 3b where the Sequential Test has demonstrated that there are no reasonably available, lower risk sites, appropriate for the Scheme.

5.10.23. In this case, essential infrastructure is required within both Flood Zone 3a and 3b.

5.10.24. There are two limbs to the Exception Test within paragraph 031 of the PPG, "*It should be demonstrated that:*

- *development that has to be in a flood risk area will provide wider sustainability benefits to the community that outweigh flood risk; and*
- *the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and where possible, will reduce flood risk overall*".

5.10.25. In response to the first limb, the Scheme would contribute to the UK's net zero and energy security goals at a national level as described in Section 4 of this Planning Statement. The Scheme is deemed to be a nationally significant infrastructure project due to its sizeable generation capacity, as well as critical national priority infrastructure, identified by UK Government as low carbon infrastructure which is critical to decarbonising the power system. The Scheme would also provide benefits to the community as outlined in Section 4.3 of this Planning Statement.

5.10.26. Table 2 of the Flood Risk and Coastal Change chapter of the PPG does not require 'essential infrastructure', which includes the Scheme, to demonstrate the Exception Test in Flood Zone 1 or Flood Zone 2. It provides for essential infrastructure within Flood Zones 3a and 3b, subject to successful application of the Exception Test.

5.10.27. To demonstrate the second limb, where essential infrastructure is located in Flood Zone 3a, it should be designed and constructed to remain operational and safe in times of flood. Where it is located within Flood Zone 3b (the functional floodplain), it should be designed and constructed to remain operational and safe for users in times of flood, result in no net loss of floodplain storage, and not impede water flows and not increase flood risk elsewhere.

5.10.28. Where solar panels are proposed within either flood zone, they are to have sufficient freeboard allowance to remain operational, as secured within the **Design Parameters** (Doc Ref. 7.4). During the River Welland breach event in a 1 in 1,000-year flood event, a small area of PV panels would be submerged in Land Parcel A, as identified within **ES Appendix 11-3: Flood Risk Assessment** (Doc Ref. 6.3). The assessment of submerged panels confirms the upper panels will remain above the flood level and remain operational in times of flood, confirming there is no area of PV panels that will not be operational during the lifetime of the Scheme.

5.10.29. Within Land Parcels A, B and C, all infrastructure other than the solar PV panels are to be located outside of the Flood Zone 3b extents, with embedded mitigation included in the design to take into account a breach scenario of the River Welland.

5.10.30. Within Land Parcel D, there are six solar stations proposed within Flood Zone 3b associated with the Gotts Catchment. These solar stations have a functional requirement to be co-located with the solar PV panels planned within these fields. There are no alternative design scenarios in this location which would see the solar stations located outside of the functional floodplain without removal of the solar PV panels altogether. The solar stations in this location are to be raised on plinths to provide a 0.6 m freeboard to ensure operation in times of flood. The total volume of floodplain displaced by the presence of the six solar stations would result in an average flood depth change of 0.7 mm. This measurement is significantly below the resolution of hydraulic modelling and topographic survey accuracy.

5.10.31. In the event of the River Welland breach in a 1 in 1,000-year floor event, the solar PV panel legs would result in a potential flood depth increase of 1 mm across the Solar Development Area. Partially submerged PV panels may increase the flood depth up to 9 mm in Land Parcel A. **ES Appendix 11-3: Flood Risk Assessment** (Doc Ref. 6.3) considers an increase of such small magnitude will not materially increase flood risk elsewhere.

5.10.32. The post-Scheme flood depth assessment notes a small net increase in flood depth outside of the Order Limits in agricultural fields with no impact on properties or roads. This increase would only occur in the River Welland breach event in a 1 in 1,000-year floor event and result in a maximum depth increase of 0.1 m within an agricultural field which would already be flooded during the breach event.

5.10.33. Therefore, **ES Appendix 11-3: Flood Risk Assessment** (Doc Ref. 6.3) concludes the siting of the Scheme infrastructure in the flood zone is not expected to result in any material or measurable loss of floodplain storage, nor any material change to flood depths or floodplain hydraulics. On this basis, no additional flood mitigation or compensation is required.

5.10.34. Taking into account the above, it is considered the Scheme meets the second limb of the Exception Test as the embedded design measures demonstrate development will be safe for its lifetime taking account the vulnerability of its users, without materially increasing flood risk elsewhere.

5.11. Landscape and Visual

5.11.1. Section 5.10 of EN-1 sets out landscape and visual policies for energy infrastructure projects. Paragraph 5.10.5 of EN-1 recognises that "*virtually all nationally significant energy infrastructure projects will have adverse effects on the landscape, but there may also be beneficial landscape character impacts arising from mitigation*". Paragraph 5.10.16 of EN-1 requires applicants to carry out a landscape and visual assessment, including cumulative effects of a proposed development. The Applicant has prepared **ES Chapter 12: Landscape and Visual** (Doc Ref. 6.1) which reports the assessment of likely significant effects on landscape and visual receptors during the construction, operation and decommissioning phases of the Scheme.

5.11.2. National Parks, the Broads and National Landscapes are confirmed within paragraph 5.10.7 of EN-1 as having the highest status of protection in relation to landscape and natural beauty. There are no National Parks, the Broads or National Landscapes within the Order Limits or study area for the Scheme.

5.11.3. EN-3 contains policies specific to the landscape and visual considerations of solar farms. It recognises, at paragraph 2.10.87, that with effective screening and appropriate land topography, the area of a zone of visual influence could be appropriately minimised. Paragraph 2.10.89 of EN-3 recommends the use of photomontage visualisations to demonstrate the effects of a proposed solar farm on sensitive or valued landscapes, particularly designated landscapes, the setting of heritage assets and any nearby residential areas or viewpoints. The Applicant has prepared photomontages to support its assessment, which are contained in **ES Figure 12-21: Photosheets** (Doc Ref. 6.2) and **ES Figure 12-22: LCC Photosheets** (Doc Ref. 6.2). These photomontages take into account cumulative developments.

5.11.4. EN-5 sets out landscape and visual considerations specific to electricity network infrastructure. Paragraphs 2.9.7 to 2.9.9 state that new overhead lines can give rise to adverse landscape and visual effects, as may new substations, sealing end compounds (including terminal towers) and other above-ground installations. Paragraph 2.9.11 of EN-5 recognises that "*though mitigation of the landscape and visual impacts arising from overhead lines and their associated infrastructure is usually possible, it may not always be so, and the impossibility of full mitigation in these cases does not countermand the need for overhead line*".

5.11.5. Where the effects of an overhead line are deemed to result in "particularly significant landscape and visual effects", paragraph 2.9.14 of EN-5 requires

applicants to "*demonstrate that they have given due consideration to the costs and benefits of feasible alternatives to the overhead line*".

5.11.6. Further paragraphs 2.9.16 to 2.9.19 of EN-5 affirm the application of the Holford and Horlock Rules when it comes to siting new overhead lines and substations. The Applicant details the consideration of the principles within the Holford and Horlock Rules within the **Design Approach Document** (Doc Ref. 7.3).

5.11.7. The Applicant has undertaken an assessment of the potential landscape and visual effects of the Scheme in **ES Chapter 12: Landscape and Visual** (Doc Ref. 6.1). It considers the likely significant effects on:

- landscape character;
- landscape fabric, which refers to the combined effect of physical landscape elements present within the landscape such as landform, land cover, boundary features, and trees and woodland;
- landscape designations within the established study area; and
- visual amenity.

5.11.8. Mitigation measures in relation to landscape and visual are principally set out in the **Outline CEMP** (Doc Ref. 7.10), **Outline LEMP** (Doc Ref. 7.16) and **Outline DEMP** (Doc Ref. 7.12). These measures include:

- protect and retain existing trees and vegetation which are not scheduled for removal via construction exclusion zones and tree protective fencing;
- lighting to be at the minimal levels of lux and luminance as necessary for safe working practices;
- landscape and biodiversity management and enhancement measures, including replacement planting;
- landscape, arborist and ecological clerk of works to ensure that the landscape and ecology requirements of the CEMP are adhered to;
- tree works to be undertaken in accordance with **ES Appendix 12-8: Arboricultural Impact Assessment** (Doc Ref. 6.3);
- implementation of perimeter security fencing around the Scheme early in the construction phase; and
- implementation of a timetable for maintenance and management proposals, including an annual landscaping management plan.

5.11.9. The Applicant has sought to mitigate landscape and visual impacts through screening with bands of native scattered trees and shrubs throughout the Solar Development Area in line with paragraph 2.10.123 of EN-3. The **Outline LEMP** (Doc Ref. 7.16) and its accompanying Outline Landscape Masterplan set out the planting proposals for the Scheme. In some cases, it has been identified as

beneficial to undertake planting early in order to maximise growth prior to the Scheme becoming operational. All other residual planting would be undertaken at the end of the construction period.

5.11.10. The design has also evolved to take into account proximity of receptors to the Scheme to reduce visual impact. Setbacks are secured within the **Works Plans** (Doc Ref. 2.3) and the **Outline LEMP** (Doc Ref. 7.16) to maintain an appropriate distance between the infrastructure and residential receptors. Planting and Habitat Management Areas are proposed in within the vicinity of residential properties to reduce visual effects as well as glint and glare effects. Specifically:

- Cloot House, west of Cloot Drove / Washbank: An offset of solar PV panels of approximately 50 m from the hedge along the southern boundary of the property in the north-eastern corner of field A-1-05 is proposed to maintain open south, south-westerly views.
- Dwellings at Martins Farm / Martins Farm Cottage, west of Martins Road: An offset of solar PV panels at least 130 m from the western boundary of Martins Farm. An offset of approximately 100 m from the eastern boundary along Martins Road. Advanced planting is proposed along sections of Martins Road and the field adjacent to Martins Farm and Martins Cottage.
- Dwellings off Hull's Drove / B1166 northwest of Shepeau Stow: An offset from solar PV panels of a minimum of 80 m from the northern boundary of these properties is proposed (refer to field C-1-07). In addition, advanced planting comprising shrubs and scattered trees is proposed along the southern boundary and south-eastern boundary of field C-1-07.
- Residences along Queen's Bank: An offset of solar PV panels between 400m and 580 m from the southern boundary of the residential properties. The existing agricultural use of the fields adjacent to Queen's Bank would be retained, with some areas proposed as Habitat Management Areas.
- Residences along Langary Gate Road: An offset of solar PV panels of minimum 50 m from residences. Habitat Management Areas and advanced planting would be established to retain visual amenity. Additional areas of advanced planting are proposed to screen the solar PV panel areas to the west of Langary Gate Road.

Landscape Effects

5.11.11. During all phases of the Scheme, there is potential for adverse effects on NCA46, however these are reported to be not significant due to the scale of the Scheme in relation to the NCA.

5.11.12. It is anticipated that there would be likely significant effects on two Historic Landscape Character Areas - The Fens (HCLA 9) and The Wash (HCLA 10) due to the degradation of key characteristics of these areas as a result of the loss of arable land and the erection of features within the skyline, changing the key

characteristic of 'openness'. During construction, these LCAs are likely to experience significant adverse effects due to the change in use from arable and presence of construction activities, including changes to site levels brought about through excavations and stockpiles within the flat topography.

5.11.13. The assessment reports a moderate (significant) adverse effect at both The Fens (HCLA 9) and The Wash (HCLA 10) during construction, operation and decommissioning of the Scheme.

5.11.14. Two local level Historic Landscape Character Zones (FEN2 and WSH6) are likely to experience significant adverse effects for similar reasons to the above, with openness particularly impacted by the presence of taller infrastructure. The assessment also reports a moderate (significant) adverse effect at both features during all phases of the Scheme.

5.11.15. The landscape assessment also takes into account the potential for cumulative landscape change arising from other schemes. It assesses the additional change in the landscape character and visual amenity introduced by the Scheme following the construction of cumulative schemes.

5.11.16. Following the construction of the cumulative schemes, the additional cumulative effect introduced by the Scheme is not considered to be significant on landscape and visual receptors across all phases of the Scheme. However, the totality of the change in the landscape, considering the Scheme and all of the cumulative schemes together, is considered to be a moderate significant adverse effect.

Visual Effects

5.11.17. The visual effects assessment within **ES Chapter 12: Landscape and Visual** (Doc Ref. 6.1) considers the change in visibility at 42 viewpoints, including viewpoints agreed with Lincolnshire County Council. The locations of the viewpoints are shown on **ES Figure 12-19: Viewpoint Locations on OS Mapping** (Doc Ref. 6.2), while **ES Figure 12-21: Photosheets** (Doc Ref. 6.2) and **ES Figure 12-22: LCC Photosheets** (Doc Ref. 6.2) contain the photomontage visualisations prepared.

5.11.18. The assessment also takes into account the potential cumulative visual effects that may occur during the operational phase.

5.11.19. During construction of the Scheme, several visual receptors have potential to experience likely significant effects. These are most likely to arise for receptors adjacent to, or in close proximity to, the Scheme, where open or partial views would be possible with changes occupying a larger proportion of the view, including a number of elements of the Scheme across the Solar Development Area, Inter-Array Connections and Grid Connection Route. Where high sensitivity receptors may be located further afield, significant effects may also be likely due to availability of open views toward construction activities, changes to the full extent of the available view, or where the receptor may experience changes in views in multiple directions.

5.11.20. Moderate (significant) adverse effects are expected during construction at Viewpoints 2, 5, 6, 7, 8, 10, 11, 12, 13, 15, 20, 21, 27, 30, LCC 2-1, LCC 3, LCC 8, LCC 9 and LCC 10, with major (significant) adverse effects anticipated during construction at:

- Viewpoint 3: View southeast from PRoW Crow/7/1 on the northwestern edge of Parcel A;
- Viewpoint 9: View east from Martins Road at the junction with Hardy's Lane (moderate to major); and
- Viewpoint 14: View southwest from Langary Gate Road south of Langary Gate Farm.

5.11.21. During the first year of operation, moderate (significant) adverse effects are expected at Viewpoints 2, 5, 6, 7, 8, 10, 11, 13, 15, 20, 21, 27, 30, LCC 2-1, LCC 3, LCC 8, LCC 9 and LCC 10. Viewpoints 3, 9 and 14 would continue to experience major (significant) adverse effects. This is due to proposed infrastructure being within close proximity to those viewpoints. Where receptors may be located further afield, significant effects may also be likely due to the openness of views toward the Scheme, changes to the full extent of the available view, or where the receptor may experience changes in views in multiple directions.

5.11.22. At Year 15, landscaping and mitigation planting proposals are expected to have matured to provide screening and landscaping benefits. Viewpoints 2, 5, 6, 8, 9, 10, 14, 15, 20, 21, 27, 30, LCC 2-1, LCC 3, LCC 8, LCC 9 and LCC 10 would experience moderate (significant) adverse effects. Only Viewpoint 3 would continue to experience major (significant) adverse effects due to the visibility of Solar Development Area infrastructure at Land Parcels A, B and C.

5.11.23. During decommissioning, Viewpoint 3 would experience major (significant) adverse effects due to the visibility of decommissioning works at Land Parcels A, B and C. Viewpoints 5, 6, 8, 9, 10, 12, 15, 20, 21, 27, 30, LCC 2-1, LCC 3, LCC 8, LCC 9 and LCC 10 would experience moderate (significant) adverse effects also owing to the visibility of decommissioning works.

5.11.24. The visual assessment also takes into account the potential for cumulative visual effects arising where visibility of construction activities from multiple developments may occur. In accordance with the Guidelines for Landscape and Visual Impact Assessment Third Edition, it is the additional change in the visual amenity introduced by the Scheme, following the construction of cumulative schemes, which is identified. The assessment concludes that following the consideration of the cumulative schemes, the additional cumulative effect introduced by the Scheme is not considered to be significant on visual receptors across all phases of the Scheme. However, the assessment acknowledges that the totality of the effects of all the cumulative schemes considered alongside ethe Scheme is moderate adverse (significant).

Summary

5.11.25. The Secretary of State can be satisfied that the **Design Parameters** (Doc Ref. 7.4) and **Outline LEMP** (Doc Ref. 7.16) secure measures that will control the detailed design of the Scheme and aid meeting good design objectives as set out within the **Design Approach Document** (Doc Ref. 7.4) in line with paragraph 5.10.30 of EN-1. Further, the Applicant is seeking a time-limited consent, and the adverse effects associated with landscape and visual would be reversed following the decommissioning of the Scheme.

5.11.26. Importantly, paragraph 2.9.21 of EN-5 sets out Government's position on the use of overhead lines, it states that "*it is the government's position that overhead lines should be the strong starting presumption for electricity networks developments in general*". Paragraph 2.9.14 of EN-5 requires due consideration to the costs and benefits of feasible alternatives for overhead lines where particularly significant landscape and visual effects are reported.

5.11.27. Where the Applicant has chosen to underground a section of the 400 kV overhead line and the 132 kV inter-array connection between Land Parcel A and B, this is to respond to technical constraints associated with crossing existing infrastructure and maintaining safe operations at the Gliding Club respectively. The rationale for these decisions is set out in full within **ES Chapter 3: Alternatives and Design Evolution** (Doc Ref. 6.1).

5.11.28. Where major adverse effects are identified within **ES Chapter 12: Landscape and Visual** (Doc Ref. 6.1), these relate to the prevalence of Solar Development Area infrastructure rather than owing to the presence of Grid Connection Route infrastructure. All landscape and visual effects reported with respect to Grid Connection Route infrastructure are moderate adverse effects. The cumulative effects assessment does not report an increase in the significance of the adverse effects as a result of additional overhead line infrastructure associated with the Grimsby to Walpole and Weston Marsh to East Leicestershire overhead line projects.

5.11.29. No significant adverse effects have been specifically identified in relation to the presence of the overhead Inter-Array Connection Area infrastructure (also classed as an NSIP).

5.11.30. Notwithstanding the above, the Applicant has provided an indication of the costs and benefits of feasible alternatives within **ES Chapter 3: Alternatives and Design Evolution** (Doc Ref. 6.1), however the effects associated with the overhead line NSIPs are not considered to be 'particularly significant' to necessitate the detailed consideration of alternatives prescribed in paragraph 2.9.15 of EN-5. Further paragraph 2.9.24 of EN-5 states that "*cases will arise where, though no part of the proposed development crosses a designated landscape, a high potential for widespread and significant adverse landscape and/or visual*

impacts along certain sections of its route may result in recommendations to use underground for relevant segments of the line".

5.11.31. While there is no definition within EN-5 as to what may be deemed particularly significant, the Applicant has understood this to be those effects that exceed moderate adverse significance, which is not the case for the overhead line infrastructure, including in the cumulative effects assessment. Additionally, there is no specific segment of the Grid Connection Route where greater landscape or visual effects are reported.

5.11.32. To conclude, the Scheme does not cross any part of a nationally designated landscape that would reverse this presumption, nor are the landscape and visual effects of the overhead lines reported in **ES Chapter 12: Landscape and Visual** (Doc Ref. 6.1) deemed to be so significant that undergrounding should be given thorough consideration as a viable alternative in accordance with paragraph 2.9.14 of EN-5.

5.12. Materials and Waste

5.12.1. Paragraph 5.15.8 of EN-1 requires applicants to describe the arrangements proposed for "*the sustainable management of waste and use of resources should include information on how re-use and recycling will be maximised in addition to the proposed waste recovery and disposal system for all waste generated by the development*".

5.12.2. Paragraph 5.15.15 of EN-1 goes on to state that "*the Secretary of State should be satisfied that:*

- *any such waste will be properly managed, both on-site and off-site.*
- *the waste from the proposed facility can be dealt with appropriately by the waste infrastructure which is, or is likely to be, available. Such waste arisings should not have an adverse effect on the capacity of existing waste management facilities to deal with other waste arisings in the area.*
- *adequate steps have been taken to give consideration to the circular economy, minimise the volume of waste arisings, and of the volume of waste arisings sent for recovery or disposal, except where that is the best overall environmental outcome".*

5.12.3. Neither EN-3 or EN-5 contain any technology-specific policies relating to materials and waste.

5.12.4. Section 16.5 of **ES Chapter 16: Other Environmental Topics** (Doc Ref. 6.1) sets out the Applicant's approach to managing materials and waste arising the Scheme. It is supported by an **Outline Site Waste Management Plan** (SWMP) (Doc Ref. 7.19), a detailed SWMP in accordance with the outline plan is secured through the **Draft DCO** (Doc Ref. 3.1).

5.12.5. Measures the Applicant proposes to avoid and reduce impacts and effects from materials and waste include:

- implementation of the waste hierarchy;
- design out and prevent waste arising;
- preparation and implementation of a Materials Management Plan for the reuse of excavated materials during construction in accordance with the CL:AIRE Definition of Waste: Code of Practice;
- diversion of waste from landfill through off-site recycling and recovery; and
- use of recycled and secondary aggregates (alternative materials) in the construction of the Scheme.

5.12.6. No significant adverse effects are identified in relation to materials or waste, as reported in **ES Chapter 16: Other Environmental Topics** (Doc Ref. 6.1), including under the 'worst case' and 'absolute worst case' cumulative effects scenarios.

5.12.7. The securing of the SWMP, and therefore the measures contained within, ensure the Secretary of State can be satisfied that waste will be appropriately minimised and managed in accordance with paragraph 5.15.14 of EN-1.

5.13. Noise and Vibration

5.13.1. Paragraph 5.12.5 of EN-1 identifies the factors that will determine the likely noise and vibration impacts of developments, which includes inherent operational noise, proximity to noise sensitive receptors, proximity to 'quiet places' and potential impacts on protected species and other wildlife. Further paragraph 5.12.6 sets out specific requirements for noise and vibration assessments for energy projects.

5.13.2. The Applicant has prepared **ES Chapter 13: Noise and Vibration** (Doc Ref. 6.1) which includes an assessment of potential noise and vibration effects throughout all phases of the Scheme in accordance with paragraph 5.12.6 of EN-1. The assessment also takes into consideration ancillary activities such as increased road traffic in accordance with paragraph 5.12.8 of EN-1, as well as the impact of operational noise on human receptors in accordance with paragraph 5.12.9 of EN-1. Further, paragraphs 2.9.27 to 2.9.44 of EN-5 describe scenarios for electricity transmission infrastructure where the assessment of noise is relevant including operational noise from substations and 'cackle' and 'hum' from the electricity lines during different weather conditions.

5.13.3. In making their determination, paragraph 5.12.17 of EN-1 requires that the Secretary of State "*should not grant development consent unless they are satisfied that the proposals will meet the following aims, through the effective management and control of noise:*

- *Avoid significant adverse impacts on health and quality of life from noise;*

- *Mitigate and minimise other adverse impacts on health and quality of life from noise; and*
- *Where possible, contribute to improvements to health and quality of life through the effective management and control of noise."*

5.13.4. The predicted impacts of noise generated from the Scheme are considered in **ES Chapter 13: Noise and Vibration** (Doc Ref. 6.1). During the construction and decommissioning phases, noise and vibration would primarily be controlled through measures that represent 'Best Practicable Means' secured within the **Outline CEMP** (Doc Ref. 7.10) and the **Outline DEMP** (Doc Ref. 7.12). This includes developing a communication strategy and noise complaints process for immediate investigation and action by the Applicant.

5.13.5. The **Outline CTMP** (Doc Ref. 7.13) also sets out measures to manage noise impacts associated with construction traffic including traffic routing, timing and access points.

5.13.6. During construction, additional measures are proposed in the form of temporary, mobile acoustic screening to reduce noise at RG07, RG32, RG36, RG48, RG53, RG54, RG60, which are all anticipated to experience major or moderate significant construction noise effects without further mitigation. The implementation of this screening would see noise reduction of up to 10dB, resulting in a minor adverse (not significant) residual effect at all receptors with the exception of RG53 (residential property at Broad Gate).

5.13.7. The assessment reports that residual moderate (significant) adverse effects may be experienced during the construction phase at RG53 as a result of night-time HDD activities, which may be required if it is not possible for the Grid Connection overhead line to oversail existing third party electricity infrastructure and, therefore, the third party assets would need to be undergrounded.

5.13.8. In addition, moderate adverse (significant) effects have been identified at Langary Gate Road as a result of construction traffic noise during peak construction (significant adverse effects are also reported at this receptor during the decommissioning phase on a precautionary basis).

5.13.9. No significant vibration effects are identified and as such, no additional mitigation measures are required in relation to vibration.

5.13.10. To minimise noise impacts during the operational phase, the Applicant proposes the following embedded mitigation:

- equipment will be evaluated against criteria in order to select less noisy equipment,
- infrastructure would be oriented away from large concentrations of receptors, and

- enclosing equipment (where practicable).

5.13.11. Without further mitigation, operational plant noise is predicted to exceed Significant Observed Adverse Effect Level (SOAEL) at RG04 and RG05 leading to a moderate adverse effect which is significant. Additional mitigation measures are proposed in the form of selecting transformers designed for low noise output within Land Parcel B, and utilisation of BESS containers with 'low noise' air cooled heat exchanger designs, both of which can reduce noise emitted at each transformer/unit by up to 8 dB. The incorporation of these measures would see noise levels at RG04 and RG05 reduced to below SOAEL, and residual effects reported to be minor adverse and not significant. Additionally, operational noise limits are proposed at receptor groups and are secured through Requirement 18 to the Draft DCO (Doc Ref. 3.1).

5.13.12. Without additional mitigation, noise effects associated with the overhead lines are expected to incur a moderate adverse effect which is significant at seven receptor groups within 10 m and 180 m of the overhead line within the Grid Connection Route.

5.13.13. Additional mitigation measures have been proposed to reduce the noise from the high-voltage lines including:

- the use of multiple sub conductors, and by increasing spacing between sub conductors, which reduce corona discharge and thereby noise;
- the use of hydrophilic coatings which allow water to spread into a thin film rather than forming noise-generating droplets; and
- increasing the distance between conductor groups to reduce electrostatic stress between them, thereby lowering the electric field which lessens corona formulation.

5.13.14. Adoption of these measures would reduce the impact of overhead line noise to be minor and not significant.

5.13.15. Once all mitigation measures are considered the only resulting significant adverse effects are:

- Significant construction noise effect at RG53 as a result of night-time HDD activities. RG53 is predicted to experience likely significant effects during HDD activities in the night-time. At this stage, the exact plant for intended for use, especially in the Grid Connection Route where HDD is likely to be on a smaller scale, is unknown. As such, construction noise effects are likely to be overestimated.
- Significant construction traffic noise effects at receptors along Langary Gate Road (including during the decommissioning phase). Significant residual effects are identified on Langary Gate Road during the peak construction of the Scheme. While barriers could be used to reduce road traffic noise levels, they are not considered a practicable or proportionate means of mitigating

construction traffic noise, as vehicle movements occur along public highways and dispersed access routes where barriers would present safety, access and visual constraints, provide limited benefit and be disproportionate given the temporary and transient nature of construction traffic.

5.13.16. While the Scheme would result in significant adverse noise effects during the construction and decommissioning phases, all reasonably practicable measures have been applied to avoid and reduce the impacts on nearby receptors in line with the first and second aims of the NPSE and paragraph 5.12.17 of EN-1.

5.14. Socio-Economics and Land Use

5.14.1. EN-1 recognises at paragraphs 5.13.1 and 5.13.2 that the construction, operation and decommissioning of energy infrastructure may have socio-economic impacts at local and regional levels, and where this may be the case, applicants should include an assessment of these within their Environmental Statement. The Applicant has prepared **ES Chapter 14: Socio-Economics and Land Use** (Doc Ref. 6.1) which takes into account the specific considerations referenced within paragraphs 5.13.4 to 5.13.7 of EN-1.

5.14.2. Embedded measures to mitigate potential construction phase effects on the local community and existing facilities from a socio-economic and land use perspective are contained across the suite of management plans including the **Outline CEMP** (Doc Ref. 7.10), **Outline DEMP** (Doc Ref. 7.12), **Outline CTMP** (Doc Ref. 7.13) and **Outline SMP** (Doc Ref. 7.14). These measures include:

- implementation of a stakeholder communications plan;
- adopting core construction working hours on-site of 07:00 to 19:00 on Monday to Friday and 08:00 to 13:30 on Saturday;
- environmental monitoring of the Scheme and its impacts throughout the construction phase;
- establishment of a Community Liaison Group prior to construction which will continue through until final commissioning of the Scheme;
- promoting sustainable travel usage by construction staff travelling to and from the Scheme, with a shuttle bus strategy implemented for non-local workers. A similar scheme would be implemented during decommissioning; and
- measures to minimise loss of soil material and loss of soil functional capacity for supporting agricultural production will be avoided during construction, operation, and decommissioning of the Scheme

5.14.3. The Applicant has also provided an **Outline SSCEP** (Doc Ref. 7.17) as part of the DCO Application which sets out measures to maximise the benefits for local residents and businesses, including any proposed employment or skills schemes.

5.14.4. The assessment within **ES Chapter 14: Socio-Economics and Land Use** (Doc Ref. 6.1) finds that the majority of socio-economic impacts experienced during the construction and decommissioning phases would relate to employment opportunities and increased spend on local services.

5.14.5. The assessment concludes that on average, the Scheme would employ 184 gross FTE during the construction phase, of which 74 FTE are expected to be taken by the local workforce. Taking account of leakage, displacement and multiplier effects, the Scheme would support, on average 207 total net jobs per annum, with 83 jobs per annum expected to be taken up by residents within the study area.

5.14.6. The Applicant has considered the impacts of the Scheme's workforce on local accommodation during construction, including consideration of cumulative effects associated with other developments being constructed with similar timeframes. The assessment reports the effects on visitor accommodation as well as private and community assets as minor adverse effects which are not significant.

5.14.7. **ES Chapter 14: Socio-Economics and Land Use** (Doc Ref. 6.1) describes the beneficial impacts the Scheme is predicted to generate in relation to employment and economic contribution during all phases of the Scheme. A Skills, Supply Chain and Employment Plan is secured by a DCO Requirement which must be in substantial accordance with the **Outline SSCEP** (Doc Ref. 7.17) submitted with the DCO Application.

Mineral Safeguarding Assessment

5.14.8. **ES Chapter 14: Socio-Economics and Land Use** (Doc Ref. 6.1) considers the effect on the Mineral Safeguarding Area at the south-west corner of Land Parcel A. It concludes that the deposits will not be permanently sterilised by the Scheme and could be extracted, if required, after the decommissioning of the Scheme. The construction and operation of the Solar Development Area in this location would be minimally invasive and is not considered to impact the underlying geology. The frames supporting the solar panels are to be driven at most 3.5 m into the ground and would be fully removed as part of decommissioning. It concludes the Scheme would result in a negligible effect on the MSA which is not significant.

5.14.9. Paragraph 5.94 of the Lincolnshire Minerals and Waste Core Strategy and Development Management Polices requires that where applications are made within a Minerals Safeguarding Area for non-minerals development, it should be accompanied by a Minerals Assessment in accordance with the latest guidance from the British Geological Survey (currently set out in Mineral Safeguarding In England: Good Practice Advice, reference OR/11/046}, unless otherwise listed as exempt within the policy.

5.14.10. **Appendix E: Mineral Safeguarding Assessment** (Doc Ref. 7.1) provides an assessment of the Scheme's on minerals safeguarding within Lincolnshire.

5.14.11. Overall, it concludes the Scheme would not have an impact on Lincolnshire's supply of sand and gravel.

5.15. Traffic and Access

5.15.1. Paragraph 5.14.19 of EN-1 acknowledges that new energy NSIPs "*may give rise to substantial impacts on the surrounding transport infrastructure and the Secretary of State should therefore ensure that the applicant has sought to mitigate these impacts, including during the construction phase of the development and by enhancing active, public and shared transport provision and accessibility*".

5.15.2. The construction and decommissioning phases of the Scheme are likely to give rise to the greatest impacts in relation traffic and access. Paragraphs 2.10.112 to 2.10.118 of EN-3 set out policies in relation to construction traffic. Paragraph 2.10.113 acknowledges that most solar farms will be sited in locations served by local roads.

5.15.3. **ES Chapter 15: Traffic and Access** (Doc Ref. 6.1) provides an assessment of the Scheme on the transport network. Embedded mitigation secured within the **Outline CTMP** (Doc Ref. 7.13), the **Outline CEMP** (Doc Ref. 7.10) and the **Outline DEMP** (Doc Ref. 7.12) will ensure that the effects of the Scheme on traffic and access are not significant. Measures include:

- providing suitable points of access for construction vehicles to accommodate swept paths and designed with adequate visibility;
- delivering internal construction routes through the Solar Development Area and Grid Connection Route;
- providing suitable protection/separation between existing PRoW and construction routes where necessary;
- managing areas where the proposed construction route crosses any existing PRoW (where these are unable to be diverted) or local access roads;
- restricting HGV movements and abnormal loads to certain routes;
- reducing HGV movements during certain times of the day (e.g. between 07:00 and 09:00, as well as between 17:00 and 19:00), to avoid increasing traffic levels on the surrounding highway network during the traditional weekday peak hours;
- encouraging local construction staff to car share or make use of any staff minibuses to reduce single occupancy car trips;
- implementing local off-site highway improvements to accommodate construction vehicles and abnormal loads travelling to the Scheme e.g. carriageway widening, pavement protection, removal of street furniture,

vegetation clearance including overhanging trees and lifting overheard cables if required.

5.15.4. **ES Chapter 15: Traffic and Access** (Doc 6.1) concludes that there would not be any significant adverse effects on severance and pedestrian delay, driver delay, non-motorised users, fear and intimidation, road safety, and as a result of large loads on road and junction receptors. The assessment also takes into account the potential for cumulative effects with other developments.

5.15.5. It reports that the cumulative effects expected on Traffic and Access receptors within the study area are predicted to be either minor or negligible (and not significant). The exception to this is the following road safety receptors; A151 Holbeach Road, A16 South of Crowland, A16 North of Peterborough, Hull's Drove (East), where the assessment predicts the potential for moderate (significant) adverse effects to occur if the construction peaks of the Scheme and cumulative projects overlap. Provisions set out within the **Outline CTMP** (Doc Ref. 7.13) and the Schedule 2 Requirements within the **Draft DCO** (Doc Ref. 3.1) provide further measures to be applied if necessary to manage these impacts.

5.15.6. Paragraph 5.10.33 of EN-3 recognises that PRoW may need to be temporarily closed or diverted to facilitate the construction of solar projects. To construct the Scheme, there would be temporary closures at Crow/12/1 and Wstn/3/1, with a temporary diversion and management measures proposed at the Common Land on Martins Road. The **Outline PRoWMP** (Doc Ref. 7.15) sets out further management measures specifically in relation to these PRoW and the strip of common land at Martins Road. **ES Chapter 15: Traffic and Access** (Doc 6.1) reports that any adverse effects on these receptors would be negligible.

5.15.7. During the operation of the Scheme, traffic would be substantially less than during construction. The Applicant proposes measures within the **Outline OEMP** (Doc Ref. 7.11) that would ensure operational impacts are minimised, including:

- providing suitable points of access for operational vehicles;
- converting the internal construction routes within the Solar Development Area into maintenance routes;
- utilising existing field access locations to facilitate access for periodic inspection and maintenance along the Grid Connection Route;
- maintaining access to all existing PRoW and common land within the Scheme; and
- controlling areas where the internal maintenance route crosses any existing PRoW or local access roads (such as providing gates), permitting only operational traffic to utilise these internal routes within the Scheme. Operational traffic will give-way to other users (including pedestrians and

road users) when using the crossing points. Visibility will be maximised between operational vehicles and other users, with warning signage provided if required.

5.15.8. No residual significant adverse effects are reported in relation to traffic and access within **ES Chapter 15: Traffic and Access** (Doc Ref. 6.1). The Applicant has prepared an **Outline CTMP** (Doc Ref. 7.13) which incorporates demand management measures in accordance with paragraph 5.4.11 of EN-1 and paragraph 2.10.131 of EN-3.

5.15.9. As there would be no significant adverse effects on traffic and access with the Scheme alone, additional measures are not required in respect of paragraphs 5.14.19 to 5.14.21 of EN-1. Where there is potential for cumulative impacts on road safety, additional measures are proposed within the **Outline CTMP** (Doc Ref. 7.13) and Schedule 2 Requirements of the **Draft DCO** (Doc Ref. 3.1) to respond to those effects.

5.16. Cumulative Effects

5.16.1. Two types of cumulative effects are assessed and reported as part of the ES:

- **Intra-project cumulative effects**, also referred to as 'effect interactions'. These comprise the combine effects on individual impacts from the Scheme which have been identified as part of the assessments reported within **ES Chapters 5 to 16** (Doc Ref. 6.1). Intra-project cumulative effects may result in a new or different likely significant effect or an effect of greater significance than any one of the impacts on their own. For example, this can happen during construction, if a receptor is subjected to noise, dust, and visual impacts associated with site works; and
- **Inter-project cumulative effects**, where there is the potential for two or more developments not yet forming part of the baseline environment to lead to significant cumulative environmental effects on the same receptor. Each topic-specific ES Chapter provides an assessment of inter-project cumulative effects as a result of the Scheme and other projects.

5.16.2. Inter-project cumulative effects have been considered within this Planning Statement within each of the topic sections alongside the policy assessment of the Scheme on its own.

5.16.3. The following paragraphs relate to intra-project effects which are not included in the preceding discussion.

5.16.4. **ES Chapter 17: Effect Interactions** (Doc Ref. 6.1) provides this intra-project cumulative effects assessment. Only receptors that are expected to be subject to more than one residual effect of minor significance or above have been included in the assessment.

5.16.5. During the construction phase, there is the potential for significant residual effect interactions to occur where high sensitivity receptors, such as residential properties or sensitive community receptors within 300 m of the Site, are affected by visual, noise and vibration, air quality, and traffic and access effects. These may lead to an increased sense of disturbance, however, these intra-project cumulative effects would be short-term temporary, transient, and unlikely to be continuous throughout the construction period. The effects will be managed and minimised in accordance with the measures outlined in the **Outline CEMP** (Doc Ref. 7.10). It is considered that the effects during the decommissioning phase would be no worse than those identified for the construction phase with management measures for decommissioning effects set out within the **Outline DEMP** (Doc Ref. 7.12). No significant effect interactions during the construction and decommissioning phases were identified for the users of the local highway network.

5.16.6. During the operational phase, there is the potential for significant effect interactions to occur where high sensitivity receptors, such as residential properties within 300 m of the Site, are affected by visual, noise, and glint and glare effects. However, in some instances, these effect interactions are expected to reduce once landscaping matures to screen views of the Scheme. The effects will also be managed in accordance with the measures identified within the **Outline OEMP** (Doc Ref. 7.11) and the **Outline LEMP** (Doc Ref. 7.16). No significant effect interactions during the operational phase were identified for the users of the local highway network and non-motorised routes.

6. Planning Balance and Conclusions

6.1. Planning Balance

6.1.1. The Scheme is required to be determined in accordance with Section 104 of the PA 2008. As set out earlier in this Planning Statement, Section 104(2) requires that, in deciding an application for development consent, the Secretary of State must have regard to:

"(a) any national policy statement which has effect in relation to development of the description to which the application relates (a "relevant national policy statement"),

(aa) the appropriate marine policy documents (if any), determined in accordance with section 59 of the Marine and Coastal Access Act 2009;

(b) any local impact report (within the meaning given by section 60(3)) submitted to the Secretary of State before the deadline specified in a notice under section 60(2),

(c) any matters prescribed in relation to development of the description to which the application relates, and

(d) any other matters which the Secretary of State thinks are both important and relevant to the Secretary of State's decision".

6.1.2. The relevant NPSs which have effect in relation to the Scheme are:

- Overarching National Policy Statement for Energy (EN-1);
- National Policy Statement for Renewable Energy Infrastructure (EN-3); and
- National Policy Statement for Electricity Network Infrastructure (EN-5).

6.1.3. This Planning Statement provides an assessment of the Scheme against the key policies within the aforementioned NPSs, with a detailed description of compliance contained within **Appendix B: National Policy Statement Accordance Tables** (Doc Ref. 7.1).

6.1.4. There are no marine policy documents relevant to the Scheme as it is not in or likely to affect a marine plan area.

6.1.5. With regard to Section 104(2)(b), Local Impact Reports (LIRs) are expected to be submitted by the host authorities. The Applicant has included an assessment of the Scheme against local policy at **Appendix C: NPPF and Local Policy Compliance Tables** (Doc Ref. 7.1).

6.1.6. In regard to Section 104(2)(c), it has been demonstrated that a decision to grant a DCO for the Scheme would have regard to the matters prescribed by Regulation 3 and 7 of the Infrastructure Planning (Decisions) Regulations 2010.

The Scheme has had regard to preserving heritage assets and their setting as set out in Section 5.5 and **Appendix E: Heritage Statement of Harm** of this Planning Statement and **ES Chapter 8: Cultural Heritage** (Doc Ref. 6.1). Biodiversity and conservation enhancement is addressed at Section 5.6 of this Planning Statement and **ES Chapter 9: Ecology and Biodiversity** (Doc Ref. 6.1).

6.1.7. Section 104(3) requires that applications for development consent must be determined by the Secretary of State in accordance with any relevant national policy statement except to the extent of one or more of subsections 104(4) to 104(8) apply.

6.1.8. None of the limited exceptions in subsections 104(4) to 108(8) of the PA 2008 apply for the reasons summarised below:

- Section 104(4) applies if deciding an application in accordance with any relevant national policy that would lead to the UK being in breach of any of its international obligations. There is no evidence to suggest that the granting of the development consent for the Scheme would lead to the UK being in breach of any of its international obligations.
- Section 104(5) applies if deciding an application in accordance with any relevant national policy would lead to the Secretary of State being in breach of any duty imposed on the Secretary of State by or under any enactment There is no evidence to suggest that the granting of development consent for the Scheme would lead the Secretary of State to be in breach of such duty.
- Section 104(6) applies if deciding an application with any relevant national policy would be unlawful by virtue of any enactment. There is no evidence to suggest that the granting of development consent for the Scheme would be unlawful by virtue of any enactment.
- Section 104(7) applies if the adverse impacts of a proposed development would outweigh its benefits. Section 5 sets out how the Scheme accords with the relevant national policy statements (EN-1, EN-3 and EN-5) and relevant local policy. The overall planning balance of the Scheme is considered below. The residual adverse impacts are not considered to outweigh the Scheme's substantial benefits.
- Section 104(8) applies if any condition prescribed for deciding an application otherwise in accordance with an NPS is met. There is no evidence to suggest that any condition is met in relation to the Scheme.

6.1.9. This Planning Statement sets out how the Scheme complies with relevant planning policy and other matters that the Applicant considers to be important and relevant to the Secretary of State's decision as to whether to grant development consent. Paragraph 4.1.3 of EN-1 clearly establishes the starting

presumption that the Secretary of State should grant consent for energy NSIPs unless other policies within the NPSs clearly indicate that consent should be refused.

6.1.10. Crucial in the consideration of the overall planning balance, is the strength of the needs case that has been established through the NPSs and the CNP status that applies to the Scheme. As a CNP project, the Scheme benefits from the strongest policy position set out in EN-1.

6.1.11. In making its decision, the Secretary of State should give regard to paragraph 4.1.7 of EN-1 in relation to CNP Infrastructure which states that "*it is likely that the need case will outweigh the residual effects not capable of being addressed by application of the mitigation hierarchy, in all but the most exceptional cases*".

6.1.12. Paragraph 4.2.28 of EN-1 reaffirms this policy position and clearly articulates the exceptions to this starting position, being:

"The exception to this presumption of consent are residual impacts onshore and offshore which present an unacceptable risk to, or unacceptable interference with, human health and public safety, defence, or irreplaceable habitats. Further, the same exception applies to this presumption for residual impacts which present an unacceptable risk to, or unacceptable interference offshore to navigation, or onshore to flood and coastal erosion risk."

6.1.13. The Applicant has worked hard to avoid, reduce and mitigate adverse effects through application of the mitigation hierarchy and consideration of good design, but such is the nature of large-scale infrastructure projects. The instances where CNP is required to be relied upon in relation to the following topics which after the implementation of mitigation, adverse significant residual effects anticipated are:

- Agriculture and Soils;
- Cultural Heritage;
- Landscape and Visual;
- Noise and Vibration;
- Traffic and Access (in relation to cumulative effects on road safety only); and
- Intra-Project Effects.

6.1.14. It is unequivocal that any residual impacts of CNP infrastructure should not outweigh the urgent need for its delivery. This Planning Statement confirms that the Scheme complies with EN-1, EN-3, EN-5, the NPPF and relevant local planning policy.

6.1.15. As demonstrated through this Planning Statement, there are no residual impacts that are considered to present an unacceptable risk to, or interference with, human health and public safety, defence, public safety, offshore navigation or onshore flood and coastal erosion risk, that would reverse this presumption. Nor are there any other exceptional circumstances which would alter this presumption in favour of granting consent.

6.1.16. The Scheme would deliver great benefits including contributing to the urgent need for low carbon infrastructure as established within EN-1. On this basis, it is concluded that development consent should be granted.