Great North Road Solar and Biodiversity Park

Planning Statement

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Contents

EXECUTIVE SUMMARY

This Planning Statement has been prepared on behalf of Elements Green Trent Limited ('the Applicant') in relation to the Development Consent Order ('DCO') application for Great North Road Solar and Biodiversity Park ('the Development').

The Development comprises the construction, operation and maintenance and decommissioning of Great North Road Solar and Biodiversity Park; a proposed solar photovoltaic (PV) electricity generating facility with a total capacity exceeding 50 megawatts (MW) with an electrical storage facility and an export connection to the National Grid.

The Development is defined as a Nationally Significant Infrastructure Project ('NSIP') under the Planning Act 2008 (the 'PA 2008') as it is for the construction of an onshore generating station in England with a capacity exceeding 50 MW. The PA 2008 requires a DCO to be obtained for the Development from the Secretary of State ('SoS') for Energy Security and Net Zero.

The Development would help the Government to directly address the clear and urgent need for additional solar infrastructure, delivering a number of national benefits. The Government ensured that the UK was the first country to set legally binding carbon budgets under the Climate Change Act 2008. This required the UK to cut emissions (versus 1990 baselines) by 34% by 2020 and by at least 80% by 2050. The Climate Change Act 2008 was amended in 2019 and there is now a legally binding commitment for the UK to achieve net zero carbon by 2050. The Development would contribute towards meeting these commitments.

In addition to meeting the urgent national need for secure and affordable low carbon energy infrastructure, the Development would provide other significant benefits including:

- A meaningful contribution to the UK's legally binding net zero commitment, with the Development anticipated to have a generating capacity of around 800 MW (AC), providing enough electricity to power the equivalent of approximately 400,000 homes (based on the Ofgem estimate of annual average household electricity consumption of 2,700 kWh per year). Given that Nottinghamshire has 360,290 domestic properties[1] , the Development would have the capacity to generate enough energy for the entirety of Nottinghamshire's domestic population with energy to spare.
- The Development is projected to result in a net reduction in emissions of 789,292 teCO2e, helping contribute to the UKs Net Zero targets.
- An additional source of domestic energy security that reduces the market price of electricity by generating power so that more expensive and more carbon intensive generation (such as gas) are not required to generate as much, reducing the overall cost of electricity to consumers.
- Provision of battery energy storage, co-located with the solar generation which maximises the efficiency of land use and grid capacity and allows

[1] https://www.nottinghamshireinsight.org.uk/research-areas/key-facts-about-nottinghamshire/

the Development to maximise the usable output from intermittent generation, which will reduce the overall amount of generation capacity required whilst also providing the opportunity to deliver grid balancing to the local electricity network.

- Significant tree planting with approximately 64,500 proposed trees creating 31 ha of woodland, as well as 49 km of new hedgerow, hedge and tree belts.
- Significant landscape enhancements comprising approximately 989 ha of Solar PV (diverse) grassland, 405 ha of diverse grassland and 23 ha of ecotone.
- Enhanced public access legacy with the introduction of new public rights of way that will be created to provide new facilities for active travel, recreation and links between communities and developments. A total of 32.6 km of new permissive routes are proposed, comprising 27 new permissive routes (21 permissive footpaths and six bridleways). A circular recreational route would be created around the Order Limits, covering 50.6 km, including 12.5 km of new permissive path.
- Biodiversity and landscape mitigation have been proposed including 555 ha dedicated solely for these purpose and which will contribute to securing biodiversity net gains for habitats, hedgerows and watercourses.
- 180 direct local full time equivalent ('FTE') construction and manufacturing jobs could be created over the 24-month construction period. The direct construction employment would generate circa £10.4m in Gross Added Value ('GVA') within the regional construction economy (based on average GVA per head in the construction industry).
- It is anticipated that the decommissioning phase would require a similar level of employment and generate a similar scale and character of workforce spending and supply chain effects as the construction phase.
- The operational phase of the Development would support 19 direct local FTE jobs consisting of operational and maintenance roles for the Development's PV panels and other structures, as well as a further 21 jobs in the wider economy.
- Additional social, economic and educational benefits including opportunities for community farming and orchards, skills and training initiatives (apprenticeships; vocational qualifications; STEM education) and supply chain opportunities (local business networking and support; local procurement strategy).

This Planning Statement provides a detailed assessment of the Development against the policies in the national policy statements ('NPSs') which have effect in relation to the DCO Application and other policies that are considered important and relevant to the SoS's decision. The Development's compliance with these policies is informed by the Environmental Statement ('ES') and other documents which support the DCO Application.

The Development has evolved over time through a fully collaborative approach involving community engagement, public consultation and ongoing discussions with key stakeholders and authorities.

When considered against the relevant NPSs, the Development is considered to be wholly consistent with national policy. The principle of the need for new renewable energy, and that this need is urgent, is firmly established in the Overarching NPS for Energy EN-1 ('NPS EN-1')[2] and the NPS for Renewable Energy Infrastructure EN-3 ('EN-3')[3].

In accordance with NPS EN-1, substantial weight should be given to the contribution which projects would make towards satisfying this need.

The Development benefits from up to date, authoritative policy support. Not only does national policy establish an urgent need for new, low carbon energy generation, it specifically identifies solar energy as a key part of the government's strategy for low cost decarbonisation of the energy sector. The Development is also considered to be consistent with the National Planning Policy Framework ('NPPF') and other important and relevant planning policies.

The Development is in the national interest. NPS EN-1 provides that the SoS should assess all applications for development consent for the types of infrastructure covered by the NPS (which includes the Development) on the basis that the government has demonstrated that there is a need for those types of infrastructure which is urgent. NPS EN-1 goes on to state that substantial weight should be given to this need. Paragraph 4.1.3 of NPS EN-1 states that the decision maker should "start with a presumption in favour of granting consent to applications for energy NSIPs".

In accordance with paragraph 4.1.5 of NPS EN-1, in considering any proposed development, the SoS should take into account:

- the potential benefits, including its contribution to meeting the need for energy infrastructure, job creation, environmental enhancements and any long term or wider benefits; and
- the potential adverse impacts, including on the environment and including any long term and cumulative adverse impacts as well as any measures to avoid, reduce, mitigate or compensate for any adverse impacts, following the mitigation hierarchy.

Delivery of the Development and the necessary mitigation would be controlled through:

- identifying parameters within which certain works can be located and constructed;
- requiring construction, operation and decommissioning to be undertaken in accordance with plans and strategies which secure commitments identified in the ES and other assessments; and
- other controls secured through the DCO.

[2] Department of Energy Security & Net Zero (2023). Overarching National Policy Statement for Energy (EN-1). https://assets.publishing.service.gov.uk/media/65a7864e96a5ec0013731a93/overarching-nps-for-energy-en1.pdf

[3] Department of Energy Security & Net Zero (2023). National Policy Statement for Renewable Energy Infrastructure (EN-3). https://assets.publishing.service.gov.uk/media/65a7889996a5ec000d731aba/npsrenewable-energy-infrastructure-en3.pdf

The presumption in favour of granting consent applies to the Development and the application should be determined in accordance with that presumption. Paragraph 4.1.7 of NPS EN-1 requires the applicant to mitigate any particular impact as far as possible, but in the event there would still be residual adverse effects after mitigation the SoS should weight those residual effects against the benefits of the proposed development.

Furthermore, NPS EN-1 states that there is a Critical National Priority ('CNP') for the provision of nationally significant low carbon infrastructure, which includes renewable electricity generation. This provides an even greater basis of policy support, given the urgent identified national need for such infrastructure.

Paragraph 4.1.7 of NPS EN-1 states that *"For projects which quality as CNP Infrastructure, it is likely that the need case will outweigh the residual effects in all but the most exceptional cases."*

This Planning Statement demonstrates that the Development would not cause any potential adverse effects that, considered individually, cumulatively or as a whole, are so severe that the decision maker should refuse the DCO Application and, moreover, that each aspect of the proposals is acceptable in planning terms when considered against the relevant national and local policies.

It is therefore concluded that the benefits of the Development, particularly the delivery of new solar generating capacity, are overwhelmingly greater than the residual adverse effects. More specifically, given the Development's definition as CNP Infrastructure, it would benefit from the presumption defined at paragraph 4.1.7 of NPS EN-1, as the need case of the Development demonstrably outweighs the limited residual effects of the Development. It is also clear that the residual impacts of the Development would not present an unacceptable risk to, or interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero.

There is a clear and compelling case in favour of the DCO being made.

The Development accords with the relevant NPSs which have effect. None of sections 104(4) to (8) of the PA 2008 apply. Accordingly, the application should be determined in accordance with the relevant NPSs by granting consent.

1 INTRODUCTION

1.1.1 This Planning Assessment has been prepared on behalf of Elements Green Trent Limited ('the Applicant') in relation to the Development Consent Order ('DCO') application for Great North Road Solar and Biodiversity Park ('the Development').

1.1.2 The application being submitted for the Development for which development consent is being sought (the 'Application') is submitted to the Planning Inspectorate ('PINS') under section 37 of the Planning Act 2008 (the 'PA 2008'). The Application seeks a DCO from the Secretary of State ('SoS') for Energy Security and Net Zero for the construction, operation and maintenance and decommissioning of Great North Road Solar and Biodiversity Park; a proposed solar photovoltaic (PV) electricity generating facility with a total capacity exceeding 50 megawatts (MW) with an electrical storage facility and an export connection to the National Grid.

1.1.3 The location of the Development is shown on **Environmental Statement (ES) Volume 3, Figure 1.1 Development Location [EN010162/APP/6.3.1A]** [AS-028]. The Development will be located within the Order Limits (the land shown on the **Works Plans [EN010162/APP/2.3A]** [AS-005] within which the Development can be carried out).

1.2 LEGISLATIVE CONTEXT OVERVIEW

1.2.1 The Development is defined as a Nationally Significant Infrastructure Project ('NSIP') under sections 14(1)(a), 15(1) and 15(2) of the PA 2008 as it is for the construction of an onshore generating station in England with a capacity exceeding 50 MW. The PA 2008 requires a DCO to be obtained for the development of NSIPs.

1.2.2 The PA 2008 prescribes that the SoS is responsible for determining an application for development consent, with the power to appoint an Examining Authority ('ExA') of appointed person(s) to manage and examine each application. The ExA, appointed through PINS, will make procedural decisions and examine an application. The ExA will make a recommendation to the SoS who will then decide whether to grant a DCO.

1.2.3 DCO applications are determined in accordance with section 104 of the PA 2008 where a relevant National Policy Statement ('NPS') is in place, or section 105 where one is not. NPSs set out the policy basis upon which NSIPs are determined.

1.2.4 Section 104(2) of the PA 2008 provides that in deciding a DCO application the SoS must have regard to any NPS which has effect in relation to development of the description to which the application relates, as well as any other matters which the SoS thinks are both important and relevant to their decision.

1.2.5 On 17 January 2024, the Overarching National Policy Statement for Energy EN-1 ('NPS EN-1')[4], National Policy Statement for Renewable Energy Infrastructure EN-3 ('NPS EN-3')[5] and National Policy Statement for Electricity Networks Infrastructure EN-5 ('NPS EN-5')[6] came into force. These NPSs are the relevant NPSs that have effect in relation to the Development.

1.2.6 The main documents that may be considered important and relevant to the SoS's decision include:

- The adopted Development Plan and other relevant planning policy documents;
- National Planning Policy Framework ('NPPF')[7]; and
- Planning Practice Guidance.

1.2.7 Whilst the NPPF does not contain specific policies for projects consented under the DCO regime, it can be an important and relevant consideration under the PA 2008, such as in relation to biodiversity, geological conservation and the tests relevant when imposing requirements.

1.2.8 Paragraph 4.1.15 of NPS EN-1 states that:

"In the event of a conflict between [other] documents and an NPS, the NPS prevails for the purpose of Secretary of State decision making given the national significance of the infrastructure".

1.2.9 A more detailed explanation of the legislative and policy context of the Development is set out in Section 3 of this Planning Assessment.

1.2.10 The Development is 'EIA development' as defined by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 'EIA Regulations') which means that an Environmental Impact Assessment ('EIA') is required. An Environmental Statement ('ES') has been prepared and is submitted with the Application.

1.2.11 The **Consents and Licenses Required Under Other Legislation document [EN010162/APP/7.3]** [APP-325] identifies additional consents, licences, and permits required to be sought in addition to the DCO, including environmental, highways, and land drainage approvals.

1.3 PRE-APPLICATION CONSULTATION

1.3.1 The Applicant has undertaken extensive consultation throughout the development of proposals for the Development up to the point of submission of the DCO Application. This is described in the **Consultation Report [EN010162/APP/5.1]** [APP-296] and includes the stages listed below.

Table 1: Key Pre-Application Consultation Milestones

[4] Department of Energy Security & Net Zero (2023). Overarching National Policy Statement for Energy (EN-1). https://assets.publishing.service.gov.uk/media/65a7864e96a5ec0013731a93/overarching-nps-for-energy-en1.pdf

[5] Department of Energy Security & Net Zero (2023). National Policy Statement for Renewable Energy Infrastructure (EN-3). https://assets.publishing.service.gov.uk/media/65a7889996a5ec000d731aba/npsrenewable-energy-infrastructure-en3.pdf

[6] Department of Energy Security & Net Zero (2023). National Policy Statement for Electricity Networks Infrastructure (EN-5). https://assets.publishing.service.gov.uk/media/65a78a5496a5ec000d731abb/npselectricity-networks-infrastructure-en5.pdf

[7] Department for Levelling Up, Housing and Communities (2024). National Planning Policy Framework. https://www.gov.uk/government/publications/national-planning-policy-framework--2

Key Pre-Application Consultation Milestones	Dates
2024 Non-Statutory Consultation	16 January to 27 February 2024
2025 Statutory Consultation	9 January to 20 February 2025
2025 Targeted Consultation	8 May to 6 June 2025

1.3.2 The Applicant has had regard to all feedback it has received in response to the above consultations when designing the Development. This is described in the **Consultation Report [EN010162/APP/5.1]** [APP-296].

1.3.3 The Statement of Commonality **[EN010162/APP/8.13]** sets out the position of the Applicant, NSDC and NCC and other parties in respect of the Development.

1.4 PURPOSE AND STRUCTURE OF THE PLANNING ASSESSMENT

1.4.1 The purpose of this Planning Assessment is to provide an overview of the Development, its effects and the Application as a whole, in a way that is easy to understand. It considers and assesses the Development against relevant planning policy and other matters the Applicant considers are likely to be important and relevant to the SoS's decision.

1.4.2 The remainder of the Planning Assessment is structured as follows:

- **Section 2** describes the Order Limits, including a summary of the existing land uses and characteristics, as well as the surroundings and land affected by the powers of the DCO, including a review of relevant planning history and local plan designations.
- **Section 3** outlines the decision-making framework; the planning policy context for the Development; and other legislation and policy considered by the Applicant to be important and relevant.
- **Section 4** provides a summary of the Development and outlines how the design has evolved, including in response to consultation feedback and relevant planning policy.
- **Section 5** sets out the need for and the benefits of large-scale solar infrastructure projects and the specific benefits of the Development.
- **Section 6** provides a detailed planning assessment, explaining the Development's compliance with planning policy.
- **Section 7** considers the overall planning balance and presents the conclusions of this Planning Assessment.

2 THE ORDER LIMITS

2.1 LOCATION AND EXTENT OF ORDER LIMITS

2.1.1 The Order Limits are located to the northwest of Newark, in Newark and Sherwood District, Nottinghamshire, East Midlands.

2.1.2 In summary, the Order Limits comprise a ring of land parcels that broadly extends from the A1/village of Egmanton in the north to the village of Staythorpe in the south, and from the Cromwell in the east to Eakring in the west.

2.1.3 The eastern boundary of the Order Limits runs from the north of North Muskham to Egmanton in the north. The western boundary of the Order Limits runs northwest from Staythorpe Power Station and then splits at Maplebeck, with spurs running to Eakring in the north-west and Kneesall to the north-northeast, then connecting with the eastern side of the Order Limits. The Order Limits are centred at Ordnance Survey ('OS') National Grid Reference ('NGR') 468050 362326.

2.1.4 The Order Limits are located within the administrative boundaries of Newark and Sherwood District Council ('NSDC') and Nottinghamshire County Council ('NCC').

2.2 ORDER LIMITS AND SURROUNDS

2.2.1 The Order Limits comprise an area of approximately 1,765 hectares (ha), the majority of which is currently used for agriculture comprising a mix of arable crops and pasture. The surrounding area is generally composed of agricultural land, interspersed by occasional woodlands. Surrounding villages and hamlets are connected by rural roads and Public Rights of Way (PRoW). Smaller fields and tree cover are more common close to the villages and along water courses, with larger and more open fields set further away.

2.2.2 Land within the Order Limits ranges from 10m Above Ordnance Datum (AOD) to 60 m AOD, across a gently undulating landscape and is generally lower lying in the east towards the River Trent.

2.2.3 Main transport routes in the local area include the A1 and East Coast Main Line railway which run adjacent to and through the eastern edge of the Order Limits, and the A616 and A617 which head northwest from Newark-upon-Trent which lies around 1 km to the southeast of the Order Limits.

2.3 DESIGNATIONS

2.3.1 The Order Limits are subject to a number of designations which are summarised in the section below.

Landscape

2.3.2 There are no nationally designated landscapes within 30 km of the Order Limits and there are no locally designated landscapes within 2 km of the Order Limits.

2.3.3 With regard to landscape character, the Order Limits are located in Natural England's National Character Area (NCA) 48 Trent and Belvoir Vales which defines a broad area that shares similar landscape characteristics at a national scale.

2.3.4 As set out in the **Draft Statements of Common Ground with NSDC [EN010162/APP/8.2], NCC [EN010162/APP/8.1A] and NE [EN010162/APP/8.4]**, the Order Limits are not considered to be a "valued landscape" as defined by NPS EN-1 paragraph 5.10.12 and paragraph 187a of the NPPF.

2.3.5 The majority of the Order Limits lie within the Nottinghamshire Farmland Regional Character Area (RCA), with the remainder being located within the Trent Washlands RCA.

2.3.6 At a local level, the majority of the Order Limits are located within the local Mid Nottinghamshire Farmlands - Village Farmlands with Ancient Woodlands Local Character Type (LCT), although it also encompasses smaller parts of four neighbouring LCTs (Mid Nottinghamshire Farmlands / Meadowlands LCT; Mid Nottinghamshire Farmlands / Village Farmlands LCT; Trent Washlands / Village Farmlands LCT; and Trent Washlands / River Meadowlands LCT).

2.3.7 Further details of landscape character are provided in **ES Volume 2, Chapter 7: Landscape and Visual Impact Assessment (LVIA) [EN010162/APP/6.2.7]** [APP-050].

Heritage

2.3.8 The Order Limits do not include any designated heritage assets, with the exception of a small western parcel that falls within the outer edges of Maplebeck Conservation Area.

2.3.9 The following designated heritage assets are located within 2 km of the Order Limits boundary:

- 19 Grade I Listed Buildings;
- 13 Grade II* Listed Buildings;
- 195 Grade II Listed Buildings;
- 17 Conservation Areas;
- 26 Scheduled Monuments; and
- 1 Grade II Registered Park and Garden.

2.3.10 Further details of heritage assets are provided in **ES Volume 2, Chapter 11: Cultural Heritage and Archaeology [EN010162/APP/6.2.11]** [APP-054].

PROWs

2.3.11 There is a network of PRoW and byways which interact with the Order Limits, linking it to the surrounding area. The Order Limits include a total of 117 PRoW comprising 95 Public Footpaths (FP) 18 Public Bridleways (BW), three Byway Open to All Traffic (BOATs) and one Restricted Byway (RB).

2.3.12 In addition, the Robin Hood Way is a 107-mile Long Distance Footpath (LDF) made up of other PRoW and roads that runs from the centre of Nottingham to the Sherwood Forest Visitor Centre at Edwinstowe, briefly passing through the edges of the Order Limits around the south-eastern extent of the village of Eakring.

2.3.13 Further details of the PRoW are provided in **ES Volume 2, Chapter 18: Recreation [EN010162/APP/6.2.18]** [APP-061].

Ecology and Biodiversity

2.3.14 The Order Limits do not include any International Sites, although there are two International Sites within 30 km of the Order Limits: Birklands and Bilhaugh SAC is 7.0 km north-west and Sherwood Forest possible Potential SPA (ppSPA) is 4.5 km west and north-west.

2.3.15 Eakring and Maplebeck Meadows Site of Special Scientific Interest (SSSI) borders the Order Limits, abutting an unclassified road along its 1.5 km southern boundary. Mather Wood SSSI is located outside of the Order Limits but less than 100 m from the boundary. There is also one National Nature Reserve (NNR) and six other SSSIs within 5 km of the Order Limits.

2.3.16 There are 16 Local Wildlife Sites (LWS) either within or bordering the Order Limits, 15 of which are noted for their botanical interest and one for its water beetle populations.

2.3.17 Further details of these designated sites are provided in **ES Volume 2, Chapter 8: Ecology and Biodiversity [EN010162/APP/6.2.8]** [APP-051].

Agricultural Land

2.3.18 The Order Limits comprise agricultural land which is of varying quality, with the survey results summarised in Table 17.5 of **ES Volume 2, Chapter 17: Agricultural Land [EN010162/APP/6.2.17]** [APP-060]. This summary is re-presented in Table 2 below for ease of reference.

Table 2: Agricultural Land Classification (ALC) of Order Limits[8]

ALC Grade	Description	Area (ha)	Proportion (%)
1	Excellent	0	0.0
2	Very good	149	8.5
3a	Good	944	53.5
3b	Moderate	596	33.8
4	Poor	1	0.0
5	Very poor	0	0.0
NA	Non-agricultural / not surveyed (road or woodland)	75	4.2

[8] Rounded to the nearest whole hectare.

Total		1,765	100.0

2.3.19 Approximately 62% of the Order Limits are categorised as 'Best and Most Versatile' (BMV) land comprising 149 ha (8.5%) of Grade 2 land and 944 ha (53.5%) of Grade 3a land. This compares with the national proportion of BMV which is 41.3%, whereas in Nottinghamshire County it is just over 50% and in Newark and Sherwood District it is 48.4%.

Water Resources and Flood Risk

2.3.20 The EA Flood Map for Planning (2025)[9] shows that the Order Limits are mostly located in Flood Zone 1 (89.81%), which comprises land having less than 0.1% (i.e. less than 1 in 1,000) annual probability of river or sea flooding, which is defined as 'low' probability.

2.3.21 The remaining area of the Order Limits (10.19%) are located in either Flood Zone 2 (identified as land having between a 1 in 100 and 1 in 1,000 annual probability of flooding, which is defined as 'medium' probability) or Flood Zone 3 (identified as land having a 1 in 100 or greater annual probability of river flooding, which is defined as 'high' probability). The extent of each Flood Zone is indicated on Plate A9.1.3 of **ES Volume 4, Appendix A9.1B: Flood Risk Assessment [EN010162/APP/6.4.9.1B]**.

2.3.22 Further details of water resources and flood risk are provided in **ES Volume 2, Chapter 9: Water Resources [EN010162/APP/6.2.9]** [APP-053].

Ground Conditions

2.3.23 The Order Limits fall within two Mineral Safeguarding Areas (MSA): a MSA for Brick Clay and a MSA for Sand and Gravel.

2.3.24 Further details are provided in **ES Volume 2, Chapter 10: Ground Conditions and Land Contamination [EN010162/APP/6.2.10]** [APP-053].

Air Quality

2.3.25 The Order Limits are not located within an Air Quality Management Area ('AQMA').

2.3.26 The designations summarised above are considered further in relevant sections of this Planning Assessment and, in particular, the assessment of the Development which is undertaken in Section 6.

2.4 RELEVANT PLANNING HISTORY

2.4.1 Except for Work No. 7, which relates to Staythorpe BESS, the Applicant is not aware of any other relevant planning history that relates to the Order limits.

[9] https://flood-map-for-planning.service.gov.uk/

3 LEGISLATIVE AND POLICY CONTEXT

3.1 INTRODUCTION

3.1.1 This section outlines the legislative framework and the planning policy context for the Development. Section 3.2 sets out the relationship of the Development with the PA 2008. Sections 3.3 – 3.7 introduce the national and local planning policy and other documents that the Applicant expects to be important and relevant to the decision and that are considered in this Planning Assessment. Section 3.8 introduces other legislation and national policy documents which the SoS may consider to be important and relevant to their decision.

3.2 LEGISLATIVE CONTEXT

3.2.1 The PA 2008 provides the legislative basis and defines the application process under which consent for NSIPs is sought. The PA 2008 sets out that projects meeting certain defined criteria are classified as NSIPs. It provides that a DCO is required for development that is or forms part of an NSIP (section 31 of the PA 2008).

3.2.2 The Development is defined as an NSIP under sections 14(1)(a), 15(1) and 15(2) of the PA 2008 by virtue of the facts listed below:

- The Development comprises the construction of a generating station (section 14(1)(a) of the PA 2008);
- It would be located in England (section 15(2)(a) of the PA 2008);
- It would not generate electricity from wind (section 15(2)(aa) of the PA 2008);
- It would not be an offshore generating station (section 15(2)(b) of the PA 2008); and
- Its capacity would be more than 50 MW (section 15(2)(c) of the PA 2008).

3.2.3 Section 115 of the PA 2008 provides that development consent may be granted for "development for which development consent is required" or for "associated development". In the case of the Development, the development which constitutes "development for which development consent is required" is described as Work No. 1 in Schedule 1 of the **Draft Development Consent Order [EN010162/APP/3.1A]** [AS-012]. This constitutes the NSIP for which development consent is required, being a ground mounted solar PV generating station with a gross electrical output capacity of over 50 MW, including solar panels fitted to mounting structures and plant. The associated development for the Development is set out in Work Nos. 2 to 8 in Schedule 1 of the **Draft Development Consent Order [EN010162/APP/3.1A]**.

3.2.4 Of relevance to the Development, section 115(2) of the PA 2008 provides that for development to be considered 'associated development' it must be associated with the NSIP which is being granted development consent or any part of it, it must not consist of or include the construction/extension of dwellings and it must be located in one of the specified areas which includes England. The provisions of the PA 2008 do not provide a detailed framework for what type of development is capable of being associated development. However, guidance has been published to assist with this, namely 'Guidance

on associated development applications for major infrastructure projects' (former Department for Communities and Local Government April 2013) ('Associated Development Guidance'). It explains that it is for the SoS to decide on a case by case basis whether or not development should be treated as associated development, but in making this decision the SoS will take into account the core principles set out in Table 2 below.

3.2.5 The Associated Development Guidance sets out at Paragraph 6 that *"It is expected that associated development will, in most cases, be typical of development brought forward alongside the relevant type of principal development or of a kind that is usually necessary to support a particular type of project…".*

3.2.6 The Applicant considers that all works contained within Work Nos. 2 to 8 are consistent with the principles set out in the Associated Development Guidance, as set out in the Table 3 below.

Table 3: Compliance with Associated Development Guidance

Guidance	Development Compliance with Guidance
There must be a direct relationship between associated development and the principal development. Associated development should therefore either support the construction or operation of the principal development, or help address its impacts.	The components of the Development considered to be associated development (Work Nos. 2-8) provide for two functions. The first function is to provide the infrastructure to enable the connection of the electricity generating station (the PV panels (Work No. 1), which is the NSIP component of the Development) to the national grid. The second function is to provide the mitigation of significant effects that would be likely to occur as a result of the Development, for example landscape proposals, areas of habitat creation and PRoW improvements.
Associated development should not be an aim in itself but should be subordinate to the principal development.	All of the associated development is subordinate – consent would not be sought for those elements in isolation without Work No. 1, which is the key Development component and principal development.
Development should not be treated as associated development if it is only necessary as a source of additional revenue for the applicant, in order to cross-subsidise the cost of the principal development.	None of the associated development is only necessary as a source of additional revenue for the Applicant. The Development seeks the use of a battery and energy storage system ('BESS') to store electricity generated before its release to the national grid. Whilst

Guidance	Development Compliance with Guidance
	the BESS can cross-subsidise the Development its purpose is to increase efficiency and to perform grid balancing services; it is therefore considered associated development.
Associated development should be proportionate to the nature and scale of the principal development.	The agreed grid connection for the Development will allow the export and import of around 800 MW of electricity to the grid. In light of this, it is considered that all associated development is proportionate in nature and scale to the principal development.

3.2.7 Following an amendment to the PA 2008 made in December 2020 by the Infrastructure Planning (Electricity Storage Facilities) Order 2020, the BESS does not qualify as an NSIP in its own right. However, the BESS is capable of being associated development under section 115 of the PA 2008.

3.2.8 The **Consents and Licenses Required Under Other Legislation document [EN010162/APP/7.3]** [APP-325] has been submitted with the Application and identifies additional consents, licences, and permits required to be sought in addition to the DCO.

3.3 POLICY CONTEXT

3.3.1 NPSs set out the policy basis for the preparation and determination of applications for NSIPs. NPSs are sector specific and provide policy for energy, transport, and water, wastewater and waste NSIPs. There are six Energy NPSs, each covering one of the following matters: overarching needs case for different types of energy infrastructure; natural gas electricity generation; renewable electricity generation; oil and gas infrastructure; electricity networks; and nuclear power generation.

3.3.2 The PA 2008 provides for two different decision-making procedures for NSIP applications; (i) where a relevant NPS has been designated and has effect (section 104); and (ii) where there is no designated NPS or there is a designated NPS, but it does not have effect (section 105).

3.3.3 On 17 January 2024, NPS EN-1, NPS EN-3 and NPS EN-5 came into force. These NPSs are the relevant NPSs that have effect thereby requiring the DCO Application for the Development to be determined under section 104 of the PA 2008.

3.3.4 Section 104 of the PA 2008 states that in deciding an application for a DCO, the SoS must have regard to:

- any NPS which has effect in relation to development of the description to which the application relates (section 104(2)(a));
- the appropriate marine policy documents (if any) (section 104(2)(aa));
- any local impact report (section 104(2)(b));

- any matters prescribed in relation to development of the description to which the application relates (section 104(2)(c)); and
- any other matters which the SoS thinks are both important and relevant to their decision (section 104(2)(d)).

3.3.5 There are no marine policy documents that apply to the Development under section 104(2)(aa) of the PA 2008.

3.3.6 The host authorities are NSDC and NCC. Each of the host authorities will have the opportunity to prepare a local impact report following acceptance of the DCO Application pursuant to section 104(2)(b) of the PA 2008.

3.3.7 The prescribed matters referred to in section 104(2)(c) of the PA 2008 are set out in the Infrastructure Planning (Decisions) Regulations 2010 (as amended) (the 'Decisions Regulations'). The provisions within the Decisions Regulations that are of relevance to the Development are:

3.3.8 Regulation 3(1) – When deciding a DCO application which affects a listed building or its setting, the SoS must have regard to the desirability of preserving the listed building or its setting or any features of special architectural or historic interest which it possesses. The Applicant considers that sufficient information on cultural heritage is included within the DCO Application to inform the SoS's decision on the DCO Application (please refer to **ES Volume 2, Chapter 11: Cultural Heritage and Archaeology [EN010162/APP/6.2.11]** [APP-054]).

3.3.9 Regulation 3(2) – When deciding a DCO application relating to a conservation area, the SoS must have regard to the desirability of preserving or enhancing the character or appearance of that area. The Applicant considers that sufficient information on cultural heritage is included within the DCO Application to inform the SoS's decision on the DCO Application (please refer to **ES Volume 2, Chapter 11: Cultural Heritage and Archaeology [EN010162/APP/6.2.11]** [APP-054]).

3.3.10 Regulation 3(3) – When deciding a DCO application which affects or is likely to affect a scheduled monument or its setting, the SoS must have regard to the desirability of preserving the scheduled monument or its setting. The Applicant considers that sufficient information on cultural heritage is included within the DCO Application to inform the SoS's decision on the DCO Application (please refer to **ES Volume 2, Chapter 11: Cultural Heritage and Archaeology [EN010162/APP/6.2.11]** [APP-054]).

3.3.11 Regulation 7 – When deciding a DCO application the SoS must have regard to the United Nations Environmental Programme Convention on Biological Diversity of '992 ('1992 Convention'). The Applicant considers that sufficient information on biodiversity is included within the DCO Application to inform the SoS's decision on the DCO Application to comply with the 1992 Convention (please refer to **ES Volume 2, Chapter 8: Ecology and Biodiversity [EN010162/APP/6.2.8]** [APP-054]).

3.3.12 The main documents that may be considered important and relevant to the SoS's decision pursuant to section 104(2)(d) of the PA 2008 include:

- The adopted Development Plan and other relevant planning policy documents;
- NPPF; and
- Planning Practice Guidance.

3.4 NATIONAL POLICY STATEMENTS

3.4.1 This section sets out the key policies in NPS EN-1, NPS EN-3 and NPS EN-5.

Overarching National Policy Statement for Energy EN-1 (NPS EN-1)

3.4.2 NPS EN-1 confirms that *"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."* (Paragraph 3.2.6) and that *"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."* (Paragraph 3.2.7).

3.4.3 NPS EN-1 includes a policy presumption in favour of energy NSIPs. It states that *"Given the level and urgency of need for infrastructure of the types covered by the energy NPSs set out in Part 3 of this NPS, the Secretary of State will 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."* (Paragraph 4.1.3)

3.4.4 NPS EN-1 provides explicit and specific policy support for low carbon generation and associated infrastructure confirming that *"there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure"* (Paragraphs 3.3.62 and 4.2.4). Low carbon infrastructure for the purposes of NPS EN-1 is defined in paragraph 4.2.5 and includes *"...for electricity generation, all onshore and offshore generation that does not involve fossil fuel combustion (that is, renewable generation, including anaerobic digestion and other plants that convert residual waste into energy, including combustion, provided they meet existing definitions of low carbon; and nuclear generation), as well as natural gas fired generation which is carbon capture ready".*

3.4.5 NPS EN-1 is clear that the *"Government strongly supports the delivery of CNP Infrastructure and it should be progressed as quickly as possible."* (Paragraph 3.3.63).

3.4.6 NPS EN-1 explains that, in terms of planning balance, *"For projects which qualify as CNP Infrastructure, it is likely that the need case will outweigh the residual effects in all but the most exceptional cases. This presumption, however, does not apply to residual impacts which present an unacceptable risk to, or interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero. 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."* (Paragraph 4.1.7).

3.4.7 NPS EN-1 confirms *"…the Secretary of State will take as the starting point for decision making that [CNP] infrastructure is to be treated as if it has met any tests which are set out within the NPSs, or any other planning policy, which requires a clear outweighing of harm, exceptionality or very special circumstances."* (Paragraph 4.2.16).

3.4.8 It further explains that *"This means that the Secretary of State will take as a starting point that CNP Infrastructure will meet the following, non-exhaustive, list of tests:*

- *where development within a Green Belt requires very special circumstances to justify development;*
- *where development within or outside a Site of Special Scientific Interest (SSSI) requires the benefits (including need) of the development in the location proposed to clearly outweigh both the likely impact on features of the site that make it a SSSI, and any broader impacts on the national network of SSSIs;*
- *where development in nationally designated landscapes requires exceptional circumstances to be demonstrated; and*
- *where substantial harm to or loss of significance to heritage assets should be exceptional or wholly exceptional."* (Paragraph 4.2.17).

3.4.9 Further consideration of NPS EN-1 policies and the Development's compliance with them is provided in Section 6 of this Planning Statement..

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

3.4.10 NPS EN-3 refers to solar in paragraph 2.10.9 which recognises the Government's support for solar projects: *"The government has committed to sustained growth in solar capacity to ensure that we are on a pathway that allows us to meet net zero emissions by 2050. As such solar, is a key part of the government's strategy for low-cost decarbonisation of the energy sector."*

3.4.11 NPS EN-3 confirms the important role that solar needs to play in delivering the government's goals for greater energy independence, referring to the British Energy Security Strategy which states that the government expects a five-fold increase in combined ground and rooftop solar deployment by 2035 (up to 70GW) (paragraph 2.10.10).

3.4.12 This is justified in paragraph 2.10.13: *"Solar farms are one of the most established renewable electricity technologies in the UK and the cheapest form of electricity generation."*

3.4.13 NPS EN-3 provides further clarity on suitable locations for solar, confirming *"…that government seeks large scale ground-mount solar deployment across the UK, looking for development mainly on brownfield, industrial and low and medium grade agricultural land."* (Paragraph 2.10.11).

3.4.14 NPS EN-3 also sets out the considerations for the SoS's decision making for solar PV projects (at paragraph 2.10.145 to paragraph 2.10.162). These include the following:

- Factors influencing site selection and design:
  - Agriculture land classification and land type
- Technical considerations:
  - Project lifetime and decommissioning
- Impacts:
  - Biodiversity, ecological, geological conservation and water management
  - Landscape, visual and residential amenity.
  - Glint and glare
  - Cultural heritage

- Construction including traffic and transport noise and vibration

3.4.15 Further consideration of NPS EN-3 policies and the Development's compliance with them is provided in Section 6 of this Planning Statement.

National Policy Statement for Electricity Networks Infrastructure (NPS EN-5)

3.4.16 NPS EN-5 is the primary basis for decisions on NSIP applications for electricity networks infrastructure (paragraph 1.4.1), which paragraph 1.6.1 explains can be divided into two elements, comprising: (i) transmission systems and distribution systems and associated infrastructure, e.g. substations; and (ii) converter stations to convert DC power to AC power and vice versa.

3.4.17 Paragraph 1.6.2 explains that NPS EN-5 covers above ground electricity lines of 132kV or above whose length is more than 2km. This does not apply to the Development. However, paragraph 1.6.4 of NPS EN-5 states that "In addition, this NPS will apply to other kinds of electricity networks infrastructure including… underground cables at any voltage, associated infrastructure as referred to above and lower voltage overhead lines, where that infrastructure becomes subject to the 2008 Act in the following circumstances: if it constitutes associated development for which consent is sought along with an NSIP…"

3.4.18 The Development includes underground cables and associated infrastructure that includes a substation that are associated development to the solar generating station NSIP. NPS EN-5 therefore has effect in relation to these elements of the Development.

3.4.19 Further consideration of NPS EN-5 policies and the Development's compliance with them provided in Section 6 of this Planning Statement.

Consultation on 2025 Revisions to National Policy Statements[10]

3.4.20 In April 2025 the Department for Energy Security & Net Zero (DESNZ) published draft revisions to NPS EN-1, NPS EN-3 and NPS EN-5. The public consultation on the changes ran from 24 April to 23 June 2025[11].

3.4.21 A review of the existing energy NPSs was announced by the Chancellor to ensure they reflect current energy policy and enable a planning policy framework which can deliver investment in the infrastructure needed to achieve Clean Power by 2030 and Net Zero by 2050.

3.4.22 The consultation followed publication of the Clean Power 2030 Action Plan, setting out how the government intends to expand low-carbon energy infrastructure to achieve energy security and at least 95% of generation in Great Britain being produced by clean sources by 2030. (Further details of the Clean Power 2030 Action Plan are provided in section 3.8 below.)

3.4.23 The revisions seek to bring Clean Power 2030 "*front and centre as the primary policy that the NPSs enable*"[12]. In summary:

[10] https://www.gov.uk/government/consultations/planning-for-new-energy-infrastructure-2025-revisions-to-national-policy-statements

[11] The consultation was extended from the original end date of 29 May 2025.

[12] Department for Energy Security & Net Zero (2025) Consultation – Planning for New Energy Infrastructure (1st

- Draft NPS EN-1[13] reinforces that the pace of planning delivery needs to significantly increase to allow the Government targets to be achieved.
- Draft NPS EN-3[14] highlights that *"Solar energy is at the heart of our Clean Power 2030 Mission".*
- Draft NPS EN-5[15] states that a *"significant amount of new network infrastructure is required in the near term to directly support the government's ambition to meet our Clean Power 2030 Mission."*

3.4.24 Responses to the public consultation are currently being considered by DESNZ. While the review is undertaken, the current suite of energy NPS remain relevant government policy and NPSs EN-1 to EN-5, published in 2024, have effect for the purposes of the PA 2008 and for determining DCO applications which have been accepted for examination before the revised NPSs are published.

3.4.25 The Transitional Arrangements do, however, acknowledge that the emerging draft NPSs are potentially capable of being important and relevant considerations in the decision making. The extent to which they are relevant is a matter for the relevant SoS to consider within the framework of the PA 2008 and with regard to the specific circumstances of each DCO application.

3.4.26 The proposed revisions to the NPSs clearly demonstrate the Government's intended direction of travel: to speed up and scale up the delivery of new solar development.

3.5 NATIONAL PLANNING POLICY FRAMEWORK 2024

3.5.1 The NPPF was last updated in 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. Whilst not specifically addressing NSIPs, the NPPF does set out its objectives to achieve sustainable development by pursuing economic, social and environmental objectives in development.

3.5.2 Paragraph 168 of the NPPF states that, when determining planning applications for all forms of renewable and low carbon energy developments and their associated infrastructure, local planning authorities should not require applicants to demonstrate the overall need for renewable or low carbon energy, and give significant weight to the benefits associated with renewable and low carbon energy generation and the proposal's contribution to a net zero future.

3.6 LOCAL PLANNING POLICY CONTEXT

and 2nd paragraph Page 9)
https://assets.publishing.service.gov.uk/media/6808b69692d50839757a61ed/planning-new-energy-infrastructure-revised-nps.pdf

[13] Department for Energy Security &Net Zero (2025) Overarching National Policy Statement for Energy (EN-1). https://assets.publishing.service.gov.uk/media/68093d68148a9969d2394f59/draft-nps-en-1.pdf

[14] Department for Energy Security &Net Zero (2025). National Policy Statement for Renewable Energy Infrastructure (EN-3) (Section 2.12.2)
https://assets.publishing.service.gov.uk/media/6809f0588c1316be7978e7cb/draft-nps-en-3.pdf

[15] Department for Energy Security & Net Zero (2025). National Policy Statement for Electricity Networks (EN-5)
https://assets.publishing.service.gov.uk/media/681dda13c66deec8488f7e66/draft-nps-en-5-electricity-networks-infrastruture.pdf

3.6.1 While the primary basis for making decisions on applications for development consent is the relevant NPSs, other matters which the SoS may consider to be important and relevant in decision making may include the Development Plan policies of the host local authorities.

3.6.2 NPS EN-1 states in paragraph 4.1.12 that *"Other matters that the Secretary of State may consider both important and relevant to their decision-making may include Development Plan documents or other documents in the Local Development Framework."* However, it must also be noted that paragraph 4.1.15 states *that "In the event of a conflict between these documents and an NPS, the NPS prevails for the purposes of Secretary of State decision making given the national significance of the infrastructure."*

The Development Plan

3.6.3 The Local Planning Authority is NSDC and the County Council is NCC, both of which are host authorities for the purposes of the DCO Application. Development Plan Documents relevant to the Development comprise the following:

- Newark and Sherwood Local Development Framework – Amended Core Strategy DPD ('the Amended Core Strategy') (2019)[16];
- Newark and Sherwood Local Development Framework – Allocations and Development Management DPD (the 'ADMDPD') (2013)[17];
- Nottinghamshire Minerals Local Plan (2021)[18]; and
- Nottinghamshire and Nottingham Waste Local Plan (2025)[19].

3.6.4 The Amended Core Strategy includes Core Policy 10 which states:

"Climate Change

The District Council is committed to tackling the causes and impacts of climate change and to delivering a reduction in the Districts carbon footprint. The District Council will work with partners and developers to:

• Promote energy generation from renewable and low-carbon sources, including community-led schemes, through supporting new development where it is able to demonstrate that its adverse impacts have been satisfactorily addressed. Policy DM4 'Renewable and Low Carbon Energy Generation' provides the framework against which the appropriateness of proposals will be assessed;…"

3.6.5 The ADMDPD includes Policy DM4 which states:

"Renewable and Low Carbon Energy Generation

In order to achieve the commitment to carbon reduction set out in Core Policy 10, planning permission will be granted for renewable and low carbon energy generation development, as both stand alone projects and part of

[16] https://www.newark-sherwooddc.gov.uk/media/nsdc-redesign/documents-and-images/your-council/planning-policy/local-development-framework/amended-core-strategy-dpd/amended-core-strategy-DPD.pdf
[17] https://www.newark-sherwooddc.gov.uk/media/nsdc-redesign/documents-and-images/your-council/planning-policy/supplementary-planning-information/allocations-and-development-management-dpd/Allocations-and-Development-Management-Development-Plan-Document.pdf
[18] https://www.nottinghamshire.gov.uk/planning-and-environment/minerals-local-plan/adopted-minerals-local-plan
[19] https://www.nottinghamshire.gov.uk/media/o3dfsast/nottinghamshireandnottinghamwlp.pdf

other development, its associated infrastructure and the retro-fitting of existing development, where its benefits are not outweighed by detrimental impact from the operation and maintenance of the development and through the installation process upon:

1. The landscape character or urban form of the district or the purposes of including land within the Green Belt arising from the individual or cumulative impact of proposals;

2. Southwell Views as defined in Policy So/PV or the setting of the Thurgarton Hundred Workhouse, as defined in Policy So/Wh;

3. Heritage Assets and or their settings;

4. Amenity, including noise pollution, shadow flicker and electro-magnetic interference;

5. Highway safety;

6. The ecology of the local or wider area; or

7. Aviation interests of local or national importance."

3.6.6 Both Core Policy 10 and Policy DM4 relate to planning applications rather than development consent applications for NSIPs. In accordance with paragraph 4.1.15 of NPS EN-1 where there is a conflict between a Local Plan and an NPS, then the NPS prevails for the purpose of SoS decision making given the national significance of the infrastructure.

3.6.7 Supplementary Planning Documents (SPDs) and other local guidance considered as being potentially important and relevant to the SoS's decision include the following:

- Newark & Sherwood Landscape Character Assessment SPD (December 2013)[20];
- Newark & Sherwood Local Development Framework Solar Energy SPD (June 2025)[21]; and
- Newark and Sherwood District Council Climate Emergency Strategy 2020[22].

Emerging Development Plan Documents

3.6.8 NSDC is currently preparing a new local plan called the Newark and Sherwood Amended Allocations and Development Management DPD (AADMDPD). The draft plan was submitted to the SoS on 18 January 2024 to be examined by an independent planning inspector. Public consultation on the proposed Main Modifications took place between 16 September and 28 October 2025.

3.7 OTHER LEGISLATION AND NATIONAL POLICY DOCUMENTS

[20] https://www.newark-sherwooddc.gov.uk/lcaspd/
[21] https://www.newark-sherwooddc.gov.uk/media/nsdc-redesign/documents-and-images/your-council/planning-policy/supplementary-planning-information/Solar-Energy-SPD.pdf
[22] https://www.newark-sherwooddc.gov.uk/media/nsdc-redesign/documents-and-images/your-council/our-policies/policies-and-procedures/Newark-and-Sherwood-District-Council---Climate-Emergency-Strategy-2020-v7---FINAL-(002).pdf

3.7.1 The section below summarises other legislation and national policy documents that the Applicant considers are likely to be important and relevant to the SoS's decision.

The Climate Change Act 2008

3.7.2 The Climate Change Act 2008 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.

The Climate Change Act 2008 (2050 Target Amendment) Order 2019[23]

3.7.3 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.

Design Principles for National Infrastructure, National Infrastructure Commission Design Group (February 2020)

3.7.4 The National Infrastructure Commission's Design Group published its own Design Principles for National Infrastructure to guide the projects which will upgrade and renew the UK's infrastructure system. The document sets out four design principles which infrastructure projects should consider at their design stage, namely: (i) climate: mitigate greenhouse gas emissions and adapt to climate change; (ii) people: reflect what society wants and share benefits widely; (iii) places: provide a sense of identity and improve the environment; and (iv) value: achieve multiple benefits and solve problems. The guide explains how everyone involved should appreciate the wider context, engage meaningfully and continually measure and improve when considering the four design principles.

Project Level Design Principles, National Infrastructure Commission Design Group (May 2024)

3.7.5 The National Infrastructure Commission's Design Group subsequently published Project Level Design Principles. This provides guidance on developing and implementing design principles for major infrastructure projects and builds on the high level design principles (climate; people; places; and value) outlined above.

3.7.6 The guidance recommends project leaders:

- Make sure there is a genuine commitment from the most senior levels of the project to using a structured design process from the earliest stages.
- Put principles in place before taking any decisions – and once in place, ensure they become a key part of the governance framework, informing all decision making.
- Make sure that principles support the widest range of outcomes (not just operational functions) and that they are used to directly inform each design iteration.
- Keep revising the principles as new information comes to light and use them to manage an evolving project effectively.

[23] https://www.legislation.gov.uk/uksi/2019/1056/contents/made

The Environment Act 2021[24]

3.7.7 The Environment Act 2021 gained Royal Assent on 9 November 2020. It provides targets, plans and policies for improving the natural environment. Of relevance to the Development is the aim to protect nature and improve biodiversity, including a requirement for 10% biodiversity net gain for developments consented under the Town and Country Planning Act 1990 and the PA 2008. Whilst this requirement came into force for major developments in February 2024 and for small sites in April 2024, it is not expected to become mandatory for NSIPs until May 2026.

British Energy Security Strategy (Updated April 2022)[25]

3.7.8 The Energy Security Strategy 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.

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

3.7.10 ***Powering up Britain: Energy Security Plan (March 2023)[26]***

3.7.11 The plan sets out the steps the Department for Energy Security and Net Zero plans to take to ensure the UK is more energy independent, secure and resilient. The plan builds on the Government's ambitions set out in the British Energy Security Strategy to enable the transformation of the energy system so it is secure, low-cost and low carbon. The plan sets out that the Government's aim is to move towards energy independence by targeting a doubling of Britain's electricity generation capacity by the late 2030s, and a five-fold increase in solar power to 70GW 2035, in line with the aim to fully decarbonise the power sector by 2035.

3.7.12 It confirms that ground-mounted solar is one of the cheapest forms of electricity generation and is readily deployable at scale. The plan confirms the Government seeks large scale ground-mount solar deployment across the UK, looking for development mainly on brownfield, industrial and low and medium grade agricultural land. The plan confirms that solar and farming can be complementary, supporting each other financially, environmentally and through shared use of land. It confirms that there is a strong need for increased solar deployment, as reflected in the latest Energy NPSs (as summarised above in this Planning Assessment).

[24] https://www.legislation.gov.uk/ukpga/2021/30/contents
[25] https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy
[26] https://www.gov.uk/government/publications/powering-up-britain/powering-up-britain-energy-security-plan

3.7.13 The plan was complemented by the Net Zero Growth Plan, which set out how the Department for Energy Security and Net Zero aims to enhance the UK's energy security, seize the economic opportunities of the transition, and deliver on our net zero commitments.

3.7.14 ***Clean Power 2030: Advice on Achieving Clean Power for Great Britain by 2030 (November 2024)***[27]

3.7.15 In November 2024 the National Energy System Operator (NESO) published its advice on achieving clean power by 2030 to the DESNZ SoS in response to their previous request for advice in August 2024.

3.7.16 The advice (page 4) has three overarching 'key messages':

"1. Clean power is a huge challenge but is achievable for Great Britain by 2030.

2. Clean power will require doing things differently. It will only be achieved with bold action and sustained momentum, across every area and every step of the way between now and 2030.

3.Achieving clean power by 2030 will put Great Britain in a strong position."

3.7.17 Chapter 2 of the advice sets out the core elements of a clean power system to be delivered by 2030. Page 18 identifies the need for a trebling of solar provision, as well as the significant growth of other renewable technologies:

"Significant growth in offshore wind (from 15 GW in 2023 to 43-50 GW in 2030), onshore wind (14 GW to 27 GW), solar (15 GW to 47 GW) and battery storage (5 GW to over 22 GW) is needed to displace gas, to meet growing demand and to replace retiring plants."

3.7.18 NESO advice (page 4) notes that achievement of clean power 2030 is a huge but achievable challenge but that several elements must deliver at the limit of what is feasible and that it will only be achieve with bold action and sustained momentum across every area.

3.7.19 With regard to the speed of solar delivery, the advice (page 25) is clear:

"Wind and solar technologies already have a strong track record of delivery and have seen rapid growth in recent years. A further scale-up in delivery is needed across the key technologies for clean power by 2030."

3.7.20 The advice (page 27) subsequently explains that onshore wind and solar are the cheapest clean power options available, with largely complementary generation patterns and with potential, in some cases, to locate away from transmission constraints, often by connecting to the distribution network. These can deploy at a faster rate than offshore wind and include smaller community-scale projects. It also states that the 2030 connection queue has higher capacities of solar and onshore wind than is required. The technologies are mature and have an effective support mechanism in place.

3.7.21 The acceleration of solar generation is identified as being critical (page 37):

"Accelerating additional solar and wind generation in the distribution network pipeline is critical to reaching clean power at pace and reducing the risk of under delivery of renewables."

[27] https://www.neso.energy/document/346651/download

3.7.22 Planning and consenting is identified as one of the critical enablers of clean power. The advice (page 55) states that significant volumes of projects need to pass through the planning system to start construction on rapid timescales, while maintaining community consent.

Clean Power 2030 Action Plan: A New Era of Clean Electricity (December 2024)[28]

3.7.23 The Government's Action Plan builds on NESO's advice referred to above, setting out the Government's pathway to achieving a clean power system by 2030.

3.7.24 The Foreword from the DESNZ Secretary of State states:

"We will usher in a new era of clean electricity for our country, with our plan to deliver the most ambitious reforms to our energy system in generations…

This plan sets out how the government will work with the clean power sector, including industry, trade unions, investors, policy makers and others to achieve our clean power goal. 2030 is just six years away, and we are under no illusions about the scale of the task ahead, but mission-driven government is about acting with urgency and determination to rise to the challenges we face…

As the Prime Minister has made clear, clean power is an urgent priority for our country. The clean power sprint is the national security, economic security, and climate justice fight of our time - and this plan gives us the tools we need to win this fight for the British people."

3.7.25 The Action Plan explains that Clean Power means that by 2030, Great Britain will generate enough clean power to meet our total annual electricity demand, backed up by unabated gas supply to be used only when essential. The objective is that clean sources produce at least 95% of Great Britain's generation (pages 25-26).

3.7.26 The Action Plan explains that successful delivery will require rapid deployment of new clean energy capacity across the whole of the UK. It states (pages 10-11):

"We have high ambition. That means 43-50 GW of offshore wind, 27-29 GW of onshore wind, and 45-47 GW of solar power, significantly reducing our fossil-fuel dependency. These will be complemented by flexible capacity, including 23-27 GW of battery capacity, 4-6 GW of long-duration energy storage, and development of flexibility technologies including gas carbon capture utilisation & storage, hydrogen, and substantial opportunity for consumer-led flexibility."

3.7.27 Table 1 on page 32 of the Action Plan identifies that the current installed capacity of solar is 16.6GW and the DESNZ 'Clean Power Capacity Range' for 2030 is 45-47GW.

[28] https://assets.publishing.service.gov.uk/media/677bc80399c93b7286a396d6/clean-power-2030-action-plan-main-report.pdf

3.7.28 NESO's advice to Government (Clean Power 2030) and the Government's subsequent Clean Power 2030 Action Plan reiterate the scale and urgency of the national challenge to deliver clean energy by 2030. More specifically, these documents identify the need for a trebling of solar provision and the need for a further scale-up in its delivery.

3.7.29 In essence, accelerating additional solar generation is considered to be critical to reaching clean power by 2030, thereby further strengthening and supporting the case for the Development and the benefits that it will deliver.

Plan for Change: Milestones for Mission-Led Government (December 2024)[29]

3.7.30 The Plan for Change was presented to Parliament by the Prime Minister on 5 December 2024. It sets out the Government's overarching national policy objectives for this parliamentary term. It has five missions, including to 'kickstart economic growth' and 'make Britain a clean energy superpower'.

3.7.31 In order to achieve these national missions, the Plan for Change sets out a series of milestones which the Government wants to achieve in the next five years. These milestones include securing home-grown energy, protecting billpayers, and putting us on track to at least 95% clean power by 2030, while accelerating the UK to net zero.

The Committee on Climate Change (CCC): The Seventh Carbon Budget – Advice for the UK Government (February 2025)[30]

3.7.32 The UK's Climate Change Act (2008) sets the framework for domestic action to address climate change mitigation and adaptation. The Act requires the Government to propose regular, legally binding milestones on the way to achieving Net Zero greenhouse gas emissions, known as carbon budgets. The CCC, which is an independent statutory body established under the Climate Change Act, is required to advise the Government on the level of these carbon budgets.

3.7.33 In February 2025, the CCC released its statutory report which provides advice to the UK Government on the level of the Seventh Carbon Budget (2038 to 2042). In essence, the document states that the UK must step up actions to adapt to the climate change that is already happening. The investments, infrastructure, and land use changes required to deliver the Seventh Carbon Budget must be designed to be well-adapted to current and future climate change (page 10).

[29] https://assets.publishing.service.gov.uk/media/6751af4719e0c816d18d1df3/Plan_for_Change.pdf
[30] https://www.theccc.org.uk/wp-content/uploads/2025/02/The-Seventh-Carbon-Budget.pdf

4 The Development

4.1 INTRODUCTION

4.1.1 This section describes the Development and its main components, describing the activities that will take place during the construction, operation and maintenance, and decommissioning phases.

4.1.2 All works that are part of the Development are listed in Schedule 1 of the **Draft Development Consent Order [EN010162/APP/3.1A]** [AS-012], which assigns 'work numbers' to a number of different components described below.

4.2 DEVELOPMENT OVERVIEW

4.2.1 The Development comprises the construction, operation and maintenance, and decommissioning of the Great North Road Solar and Biodiversity Park, a solar photovoltaic (PV) array electricity generating station and electrical storage facility, with a total capacity exceeding 50 megawatts (MW) and an export connection to the National Grid (the 'Development').

4.2.2 Electricity would be transmitted from the Development (either directly from the solar panels or via storage in the batteries) at 400 kV along a cable either ducted or direct-buried below the surface of the ground. Two alternative options are proposed to connect the 400 kV cable to the Staythorpe Substation.

- Connect via the substation associated with a consented grid support BESS on land immediately to the west of the existing National Grid Staythorpe Substation. This grid support BESS has been granted planning consent (NSDC, planning reference 22/01840/FULM); or
- Connect the 400 kV cable to connect directly to the National Grid Staythorpe Substation.

4.2.3 The location of the Development is shown on **ES Volume 3, Figure 1.1 Development Location [EN010162/APP/6.3.1A]** [AS-028]. The Development will be located within the Order Limits (the land shown on the **Works Plans [EN010162/APP/2.3A]** [AS-005] within which the Development can be carried out).

4.2.4 It is anticipated that the Development will be operational for a 40-year period, and this has been assessed in the EIA and reported in the ES. Once the Development ceases to operate it will be decommissioned over a period of 18 to 24 months.

4.3 MAIN COMPONENTS OF THE DEVELOPMENT

4.3.1 The Order Limits are approximately 1,765 ha and are divided into Works that are defined by Schedule 1 of the **Draft Development Consent Order [EN010162/APP/3.1A]** [AS-012]. A summary of the Works is set out below:

- Work no. 1: Solar PV;
- Work no. 2: Cables;
- Work no. 3: Mitigation/enhancement;
- Work no. 4: Intermediate substations;
- Work no. 5a: BESS;
- Work no. 5b: 400 kV compound;

- Work no. 6: National Grid Staythorpe Substation and connection point;
- Work no. 7: Consented Staythorpe BESS and Connection; and
- Work no. 8: Access Works

4.3.2 The location of the works listed above is shown **on ES Volume 3, Figure 5.1: Works Areas [EN010162/APP/6.3.5A]** [AS-032].

4.3.3 A description of the proposed works is provided in **ES Volume 2, Chapter 5: Development Description [EN010162/APP/6.2.5]** [APP-048].

4.4 DESIGN DEVELOPMENT

4.4.1 As explained above in Section 1 of this Planning Assessment, the design of the Development has been informed by a comprehensive programme of consultation and engagement. The principal pre-application consultation milestones are as follows:

- EIA Scoping (November-December 2023);
- Non-statutory consultation (January-February 2024);
- Statutory consultation (January-February 2025);
- Targeted Consultation (May-June 2025); and
- Meetings and discussions with statutory consultees and relevant stakeholders (throughout the process – 2023-2025).

4.4.2 The design of the Development has evolved since 2023 as part of an iterative, mitigation by design process conducted in accordance with the NPSs, planning guidance and best practice. An iterative design process has been employed to identify a robust, proportionate and deliverable mitigation strategy as part of the Development. Mitigation measures have been developed in response to policy requirements, relevant guidance, the physical characteristics of the Order Limits and views to and from the Order Limits from the wider landscape.

4.4.3 Many physical, environmental and practical factors were considered, and the design was amended in response to these. Data describing these factors was collected through desk-based studies of existing information and site surveys to collect new information. Feedback on the proposals was received through consultation with the local public, local groups, local organisations and national advisory bodies such as the Environment Agency (EA) and Natural England (NE).

4.4.4 This information identified areas that were less preferable for development, or for certain types of development, such as solar panels in areas with the best soils for agriculture and substations within 300 m of residential properties. Areas of the highest flood risk were avoided and areas with particular visual impact from key locations were avoided. The technical design of the Development evolved, with a 400 kV substation proposed as close as practical to the National Grid Staythorpe Substation, alongside a BESS. A high level landscape and ecological plan for the Development was proposed which included woodland, hedges, new grassland and other areas for environmental mitigation or enhancement. This resulted in the layout proposed in the EIA Scoping report.

4.4.5 Following the Scoping Report and non-statutory consultation, feedback on the proposals combined with increased data from the ongoing environmental surveys and technical studies led to further design changes. Design changes at this stage were generally at smaller scale. They included omitting solar

panels from particular views, adding new areas of woodland and other habitats to improve biodiversity, developing cable routing options and reducing options for substations and other infrastructure as it became clear that they would not be required as part of the electrical design. An access strategy was developed, with access points to the solar park site from the public road network proposed, surveyed and assessed. A public rights of way (footpaths and bridleways) strategy was also developed to minimise effects on users of routes in areas with solar on both sides by diverting the routes around the edges of fields, and to propose a network of new permissive routes, complementing the existing rights of way network.

4.4.6 The Applicant had always planned to include environmental benefits, however, the extent of the land agreements created the opportunity for landscape-scale biodiversity benefits and, in collaboration with local wildlife groups, proposals for a biodiversity park were included and the name of the Development was changed to reflect those benefits. This led to the layout proposed in the Preliminary Environmental Information Report (PEIR) which was the document that formed the basis of the statutory consultation process.

4.4.7 Following statutory consultation feedback, and the completion of the environmental surveys and studies as part of the EIA, a further round of design changes was made. The principal changes at this stage included avoiding areas identified in new flood modelling released by the EA, a reduction in solar area overall as a result of increases in solar panel efficiency (meaning the same electricity could be generated from less land than was previously the case), preferred cable routes were chosen from the options previously identified, the locations for the four intermediate substations were confirmed and the proposed boundary was reduced to omit those areas no longer needed.

4.4.8 Further design changes at this stage included the selection of fixed, south-facing solar panels, avoiding the taller “tracker” panels that move as the sun moves across the sky. The maximum height of the solar PV modules was reduced from 4.0 m to 3.5 m, reducing their visibility. Methods for drilling holes for cables to pass under watercourses and woodland were selected in certain locations, rather than digging an open trench, to reduce environmental impacts. The permissive path routing proposals were refined following discussions with local walking groups and parish councils, and a circular long-distance footpath was identified, using some new permissive paths, but also some existing public footpaths within and outside the solar park site area. The access point strategy was further developed, so that the number of places where construction traffic could enter the solar park site was limited, and internal tracks would be used, reducing the construction traffic levels on public roads.

4.4.9 Mitigation measures have been included in relevant control documents, which have been prepared in outline form for the Application and include:

- **ES Volume 4, Appendix A5.1: Outline Landscape and Ecological Management Plan (LEMP) [EN010162/APP/6.4.5.1]** [APP-201]**;**
- **ES Volume 4, Appendix A5.2: Outline Construction Traffic Management Plan (CTMP) [EN010162/APP/6.4.5.2]** [APP-203]**;**

- **ES Volume 4, Appendix A5.3: Outline Construction Environmental Management Plan (CEMP) [EN010162/APP/6.4.5.3]** [APP-204]**;**
- **ES Volume 4, Appendix A5.4: Outline Fire Safety Management Plan (FSMP) [EN010162/APP/6.4.5.4]** [APP-205]**;**
- **ES Volume 4, Appendix A5.5: Outline Operation Environmental Management Plan (OEMP) [EN010162/APP/6.4.5.5]** [APP-206]**; and**
- **ES Volume 4, Appendix A5.6: Outline Decommissioning and Restoration Plan (DRP) [EN010162/APP/6.4.5.6]** [APP-207]**.**

4.4.10 **ES Volume 2, Chapter 4: Alternatives [EN010162/APP/6.2.4] [APP-047]** and the **Design Approach Document [EN010162/APP/5.6] [APP-319] [APP-320] [APP-321] [APP-322]** provide further details regarding how the design evolved throughout the pre-application stage.

4.4.11 A description of the final design proposal for the Development which was arrived at following completion of this iterative design process is provided in **ES Volume 2, Chapter 5: Development Description [EN010162/APP/6.2.5]** [APP-048].

4.5 COMMUNITY BENEFIT FUND

4.5.1 The Applicant has also committed to providing a Community Benefit Fund linked to the Development called 'NG+' to provide a comprehensive package of support to the community. The 5 Pillars of NG+ are: the Local environment; Education; Food security; Well-being and Energy efficiency. A website has been established to provide further information on NG+ (www.ngplus.uk) and a forum to engage with the local community.

4.5.2 "NG+ developments" are environmental and socio-economic enhancement works that are being offered as part of the community benefit scheme.

4.5.3 NG+ is the term for the money, or projects-in-kind, that will be provided voluntarily to the community by the Applicant during the operational phase of the Development. NG+ is being led by the developers of GNR in consultation with the local communities. These would proceed if, and only if, the Development proceeds, subject to any required planning permission being secured, and their implementation is anticipated to take place post-consent and pre-construction of the Development.

4.5.4 The Community Benefit Fund does not form part of the DCO Application, and this funding is not required to mitigate the effects of the Development. Therefore, the SoS cannot, and should not, apply any weight to the Community Benefit Fund when balancing the positives and negatives of the Development. The Community Benefit Fund is therefore not taken into account in consideration of the planning balance within this Planning Statement.

5 NEED AND BENEFITS

5.1 INTRODUCTION

5.1.1 This section presents the need and benefits for solar projects and the specific benefits of the Development.

5.2 NEED

National Policy Statement EN-1

5.2.1 The principle of the need for new renewable energy, and that this need is urgent, is firmly established in NPS EN-1 and NPS EN-3. In accordance with NPS EN-1, substantial weight should be given to the contribution which projects would make towards satisfying this need.

5.2.2 There is also a growing need for new renewable energy in the local area.

5.2.3 NSDC declared a climate emergency at a Full Council meeting on 16 July 2019[31] and subsequently published its Climate Emergency Strategy in September 2020.

5.2.4 NCC declared a climate emergency at a Full Council meeting on 27 May 2021[32]. In 2024 NCC published its Net Zero Framework[33] which provides its approach to achieving net zero by 2050 and its ambition to become a carbon neutral Council by 2030.

5.2.5 The Development benefits from up to date, authoritative policy support. Not only does national policy establish an urgent need for new, low carbon energy generation, it specifically identifies solar energy as a key part of the government's strategy for low-cost decarbonisation of the energy sector. The Development is in the national interest and national policy requires that substantial weight is to be given to the need for its development.

5.2.6 Given the level and urgency of need, paragraph 4.1.3 of NPS EN-1 states that the SoS should *"start with a presumption in favour of granting consent to applications for energy NSIPs"*. Paragraph 3.2.7 states that *"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"*.

5.2.7 In accordance with paragraph 4.1.5 of NPS EN-1, in considering any proposed development, the SoS should take into account:

- the potential benefits, including its contribution to meeting the need for energy infrastructure, job creation, environmental enhancements and any long term or wider benefits; and
- the potential adverse impacts, including on the environment and including any long term and cumulative adverse impacts as well as any measures to avoid, reduce, mitigate or compensate for any adverse impacts, following the mitigation hierarchy.

[31] https://democracy.newark-sherwooddc.gov.uk/ieListDocuments.aspx?CId=139&MId=311

[32] https://www.nottinghamshire.gov.uk/dms/Meetings/tabid/70/ctl/ViewMeetingPublic/mid/397/Meeting/5417/Committee/513/SelectedTab/Documents/Default.aspx

[33] https://www.nottinghamshire.gov.uk/media/0u5a2fhr/netzeroframework.pdf

5.2.8 Importantly, NPS EN-1 defines onshore renewable electricity generation (which includes solar) (Paragraph 4.2.5) as Critical National Priority ('CNP') infrastructure that is required to meet the Government's target to decarbonise the power system by 2035, to underpin its 2050 net zero ambitions (Paragraph 4.2.1).

5.2.9 Paragraph 3.3.63 provides further confirmation of the need stating the *"Government strongly supports the delivery of CNP Infrastructure and it should be progressed as quickly as possible."*

5.2.10 Paragraph 4.2.8 of NPS EN-1 states that the CNP policy will influence how non-Habitats Regulations Assessment and non-Marine Conservation Zone residual impacts are considered in the planning balance. The overall position is summarised at Paragraph 4.1.7 of NPS EN-1 which confirms *"For projects which quality as CNP Infrastructure, it is likely that the need case will outweigh the residual effects in all but the most exceptional cases."*

Clean Power 2030 Action Plan

5.2.11 The more recent Clean Power 2030 Action Plan seeks to ensure that clean sources of energy produce at least 95% of Great Britain's electricity generation by 2030.

5.2.12 Table 1 of the Action Plan identifies that the current installed capacity of solar is 16.6 GW and DESNZ 'Clean Power Capacity Range' for 2030 is 45-47 GW. Similarly for batteries the current installed capacity is 4.5GW and the DESNZ 'Clean Power Capacity Range' for 2030 is 23-27 GW.

5.2.13 In simple terms, the Clean Power 2030 Action Plan requires an additional 28 to 30 GW of solar generation to be connected over the next five years, equivalent to approximately 6 GW per year or more than 100 MW per week.

5.2.14 Similarly, in relation to battery storage the Clean Power 2030 Action Plan requires an increase from 4.5 GW to 23-27 GW, a 400-500% increase in battery storage capacity over the next five years.

Summary

5.2.15 The principal need for large-scale solar projects is centred on the significant contribution they can make to the three important national energy policy aims:

- Decarbonisation – achieving net zero carbon emissions by 2050, requiring deployment of zero-carbon electricity generation at scale to ensure that clean sources of energy produce at least 95% of Great Britain's electricity generation by 2030 and to decarbonise the power sector by 2035.
- Security of supply – delivering geographically and technologically diverse energy supplies.
- Affordability - providing large-scale generation at low cost which will provide an overall reduction in energy costs for end-use consumers.

5.2.16 The Development will make a meaningful contribution to the UK's legally binding net zero commitment, which is set out in further detail below.

5.2.17 Well-designed large-scale solar projects, such as the Development, are a critical part of the development of the UK's portfolio of renewable energy generation required to decarbonise its energy supply quickly and provide secure and affordable energy supplies.

5.2.18 Further details of the need for the Development are provided in the **Statement of Need [EN010162/APP/7.2]** [APP-324]. In addition to demonstrating the strategic need for renewable energy generation and storage which is embedded in legislation and national policy, the Statement of Need also explains how the Development is able to be deployed so that it can contribute to meeting this identified need.

5.2.19 The Applicant has secured and accepted a Grid Connection Offer from NESO[34] to connect the Development to the National electricity Transmission System (NETS) with a connection date of 2027, which provides further certainty on the deliverability of the Development and its ability to help meet the urgent need identified in Clean Power 2030. Further details are provided in the **Grid Connection Statement [EN010162/APP/7.15]** [APP-331]..

5.3 Benefits

5.3.1 In addition to meeting the urgent national need for secure and affordable low carbon energy infrastructure the Development would provide other significant benefits including:

- A meaningful contribution to the UK's legally binding net zero commitment, with the Development anticipated to have a generating capacity of around 800 MW (AC), providing enough electricity to power the equivalent of approximately 400,000 homes (based on the Ofgem estimate of annual average household electricity consumption of 2,700 kWh per year). Given that Nottinghamshire has 360,290 domestic properties[35], the Development would have the capacity to generate enough energy for the entirety of Nottinghamshire's domestic population with energy to spare.
- The Development is projected to result in a net reduction in emissions of 789,292 teCO2e, helping contribute to the UKs Net Zero targets.
- An additional source of domestic energy security that reduces the market price of electricity by generating power so that more expensive and more carbon intensive generation (such as gas) are not required to generate as much, reducing the overall cost of electricity to consumers.
- Provision of battery energy storage, co-located with the solar generation which maximises the efficiency of land use and grid capacity and allows the Development to maximise the usable output from intermittent generation, which will reduce the overall amount of generation capacity required whilst also providing the opportunity to deliver grid balancing to the local electricity network.
- Significant tree planting with approximately 64,500 proposed trees creating 31 ha of woodland, as well as 49 km of new hedgerow, hedge and tree belts.

[34] Previously known as the National Grid Electricity System Operator (NGESO)
[35] https://www.nottinghamshireinsight.org.uk/research-areas/key-facts-about-nottinghamshire/

- Significant landscape enhancements comprising approximately 989 ha of Solar PV (diverse) grassland, 405 ha of diverse grassland and 23 ha of ecotone.
- Enhanced public access legacy with the introduction of new public rights of way that will be created to provide new facilities for active travel, recreation and links between communities and developments. A total of 32.6 km of new permissive routes are proposed, comprising 27 new permissive routes (21 permissive footpaths and six bridleways). A circular recreational route would be created around the Order Limits, covering 50.6 km, including 12.5 km of new permissive path.
- Biodiversity and landscape mitigation have been proposed including 555 ha dedicated solely for these purpose and which will contribute to securing biodiversity net gains for habitats, hedgerows and watercourses, which would result in a significant BNG.
- 180 direct local full time equivalent ('FTE') construction and manufacturing jobs could be created over the 24-month construction period. The direct construction employment would generate circa £10.4m in Gross Added Value ('GVA') within the regional construction economy (based on average GVA per head in the construction industry).
- It is anticipated that the decommissioning phase would require a similar level of employment and generate a similar scale and character of workforce spending and supply chain effects as the construction phase.
- The operational phase of the Development would support 19 direct local FTE jobs consisting of operational and maintenance roles for the Development's PV panels and other structures, as well as a further 21 jobs in the wider economy.
- Additional social, economic and educational benefits including opportunities for community farming and orchards, skills and training initiatives (apprenticeships; vocational qualifications; STEM education) and supply chain opportunities (local business networking and support; local procurement strategy).

5.3.2 These benefits of the Development are considered to carry substantial weight.

5.3.3 National policy makes it clear that energy security is nationally important, whilst climate change is the single most important issue facing the planet. The scale and urgency of the challenge to the UK in meeting our zero carbon commitment is unparalleled. Renewable energy has an increasingly important role to play, but it is dependent on the diversification of the UK's energy market. The Development is in the national interest and national policy requires that substantial weight be given to the need for its development.

5.3.4 To enhance the overarching national benefit of delivering the Development, the Applicant has worked closely with stakeholders to develop extensive landscape and ecological enhancements, as well as an enhanced public access legacy that would provide a significant benefit to the local area. These wider public benefits of the Development are also considered to carry substantial weight.

6 PLANNING ASSESSMENT

6.1 INTRODUCTION

6.1.1 This section assesses the compliance of the Development with the main policy requirements that are applicable following a review of the documents identified earlier in Section 3. Those policy requirements are listed below, along with the section of this Planning Assessment in which they are addressed.

6.1.2 As explained in Section 3 of this Planning Assessment, NPS EN-1, NPS EN-3, and NPS EN-5 provide the primary policy basis for deciding the DCO Application. NPS EN-1 provides the overarching policy position and, specifically, confirms that onshore renewable electricity generation (which includes solar) is designated as CNP Infrastructure. NPS EN-3 sets out the considerations for the SoS's 'Decision Making for Solar Photovoltaic Generation'. Alongside the NPSs, the NPPF and local policies have also been used to assess the Development.

6.1.3 The areas considered in this assessment are as follows:

Overarching Considerations (NPS EN-1):

- Meeting the renewable energy need (Section 6.2)
- Alternative sites and site selection (Section 6.3)
- Good design (Section 6.4)
- Flood risk (Section 6.5)
- Noise and vibration (Section 6.6)
- Socio economic (Section 6.7)

'Decision Making for Solar Photovoltaic Generation' Considerations (NPS EN-3):

- Agriculture land classification and land type (Section 6.8)
- Project lifetime and decommissioning (Section 6.9)
- Biodiversity, ecological, geological conservation and water management (Section 6.10)
- Landscape, visual and residential amenity (Section 6.11)
- Glint and glare (Section 6.12)
- Cultural heritage (Section 6.13)
- Construction including traffic and transport noise and vibration (Section 6.14)

6.1.4 The Planning Assessment assesses each of these considerations in turn below.

6.2 MEETING THE RENEWABLE ENERGY NEED

6.2.1 The Development would make a direct contribution to the provision of low carbon generation capacity that is urgently required in order to meet the Government's objectives and commitments for the development of a secure, affordable and low carbon energy system.

6.2.2 The SoS has determined that substantial weight should be given to this need when considered applications for development consent under the PA 2008 (NPS EN-1, Paragraph 3.2.7). Helping meet this established urgent need should weigh heavily in favour of development consent being granted. It is acknowledged that there are environmental effects identified during the

construction, operation and decommissioning stages, but such impacts must be balanced against the substantial weight which should be given to the need for renewable energy. These benefits are considered to demonstrably outweigh any limited harm to which a project of this scale may give rise.

6.2.3 Paragraph 4.1.2 of NPS EN-1 emphasises the importance of the government's net zero target commitment and efforts to fight climate change, as well as the need to maintain a secure and reliable energy system.

6.2.4 Paragraph 4.1.3 of NPS EN-1 provides a policy presumption in favour of energy NSIPs. It states: *"Given the level and urgency of need for infrastructure of the types covered by the energy NPSs set out in Part 3 of this NPS, the Secretary of State will 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."*

6.2.5 NPS EN-1 provides explicit and specific policy support for low carbon generation and associated infrastructure confirming that *"there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure"* (Paragraph 3.3.62). Low carbon infrastructure for the purposes of NPS EN-1 is defined in paragraph 4.2.5 and includes *"...for electricity generation, all onshore and offshore generation that does not involve fossil fuel combustion (that is, renewable generation, including anaerobic digestion and other plants that convert residual waste into energy, including combustion, provided they meet existing definitions of low carbon; and nuclear generation), as well as natural gas fired generation which is carbon capture ready"*.

6.2.6 NPS EN-1 also states that *"Government strongly supports the delivery of CNP Infrastructure and it should be progressed as quickly as possible"* (Paragraph 3.3.63).

6.2.7 Paragraph 3.2.6 of NPS EN-1 states that the SoS should assess all DCO applications for the types of infrastructure covered by this NPS on the basis that the government has demonstrated that there is a need for such infrastructure which is urgent. Paragraph 3.2.7 of NPS EN-1 states that the SoS has determined that substantial weight should be given to this need when considering DCO applications. Paragraph 3.2.8 of NPS EN-1 also states that:

"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."

6.2.8 NPS EN-1 paragraph 3.3.20 states 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 (as they are not reliant on fuel for generation). Our analysis shows that a secure, reliable, affordable, net zero consistent system in 2050 is likely to be composed predominantly of wind and solar".*

6.2.9 Paragraph 2.3.3 of NPS EN-1 states that: *"Our objectives for the energy system are to ensure our supply of energy always remains secure, reliable, affordable, and consistent with meeting our target to cut GHG emissions to net zero by 2050, including through delivery of our carbon budgets and*

Nationally Determined Contribution. This will require a step change in the decarbonisation of our energy system".

6.2.10 The Development would contribute to the meeting the Government's aims as follows:

- **Decarbonisation** – the Government has a legal commitment to achieve net zero carbon emissions by 2050. In addition, the more recent Clean Power 2030 Action Plan seeks to ensure that clean sources of energy produce at least 95% of Great Britain's electricity generation by 2030. Achieving these objectives, requires deployment of zero-carbon electricity generation at scale, to result in decarbonisation of the power sector by 2035. The Development will generate large-scale low carbon electricity and is expected be operational by 2028.
- **Security of supply** – delivering geographically and technologically diverse energy supplies. The Development provides geographical and technological diversification to balance the UK's progress in offshore wind. It also includes energy storage that allows electricity generated from the PV panels (or imported from the electricity grid during periods of high supply) to be stored and discharged when it is needed most, i.e. during periods of high demand. In addition to balance the Development's output the energy storage contributes to the overall balancing of the UK electricity grid, including ensuring energy generated during periods of high wind generation can be stored and efficiently used later.
- **Affordability** - providing large-scale generation at low cost which will provide an overall reduction in energy costs for end-use consumers. The Development will contribute to a reduction in the market price of electricity by generating power so that more expensive and more carbon intensive generation (such as gas) are not required to generate as much, reducing the overall cost of electricity to consumers.

6.2.11 NPS EN-3 sets out the Government's objectives and commitments for the energy system, providing planning policy for solar PV that is intended to facilitate the delivery of these objectives and meet the Government's legislative commitments.

6.2.12 In corroboration with NPS EN-1, paragraph 2.10.9 of NPS EN-3 recognises the Government's support for solar projects: *"The government has committed to sustained growth in solar capacity to ensure that we are on a pathway that allows us to meet net zero emissions by 2050. As such, solar is a key part of the government's strategy for low-cost decarbonisation of the energy sector."*

6.2.13 Paragraph 161 of the NPPF states that *"The planning system should support the transition to net zero by 2050"* and *"contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience"* by support renewable and low carbon energy and associated infrastructure.

6.2.14 Paragraph 168 of the NPPF states that, when determining planning applications, the decision-maker *"should not require applicants to demonstrate the overall need for renewable or low carbon energy, and give significant weight to the benefits associated with renewable and low carbon energy generation and the proposal's contribution to a net zero future."*

6.2.15 The Development will deliver significant carbon savings. Table A15.1.19 of **ES Volume 4, Appendix A15.1 – Lifecycle Greenhouse Gas Evaluation [EN010162/APP/6.4.15.1]** [APP-285] projects that the Development would

produce 560,549 MWh of renewable energy in the opening year and up to 1,112,147 MWh in subsequent years of operation. Over the 40-year lifetime of the Development a total of 40,677,227 MWh of renewable electricity is expected to be generated. The Development would provide renewable electricity that would otherwise be generated via alternative means with higher carbon intensity. **ES Volume 2, Chapter 15: Climate Change [EN010162/APP/6.2.15]** [APP-058] anticipates that the Development would result in a net reduction in emissions of 789,292 teCO2e, helping contribute to the UKs Net Zero targets.

6.2.16 Overall, therefore it is demonstrated that the Development will lead to net greenhouse gas emissions savings by replacing electricity currently generated by more carbon intensive methods such as natural gas using Combined Cycle Gas Turbines, and helping to enable the removal of fossil fuel generation from the UK electricity grid.

6.2.17 This section clearly demonstrates that the Development would make a significant contribution to meeting government objectives and is therefore compliant with national legislation and policy.

6.3 ALTERNATIVE SITES AND SITE SELECTION

6.3.1 The Applicant has undertaken a comprehensive site selection process and selected the Order Limits because of its suitability for the Development as detailed in **ES Volume 2, Chapter 4: Alternatives [EN010162/APP/6.2.4]** [APP-047]. Its location and characteristics mean that it can provide a large volume of renewable electricity generation with the ability to export this generation to the electricity grid, whilst avoiding impacts on nationally or internationally designated sites and minimising impacts on other sensitive receptors.

6.3.2 Paragraph 4.3.9 of NPS EN-1 states: *"This NPS does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option from a policy perspective."*

6.3.3 However, NPS EN-1 at paragraph 4.3.15 states that: *"Applicants are obliged to include in their ES, information about the reasonable alternatives they have studied. This should include an indication of the main reasons for the applicant's choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility."*

6.3.4 NPS EN-1 paragraphs 4.3.16 and 4.3.17 subsequently state:

"In some circumstances, the NPSs may impose a policy requirement to consider alternatives."

"Where there is a policy or legal requirement to consider alternatives, the applicant should describe the alternatives considered in compliance with these requirements."

6.3.5 Paragraphs 4.3.22 – 4.3.29 of NPS EN-1 set out guiding principles for the SoS when considering alternatives.

6.3.6 NPS EN-1 paragraph 4.3.22 states that:

"Given the level and urgency of need for new energy infrastructure, the Secretary of State should, subject to any relevant legal requirements (e.g.

under the Habitats Regulations) which indicate otherwise, 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."

6.3.7 In practical terms, the second point means that smaller scale solar projects should not be considered as reasonable alternatives to the Development, since they would not meet the objective of the Development to supply the maximum amount of renewable electricity to the grid and they would not deliver the same energy, climate change or environmental benefits as the Development.

6.3.8 NPS EN-1 paragraph 4.3.24 states that: *"The Secretary of State should not refuse an application for development on one site simply because fewer adverse impacts would result from developing similar infrastructure on another suitable site, and should have regard as appropriate to the possibility that all suitable sites for energy infrastructure of the type proposed may be needed for future proposals."*

6.3.9 NPS EN-1 paragraph 4.3.25 states that: *"Alternatives not among the main alternatives studied by the applicant (as reflected in the ES) should only be considered to the extent that the Secretary of State thinks they are both important and relevant to the decision."*

6.3.10 There are certain circumstances where there is a requirement to consider alternatives, including:

a. Where a scheme would involve the compulsory acquisition of land or interests in land (NPS EN-1 paragraph 4.3.9).

b. Where a scheme would be located near a sensitive receptor site for air quality (NPS EN-1 paragraph 5.2.7).

c. Where a scheme would lead to significant harm to biodiversity and geological conservation interests (NPS EN-1 section 5.4).

d. Where a scheme would result in an adverse effect on the integrity of a European site that cannot be avoided (NPS EN-1 section 5.4.6).

e. Where a scheme would be located within, or partially within, Flood Zone 2 or Flood Zone 3 (NPS EN-1 section 5.8). In this case the Sequential Test should be undertaken. If following application of the Sequential Test, it is not possible for the project to be located in areas of lower flood risk the Exception Test can be applied, which provides a method of allowing necessary development to go ahead in situations where suitable sites at lower risk of flooding are not available. With regard to applying the Sequential Test, paragraph 5.8.23 of NPS EN-1 sets out that consideration of alternative sites should take account of the policy on alternatives described in section 4.3 of NPS EN-1.

f. Where a development would be located within a National Park, the Broads or an AONB (now National Landscape) (NPS EN-1 section 5.10).

6.3.11 With regard to point 'a', the DCO Application does seek compulsory acquisition powers. See the 'Land Availability' section below and the **Statement of Reasons [EN010162/APP/4.1]** [APP-010] regarding the consideration of alternatives.

6.3.12 With regard to point 'b', the Order Limits are not located within an Air Quality Management Area ('AQMA').

6.3.13 With regard to point 'c', the Development would not give rise to likely significant adverse effects on national biodiversity or geological designations. See **ES Volume 2, Chapter 8: Ecology and Biodiversity [EN010162/APP/6.2.8]** and [APP-051] and **ES Volume 2, ES Chapter 10: Ground Conditions and Land Contamination [EN010162/APP/6.2.10]** [APP-053] for further details.

6.3.14 With regard to point 'd', a **Habitats Regulations Screening Report [EN010162/APP/5.3A]** [AS-020] has been submitted with the DCO Application, which concludes that there will be no likely significant effects arising from the Development on any International Site either alone or in combination with other plans or projects.

6.3.15 With regard to point 'e', whilst the vast majority of the Order Limits are located within Flood Zone 1 (as directed by NPS policy), sections of the Order Limits are located within Flood Zones 2 and 3. **ES Volume 2, Chapter 9: Water Resources [EN010162/APP/6.2.9]** [APP-052] and **ES Volume 4, Appendix A9.1: Flood Risk Assessment [EN010162/APP/6.4.9.1A]** [AS-051] demonstrate that the Development will be safe, without increasing flood risk elsewhere, and will reduce flood risk overall given the reduction in surface water runoff following redevelopment. The **Sequential and Exception Test Report** which is provided at **Appendix 1** of this **Planning Statement** sets out how the Sequential and Exception Tests have been met.

6.3.16 The Order Limits are not located within a National Park, the Broads or a National Landscape. Therefore, no alternative assessments are required to address point 'f'.

6.3.17 In considering alternatives, and identifying and selecting the Order Limits, the Applicant has been guided by the principles described above and also by the technical and environmental requirements of a large-scale solar project.

6.3.18 The following paragraphs assess the reasons that the Applicant identified and selected the Order Limits from a technical, environmental and planning perspective, by reference to matters set out in Section 2.10.18–2.10.48 of NPS EN-3, *"Factors influencing site selection and design"* and relevant sections of NPS EN-1. The assessment comprises the following sections:

- Irradiance and Site Topography
- Capacity of a Site
- Proximity of a Site to Dwellings
- Agricultural Land Classification and Land Type
- Accessibility
- Public Rights Of Way
- Network Connection
- Land Availability
- Landscape, Ecological and Geological Designations
- Summary

Irradiance and Site Topography

6.3.19 NPS EN-3 paragraph 2.10.20 recognises that in order to maximise irradiance, applicants may choose a site and design its layout with variable and diverse panel types and aspects.

6.3.20 The amount of energy a solar park generates annually is strongly influenced by location. Solar irradiance (the amount of sunlight received at ground level) varies across the UK. The Applicant considered this area of Nottinghamshire to be a suitable area for the Development due to its higher levels of solar irradiation relative to other parts of the UK (as indicated on the Global Solar Atlas Photovoltaic Power Potential Map[36]).

6.3.21 In addition to sufficient solar irradiation levels, the generally undulating nature of the Order Limits topography is also suitable for solar infrastructure. The site selection process has enabled approximately 80 % of Work Area 1: Solar PV to be proposed on slopes of less than 6 % demonstrating the relatively flat nature of the Order Limits and a south-facing layout of appropriate PV panel types is proposed to maximise irradiance levels.

6.3.22 In addition, the Applicant has also secured a grid connection at the Staythorpe Substation which is a further critical factor that must be considered alongside irradiation levels, given the constrained nature of the grid and the limited availability of new connections.

6.3.23 In accordance with NPS EN-3, the Order Limits are suitable for a solar farm development in this regard, being located within an area of relatively high irradiance and being of suitable topography.

Capacity of a Site

6.3.24 NPS EN-3 states at paragraph 2.10.17 that *"Along with associated infrastructure, a solar farm requires between 2 to 4 acres for each MW of output. A typical 50MW solar farm will consist of around 100,000 to 150,000 panels and cover between 125 to 200 acres. However, this will vary significantly depending on the site, with some being larger and some being smaller."*

6.3.25 Paragraph 2.10.55 of NPS EN-3 subsequently explains that *"The installed generating capacity of a solar farm will decline over time in correlation with the reduction in panel array efficiency. There is a range of sources of degradation that developers need to consider when deciding on a solar panel technology to be used. Applicants may account for this by overplanting solar panel arrays."*

6.3.26 Footnote 92 of NPS EN-3 states *""Overplanting" refers to the situation in which the installed generating capacity or nameplate capacity of the facility is larger than the generator's grid connection. This allows developers to take account of degradation in panel array efficiency over time, thereby enabling the grid connection to be maximised across the lifetime of the site. Such reasonable overplanting should be considered acceptable in a planning context so long as it can be justified and the electricity export does not exceed the relevant NSIP installed capacity threshold throughout the operational lifetime of the site and the proposed development and its impacts are assessed through the planning process on the basis of its full extent, including any overplanting."*

6.3.27 As explained in **ES Volume 2, Chapter 4: Alternatives [EN010162/APP/6.2.4]** [APP-047], in order to deliver the 800 MW (AC) in accordance with the secured grid connection contract, the Development needs to provide installed DC capacity of approximately 1,120 MW, based on a 1.4 ratio for overplanting. In 2021, the Applicant set a target of securing around 5,000 acres (c. 2,000 ha) of land for solar PV only, based on the assumption at the time of approximately 4.5 acres per 1 MW of solar.

6.3.28 The Order Limits comprise an area of approximately 1,765 ha (i.e. 4,360 acres). Based on an installed DC capacity of approximately 1,120 MW, this equates to approximately 3.9 acres for each MW of output.

6.3.29 Designing projects with a generating capacity that is higher than the grid connection export capacity maximises the renewable energy that is generated and exported to the electricity grid. There is a significant shortage of grid capacity across the country, leading to long delays before grid connections are made available to operators, and this has been identified as a limiting factor in achieving the Government's objectives regarding renewable energy deployment. In light of that shortage, it would be contrary to policy not to seek to maximise the existing grid capacity that is available to the Development (i.e. by ensuring that use of the Development's grid connection capacity of 800 MW is maximised).

6.3.30 In terms of the overall extent of the Order Limits, the land take is consistent with paragraph 2.10.17 of NPS EN-3 which recognises that a solar farm requires around two to four acres for each MW.

6.3.31 The capacity of the Order Limits for the Development would enable the Applicant to maximise the generating capacity of the Development throughout its lifetime. This would fully utilise the BESS capacity and the secured grid connection, thereby maximising the generation of renewable energy and the other benefits of the Development.

6.3.32 The approach to site capacity of the Development is therefore in accordance with NPS EN-3 and national policy more widely.

Proximity of a Site to Dwellings

6.3.33 NPS EN-3 states at paragraph 2.10.27 that *"Utility-scale solar farms are large sites that may have a significant zone of visual influence. The two main impact issues that determine distances to sensitive receptors are therefore likely to be visual amenity and glint and glare."*

6.3.34 In identifying the Order Limits the Applicant identified that it is remote from nearby villages with visibility constrained by a combination of landform and existing vegetation. There are only a small number of residential properties where visual impacts would result from the Development and the Applicant has consulted with impacted residents during the pre-application period and made adjustments to the design where possible to reduce visual impact.

6.3.35 The Applicant has undertaken **ES Volume 4, Appendix: A7.6 Residential Visual Amenity Assessment (RVAA) [EN010162/APP/6.4.7.6]** [APP-213] to identify any instances where effects on residential visual amenity could be of such a nature or magnitude that they may need to be considered in the overall balance of 'Residential Amenity' or 'Living Conditions'. The point at

[36] https://globalsolaratlas.info/download/united-kingdom

which this happens is referred to as the Residential Visual Amenity (RVA) threshold. The RVAA concluded that effects would be at the highest level of magnitude at none of the properties and there would be no potential for the RVA threshold to be exceeded at any homes as a result of the construction and/or operation of the Development.

6.3.36 In summary, the Development has suitably considered the Order Limits proximity to residential dwellings and assessed the potential impacts and is therefore consistent with NPS EN-3.

Agriculture Land Classification and Land Type

6.3.37 NPS EN-3 (paragraph 2.10.29) states *"While land type should not be a predominating factor in determining the suitability of the site location applicants should, where possible, utilise suitable previously developed land, brownfield land, contaminated land and industrial land. Where the proposed use of any agricultural land has been shown to be necessary, poorer quality land should be preferred to higher quality land avoiding the use of "Best and Most Versatile" agricultural land where possible. 'Best and Most Versatile agricultural land is defined as land in grades 1, 2 and 3a of the Agricultural Land Classification".*

6.3.38 The Applicant reviewed the Provisional Agricultural Land Classification (ALC) map[37] published by Natural England that provides an indication of the ALC of an area and are stated to be suitable for strategic uses. An important factor considered in the site selection process for the Development was the ALC grade of land, particularly seeking to avoid / minimise areas of Grade 1 and Grade 2 quality.

6.3.39 As explained in **ES Volume 2, Chapter 17: Agricultural Land [EN010162/APP/6.2.17]** [APP-060] and indicated on Insert 17.1, the provisional map identifies the Order Limits as mostly undifferentiated Grade 3 land (the map does not differentiate between Grade 3a or Grade 3b), which is good to moderate quality agricultural land, with only small parts of the Order Limits (at the eastern and western edges) identified as falling into ALC Grade 2. Assessment of the wider area shows that undifferentiated Grade 3 land is generally the poorest available in the wider area between Nottingham and Lincoln.

6.3.40 ES Chapter 17 is informed by **ES Volume 4, Appendix A17.1: Agricultural Land Classification** [APP-288] [APP-289] which reports the findings of detailed ALC surveys for the Order Limits and this is considered further in respect of the Development in Section 6.8 below.

6.3.41 In summary, the Applicant considered ALC in the site selection process and sought to identify Order Limits that maximised the use of lower quality agricultural land and it is therefore policy compliant.

Accessibility

6.3.42 NPS EN-3 states at paragraph 2.10.36 that *"Given that potential solar farm sites are largely in rural areas, access for the delivery of solar arrays and associated infrastructure during construction can be a significant consideration for solar farm siting."*

[37] https://naturalengland-defra.opendata.arcgis.com/datasets/Defra::provisional-agricultural-land-classification-alc-england/about

6.3.43 Accessibility for the delivery of solar arrays and associated infrastructure during construction / decommissioning and for operational maintenance purposes was a key factor in the Applicant's selection of the Order Limits.

6.3.44 The Order Limits are accessible from the highway and the access strategy has been updated throughout the design process in response to public feedback and optimisation of the access strategy. The access strategy for the area near Weston was amended in response to feedback from the villages of Ossington, Moorhouse and Weston. The change in approach removed the need for construction traffic to pass through these villages. It also negated the requirement for Heavy Goods Vehicles (HGVs) to use Ladywood Lane and Wadnal Lane, and the disruption to properties on these lanes that would otherwise have occurred. Traffic would instead arrive and depart to the north, to and from the B1164 near Weston. Near Sutton on Trent, traffic would instead arrive and depart to the north to and from the B1164.

6.3.45 Throughout the Development design process further changes have been introduced to reduce any impacts on the local highway network to the extent possible.

6.3.46 Consideration has been given to accessibility and the Development is therefore compliant with NPS EN-3.

Public Rights of Way

6.3.47 The Applicant identified the PRoW network within the Order Limits at an early stage and has engaged proactively with the NCC PRoW Team, landowners, local user groups and the general public to inform preparation of the PRoW strategy for the Development.

6.3.48 NPS EN-3 Paragraph 2.10.42 states that *"Applicants are encouraged to design the layout and appearance of the site to ensure continued recreational use of public rights of way, where possible during construction, and in particular during operation of the site."* Paragraph 2.10.43 of NPS EN-3 encourages applicants where possible to minimise the visual impacts of the development for those using existing PRoW, considering the impacts this may have on any other visual amenities in the surrounding landscape.

6.3.49 Permanent PRoW diversions have been kept to a minimum and only proposed where absolutely necessary. Out of the 117 PRoW within the Order Limits, eight PRoW would be fully or partially closed, with diversions put in place. Of these diversions, seven would be permanent (those that currently pass through Work no. 1 Solar PV area), and one would be temporary, in place only during parts of the construction and decommissioning phases. No PRoW would be closed without an alternative or replacement being opened first.

6.3.50 New permissive routes are proposed to increase the connectivity of the network during the operational phase of the Development, including 21 new permissive footpaths, and six new permissive bridleways, creating 32.6 km of new permissive route. A circular recreational route covering 50.6 km would be created around the Order Limits, including 12.5 km of new permissive path.

6.3.51 **ES Volume 2, Chapter 18: Recreation [EN010162/APP/6.2.18]** [APP-061] identifies and assesses the likely significant effects of the Development on

publicly accessible recreation resources within and around the Order Limits, which are predominantly PRoW. The majority of potential effects on PRoW are assessed as being negligible and not significant. For some PRoW, adverse effects were assessed during construction, operation and decommissioning, but were found to be not significant in EIA terms as the affected PRoW are of local use or importance.

6.3.52 Beneficial effects are identified during the operational phase of the Development on all 27 new permissive routes which total 32.6 km in length. These effects are assessed as significant for the new 50.6 km circular recreational route around the Order Limits, since this is a long-distance route of more than local use or importance and would enhance the connectivity and recreational amenity of the area. This is assessed as a major and significant beneficial effect of the Development.

6.3.53 To ensure continued recreational use of the PRoW during construction, operation and decommissioning of the Development, the **ES Volume 4, Appendix A18.1: Outline Recreational Routes Management Plan (oRRMP) [EN010162/APP/6.4.18.1]** [APP-295] proposes measures to manage closures, diversions, and new permissive routes.

6.3.54 In summary, the Development has considered the PRoW network and accords with relevant policy in NPS EN-3.

Network Connection

6.3.55 NPS EN-3 states that: *"…availability of network capacity, and the distance from the solar farm to the existing network can have a significant effect on the commercial feasibility of a development proposal"* (Paragraph 2.10.24) and that *"To maximise existing grid infrastructure, minimise disruption to existing local community infrastructure or biodiversity and reduce overall costs, applicants may choose a site based on nearby available grid export capacity"* (Paragraph 2.10.25).

6.3.56 The electricity grid is highly constrained in terms of its ability to connect new generation projects and cannot be easily or quickly expanded.

6.3.57 In order to meet the legislative commitments to net zero and the urgent national need for low carbon energy infrastructure in accordance with the objectives of NPS EN-1 and NPS EN-3, all sites that are available for renewable energy generation and storage projects are required.

6.3.58 The Applicant has secured a grid connection at the Staythorpe Substation that provides a suitable point of connection ('POC') for the scale of solar generation and storage proposed. This grid connection capacity is secured for the Development and cannot be used by third parties.

6.3.59 ***Land Availability***

6.3.60 When carrying out the site selection process, the Applicant had regard to the availability of land, including whether compulsory acquisition powers may be required in connection with the land, and if so the potential for the exercise of those powers to interfere with human rights and equality considerations. In selecting the Order Limits, the Applicant has carefully considered the balance to be struck between individual rights and the wider public interest.

6.3.61 The location and extent of land and rights has therefore been carefully considered and designed to take the minimum amount of land required to

enable the successful, urgent delivery of the Development and the benefits it would provide.

6.3.62 Further information on the reasons why compulsory acquisition powers are required for the Development, the alternatives that have been considered and the status of land negotiations is provided in the **Statement of Reasons [EN010162/APP/4.1]** [APP-010] that has been submitted with the DCO Application.

Landscape, Ecological and Geological Designations

6.3.63 Paragraph 5.10.7 of NPS EN-1 sets out that National Parks, the Broads and AONBs (now National Landscapes) have the highest status of protection in relation to landscape and natural beauty.

6.3.64 Paragraph 5.10.12 of NPS EN-1 states that *"Outside nationally designated areas, there are local landscapes that may be highly valued locally. Where a local development document in England or a local development plan in Wales has policies based on landscape or waterscape character assessment, these should be paid particular attention. However, locally valued landscapes should not be used in themselves to refuse consent, as this may unduly restrict acceptable development."*

6.3.65 In accordance with this, the Order Limits are not located in any national or local landscape designations. There are no nationally designated landscapes within 30 km of the Order Limits and there are no locally designated landscapes within 2 km of the Order Limits.

6.3.66 The Order Limits do not include any international ecological designations. Eakring and Maplebeck Meadows SSSI borders the Order Limits, abutting an unclassified road along its 1.5 km southern boundary. Mather Wood SSSI is located outside of the Order Limits but less than 100 m from the boundary. There are also 16 LWS either within or bordering the Order Limits.

6.3.67 Paragraph 5.4.8 of NPS EN-1 states *"Development on land within or outside a SSSI, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits (including need) of the development in the location proposed 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."*

6.3.68 **ES Volume 2, Chapter 8: Ecology and Biodiversity [EN010162/APP/6.2.8]** [APP-051] identifies and assesses the likely significant effects of the Development on ecology and biodiversity. It predicts that the Development would not have any significant effects on either Eakring and Maplebeck Meadows SSSI or Mather Wood SSSI. The design and embedded measures have minimised and mitigated adverse effects, and enhancement is proposed that provides a net beneficial effect.

6.3.69 More generally, ES Chapter 18 finds that the Development would not have any significant adverse effects on ecology and biodiversity, whereas significant beneficial effects are predicted for LWS, habitats and breeding birds during the operation of the Development.

6.3.70 The Development is therefore compliant with paragraph 5.4.8 of NPS EN-1.

6.3.71 The Order Limits is not located within the Green Belt and there are no land use planning allocations or designations within the Order Limits, with the exception of two Mineral Safeguarding Areas (MSA): a MSA for Brick Clay and a MSA for Sand and Gravel.

6.3.72 **ES Volume 2, Chapter 10: Ground Conditions and Land Contamination [EN010162/APP/6.2.10]** [APP-053] identifies and assesses the likely significant effects of the Development on the nature and extent of the MSAs. It was informed by **ES Volume 4, Appendix A10.9:Mineral Resource Assessment [EN010162/APP/6.4.10.9]** [APP-238] which concluded that the safeguarded mineral resources would not be permanently sterilised by the Development given its temporary nature and the safeguarded resource would subsequently be available for extraction at some point in the future. The regional minerals officer has concurred with the conclusions of the MRA.

Summary

6.3.73 In considering alternatives, and identifying and selecting the Order Limits, the Applicant has been guided by principles described above and also by the technical and environmental requirements of a large-scale solar development project. Thorough consideration has been given to selecting the Order Limits. The Applicant identified and selected the Order Limits following a process to identify land which is suitable from a technical, environmental and planning perspective. This has been detailed **ES Volume 2, Chapter 4: Alternatives [EN010162/APP/6.2.4]** [APP-047] and the **Sequential and Exception Test Report** provided at **Appendix 1** of this Planning Statement.

6.3.74 In summary, consideration of alternatives has been carried out in line with regulatory requirements and in the context of the clear and urgent need for the Development.

6.4 GOOD DESIGN

6.4.1 The Development has been subject to a detailed and sensitive iterative design process. This has taken account of the context and features of the land within the Order Limits, nearby sensitive receptors and assets, information from environmental surveys, feedback from stakeholders, and opportunities and constraints in order to develop a good design that balances the need to maximise the energy generation capacity of the Development with the avoidance and mitigation of effects, and provision of environmental and other enhancements, where practicable.

6.4.2 NPS EN-1 (at paragraph 4.7.1) makes it clear whilst visual appearance is important, good design is a much broader consideration.

6.4.3 NPS EN-1 states that *"Applying good design to energy projects 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 is acknowledged, however 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."* (paragraph 4.7.2).

6.4.4 Paragraph 4.7.3 states that *"Good design is also a means by which many policy objectives in the NPSs can be met, for example the impact sections show how good design, in terms of siting and use of appropriate technologies, can help mitigate adverse impacts such as noise."*

6.4.5 NPS EN-1 recognises the typical location of such projects and as such states that *"Virtually all nationally significant energy infrastructure projects will have adverse effects on the landscape"* (paragraph 5.10.5) and that *"All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites"* (paragraph 5.10.13).

6.4.6 Paragraph 5.10.6 of NPS EN-1 states that *"Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate."*

6.4.7 NPS EN-3 recognises the role that good design should play in the context of achieving the Government's urgent and overriding need for solar energy infrastructure.

6.4.8 Paragraph 2.10.60 states that *"As set out above applicants will consider several 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."*

6.4.9 NPS EN-3 also states (at paragraph 2.10.61) that *"For a solar farm to generate electricity efficiently the panel array spacing should seek to maximise the potential power output of the site"*.

6.4.10 NPS EN-3 confirms (at paragraph 2.10.98) that *"Applicants should follow the criteria for good design set out in Section 4.7 of EN-1 when developing projects and will be expected to direct considerable effort towards minimising the landscape and visual impact of solar PV arrays especially within nationally designated landscapes."*

6.4.11 In terms of project design and evolution, NPS EN-3 (paragraph 2.10.59) sets out that applicants should consider the criteria for good design set out in NPS EN-1 (Section 4.7) at an early stage when developing projects.

6.4.12 Good design is described in NPPF paragraph 131. It explains that *"The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities."*

6.4.13 In summary, the aspiration for good design is central to policy, but importantly it is recognised that the contribution that energy infrastructure development is able to make to the enhancement of the quality of an area is limited by the nature of the type of project and that virtually all nationally significant infrastructure projects will have landscape and visual effects.

6.4.14 The NSDC Amended Core Strategy, adopted in 2019, includes general policies on design. Core Policy 9 (Sustainable Design) states that NSDC will expect new development proposals to demonstrate a high standard of

sustainable design that both protects and enhances the natural environment and contributes to and sustains the rich local distinctiveness of the District. Core Policy 13 (Landscape Character) states that based on the comprehensive assessment of the District's landscape character, provided by the Landscape Character SPD, NSDC will work with partners and developers to secure new development which positively addresses the implications of relevant landscape Policy Zone(s) that is consistent with the landscape conservation and enhancement aims for the area(s) ensuring that landscapes, including valued landscapes, have been protected and enhanced.

6.4.15 In accordance with NPS EN-1 section 4.7 and NPS EN-3 paragraphs 2.10.59 – 2.10.64, the Development is the result of an iterative design development process which commenced at an early stage and addresses the key opportunities and challenges of the Development and the context and setting within which it is located.

6.4.16 The Applicant's design team has worked collaboratively with a number of interested parties and has had regard to consultation feedback to provide an integrated and responsive design. Through the design process, the Applicant has taken account of the context and features of the land within the Order Limits and its surroundings in order to develop a good design that meets the requirements and objectives of the policies described above.

6.4.17 The design evolution process and the basis of design decisions for the Development are described in **ES Volume 2, Chapter 4: Alternatives [EN010162/APP/6.2.4]** [APP-047] and the **Design Approach Document [EN010162/APP/5.6]** [APP-319] [APP-320] [APP-321] [APP-322]. Section 2.2 of the latter document explains how the Applicant's design team used the framework set out by the NIC's overarching design principles and design policies set out in NPS EN-1 and NPS EN-3 to develop 16 overarching design principles which were adopted for the Development. These comprise:

Climate

CL1 - make an important contribution to achieving net zero greenhouse gas emissions by 2050 or sooner;

CL2 - seek to minimise whole life emissions of the project; and

CL3 - ensure the project can adapt flexibly to climate change.

People

PE1 - communicate openly with local communities and stakeholders;

PE2 - minimise the need to use compulsory purchase powers;

PE3 - seek local knowledge and views to inform and improve the project;

PE4 - deliver wider societal benefit;

PE5 - be a good neighbour to local residents and businesses.

Places

PL1 - design at a human scale and embed nature-based solutions;

PL2 - seek opportunities to enhance access and recreation to improve health and well-being;

PL3 - deliver biodiversity net gain that exceeds mandatory requirements;

PL4 - facilitate understanding and appreciation of local cultural heritage throughout the life of the project; and

PL5 - design with local landscape character in mind, providing a legacy of landscape enhancement.

Value

VA1 - seek opportunities to grow planting materials within the site and nearby, for example, seed mixes and hedgerow plants;

VA2 - measure performance of all aspects of the project against its objectives and use lessons learned to improve; and

VA3 - encourage engagement and provide learning opportunities.

6.4.18 Table 1 in section 7 of the Design Approach Document subsequently demonstrates how the design of the Development has responded to each of the 16 overarching design principles.

6.4.19 In conclusion, the Development delivers good design in the context of efficiently delivering large scale renewable energy infrastructure whilst providing an enhanced network of environmental features and benefits including biodiversity and landscape enhancements and an enhanced public access legacy.

6.4.20 As such, it is considered that the Development fully accords with the requirements of good design as outlined in the NPS.

6.5 FLOOD RISK

6.5.1 The EA Flood Map for Planning (2025) shows that the Order Limits are mostly located in Flood Zone 1 (89.99%), which comprises land having less than 0.1% (i.e. less than 1 in 1,000) annual probability of river or sea flooding, which is defined as 'low' probability. The remaining area of the Order Limits (10.01%) is located in either Flood Zone 2 or Flood Zone 3.

6.5.2 The Work Area 1 is located outside of Flood Zone 3. The Development would be located predominantly in Flood Zone 1. The only works that would be located in Flood Zone 3 are as follows:

- Work Area 2: Cables – these would be located entirely below ground and in waterproof ducting, ensuring no loss of floodplain storage or conveyance.
- Work Areas 3: Mitigation/enhancement – this would comprise grassland, scrub, an orchard and scattered trees, which is compatible with the EA's "Working with natural processes to reduce flood risk 2024" Flood and Coastal Erosion Risk Management (FCERM) research report[38].
- Work Area 6: National Grid Staythorpe Substation – this is unlikely to flood due to the presence of private flood defences which serve the operational substation.
- Work Area 7: Consented Staythorpe BESS and Connection – this has incorporated flood resilient design.

[38] https://www.gov.uk/flood-and-coastal-erosion-risk-management-research-reports/working-with-natural-processes-to-reduce-flood-risk-2024?utm_medium=email&utm_campaign=govuk-notifications-topic&utm_source=a06ab0c7-b939-430c-a4b4-14734d0c1c23&utm_content=weekly

6.5.3 NPS EN-1 Paragraph 5.8.13 requires that *"A site-specific flood risk assessment should be provided for all energy projects in Flood Zones 2 and 3 in England"*. Paragraph 5.8.14 explains *"This assessment should identify and assess the risks of all forms of flooding to and from the project and demonstrate how these flood risks will be managed, taking climate change into account."*

6.5.4 A site-specific flood risk assessment ('FRA') is provided at **ES Volume 4, Appendix A9.1: Flood Risk Assessment [EN010162/APP/6.4.9.1A]** [AS-051].

6.5.5 NPS EN-1 Paragraph 5.8.18 requires that *"Applicants for projects which may be affected by, or may add to, flood risk should arrange pre-application discussions before the official pre-application stage of the NSIP process with the EA or NRW, and, where relevant, other bodies such as Lead Local Flood Authorities, Internal Drainage Boards, sewerage undertakers, navigation authorities, highways authorities and reservoir owners and operators."*

6.5.6 The Applicant has engaged with the EA, Trent Valley Internal Drainage Board and other relevant parties during the pre-application stage to inform the design of the Development.

6.5.7 NPS EN-1 Paragraph 5.8.21 states that *"Where it is not possible to locate development in low-risk areas, the Sequential Test should go on to compare reasonably available sites with medium risk areas and then, only where there are no reasonably available sites in low and medium risk areas, within high-risk areas."*

6.5.8 The Applicant has provided its assessment of the Development in line with both the Sequential Test and the Exception Test in the **Sequential and Exception Test Report** provided at **Appendix 1** of this Planning Statement. This confirms that the requirements of both tests have been satisfied in accordance with NPS EN-1.

6.5.9 NPS EN-1 Paragraph 5.16.3 states that *"Development should be designed to ensure there is no increase in flood risk elsewhere, accounting for the predicted impacts of climate change throughout the lifetime of the development. There should be no net loss of floodplain storage and any deflection or constriction of flood flow routes should be safely managed within the site. Mitigation measures should make as much use as possible of natural flood management techniques."*

6.5.10 NPS EN-1 Paragraph 5.8.7 states that *"Where new energy infrastructure is, exceptionally, necessary in flood risk areas (for example where there are no reasonably available sites in areas at lower risk), policy aims to make it safe for its lifetime without increasing flood risk elsewhere and, where possible, by reducing flood risk overall. It should also be designed and constructed to remain operational in times of flood."*

6.5.11 The FRA demonstrates that the Development will be safe, without increasing flood risk elsewhere, and will reduce flood risk overall given the reduction in surface water runoff following redevelopment.

6.5.12 NPS EN-1 Paragraph 5.8.41 states that *"Energy projects should not normally be consented within Flood Zone 3b[228], or Zone C2 in Wales, or on land expected to fall within these zones within its predicted lifetime. This may also*

apply where land is subject to other sources of flooding (for example surface water). However, where essential energy infrastructure has to be located in such areas, for operational reasons, they should only be consented if the development will not result in a net loss of floodplain storage, and will not impede water flows."

6.5.13 The FRA confirms that minor areas of the Order limits are located within the functional floodplain (Flood Zone 3b), specifically Work Area 3: Mitigation, Work Area 6: National Grid Staythorpe Substation and connection point, Work Area 7: Consented Staythorpe BESS and Connection and Work Area 8: Access, as shown in Figure A9.2 in Appendix D. The works associated are either below ground (cables) or involve the creation of grassland etc which are compatible with the floodplain, will not result in a loss of storage or a perceptible effect on conveyance.

6.5.14 In summary, the Development accords with NPS EN-1 in respect of flood risk.

6.6 NOISE AND VIBRATION

6.6.1 NPS EN-1 paragraph 5.12.6 requires a noise assessment to be prepared where noise impacts are likely to arise, and sets out the methodology for this assessment. NPS EN-1 paragraph 5.12.9 adds that for operational noise this should be assessed using the principles of the relevant British Standards and other guidance.

6.6.2 **ES Volume 2, Chapter 12: Noise and Vibration [EN010162/APP/6.2.12]** [APP-055] presents the findings of an assessment of the likely significant effects from noise and vibration as a result of the Development.

6.6.3 NPS EN-1 paragraph 5.12.17 states that the SoS should not grant development consent unless they are satisfied that the proposals will meet the following aims:

- 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.

6.6.4 Part (e) of NPPF paragraph 187 outlines that planning decisions should prevent *"new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of…noise pollution".* At paragraph 198 (a) it also states that decisions should *"mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life"*.

6.6.5 **ES Volume 2, Chapter 12: Noise and Vibration [EN010162/APP/6.2.12]** [APP-055] concluded that, with mitigation in place and adherence to best practice, the assessment the Development is not likely to give rise to any significant noise or vibration effects during construction, operation or decommissioning.

6.6.6 The assessment of construction noise included the effects of hardstanding construction activities, construction traffic and vibration. The assessment concludes that with the embedded design and mitigation measures which

would be secured, the effects from noise during the construction phase are not expected to be significant. **ES Volume 4, Appendix 5.3: Outline Construction and Environmental Management Plan (CEMP) [EN010162/APP/6.4.5.3]** [APP-204] has been prepared by the Applicant and includes a list of noise mitigation measures. In addition, Requirement 12 in Schedule 2 of the **Draft Development Consent Order [EN010162/APP/3.1A]** [AS-012] prevents any phase of the Development commencing until a CEMP for that phase has been submitted to and approved by NSDC. Each CEMP must be prepared in accordance with the aforementioned Outline CEMP.

6.6.7 With regard to noise and vibration during the operational phase of the Development, the ES concludes that noise levels will be either low or negligible (not significant) at all noise sensitive receptors during both daytime and night-time periods. Requirement 15 in Schedule 2 of the **Draft Development Consent Order [EN010162/APP/3.1A]** [AS-012] requires an operational noise assessment to be submitted to and approved by NSDC before any part of the following works commence use: Work no. 1: Solar PV; Work no. 4: Intermediate substations; Work no. 5a: BESS; Work no. 5b: 400 kV compound; Work no. 6: National Grid Staythorpe Substation and connection point; and Work no. 7: Consented Staythorpe BESS and Connection.

6.6.8 The ES concludes that the effects from noise and vibration during the decommissioning of the Development will not be significant and will be controlled by the same mitigation measures as the construction phase (as outlined above).

6.6.9 In summary, the Development accords with NPS EN-1, specifically the policy aims of paragraph 5.12.17, and the NPPF by avoiding significant adverse noise and vibration impacts on health and quality of life; and mitigating and minimising other adverse impacts of noise and vibration through appropriate mitigation.

6.7 SOCIO ECONOMIC

6.7.1 **ES Volume 2, Chapter 13: Socio-economics and Tourism [EN010162/APP/6.2.13]** [APP-056] identifies and assesses the likely significant effects of the Development on socio economic and tourism resources.

Construction Phase

6.7.2 During the construction phase, the Development will support short term employment in the form of construction jobs. The Development will also have indirect effects through the local spending of construction workers and the potential for local businesses to supply the Development and benefit skills and training as part of a skills and employment plan. These effects are assessed as being significant beneficial effects of the Development.

6.7.3 Construction activity at the Order Limits may result in the temporary impact of traffic disruption, changes to visual amenity, noise impacts and restrictions to access on the visitor economy. Given the measures that the Development has secured to manage these effects, this is not considered likely to result in any significant effects and these effects are assessed as negligible.

Operational Phase

6.7.4 The impact of the Development on direct investment, supply chain investment, employment generation and sale of electricity and on skills and training are assessed as being moderate beneficial (significant) effects. There would also be a minor beneficial effect in respect of employment generation.

6.7.5 Although the operation of the Development will impact adversely on agricultural output and through traffic disruption, changes to visual amenity, noise impacts and restrictions to access on the visitor economy, these effects are assessed as being minor adverse (not significant). Mitigation measures include retained and new routes through the arrays appealing to people to encourage their use by providing information boards (with details of new routes); benches and resting places; wildflowers and hedgerows (for visual screening); children's fun trails and education boards (e.g. on wildlife, heritage and solar energy).

Decommissioning Phase

6.7.6 During the decommissioning phase, the Development is assessed as having a minor beneficial effect in respect of employment generation and moderate beneficial (significant) effect in respect of direct investment, supply chain investment, employment generation and sale of electricity. Other effects during this phase of the Development such as the temporary impact of traffic disruption, changes to visual amenity, noise impacts and restrictions to access on the visitor economy are assessed as being negligible.

6.8 AGRICULTURE LAND CLASSIFICATION (ALC) AND LAND TYPE

6.8.1 National and local planning policy is consistent in seeking to minimise impact on Best and Most Versatile ('BMV') agricultural land. BMV land comprises Grades 1, 2 and 3a of the Agricultural Land Classification (ALC). Policy also seeks to guide development away from BMV land where possible, except where its use is justified by other sustainability considerations. National and local policy also require the use of BMV land to be justified.

6.8.2 NPS EN-1 paragraph 5.11.12 states:

"Applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5)."

6.8.3 NPS EN-1 paragraph 5.11.34 states that the SoS:

"Should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification. Where schemes are to be sited on best and most versatile agricultural land the Secretary of State should take into account the economic and other benefits of that land. Where development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality."

6.8.4 NPS EN-3 states at paragraph 2.10.30 that the development of ground mounted solar arrays is not prohibited on BMV agricultural land. It subsequently states at paragraph 2.10.31 that *"It is recognised that at this scale, it is likely that applicants' developments will use some agricultural land. Applicants should explain their choice of site, noting the preference for*

development to be on suitable brownfield, industrial and low and medium grade agricultural land."

6.8.5 NPS EN-3 also recognises that solar projects can result in significant biodiversity benefits and wider environmental gains. Paragraph 2.10.89 states that *"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."*

6.8.6 On 15 May 2024, a written statement was published by Government, titled *'Solar projects must fit in with food security'*[39]. This reaffirms the Government's commitment to solar, along with ensuring large solar projects avoid higher quality agricultural land where possible.

6.8.7 In consideration of the above ALC policy context, the following two objectives have underpinned the Applicant's approach to this matter:

a. Minimisation of the impact on BMV agricultural land; and

b. Justification for the use of BMV agricultural land.

6.8.8 Each of these two objectives are considered further in turn below.

a. Minimisation of the impact on BMV agricultural land

6.8.9 The Applicant has taken account of ALC grading and agricultural land productivity throughout the design process for the Development and has sought to minimise the amount of BMV land included in the Order Limits.

6.8.10 Table 17.5 of **ES Volume 2, Chapter 17: Agricultural Land [EN010162/APP/6.2.17]** [APP-060] confirms that the Order Limits comprise 149 ha (8.5%) of Grade 2 land, 944 ha (53.5%) of Grade 3a land, 596 ha (33.8%) of Grade 3b land, 1 ha of Grade 4 land (0%) and 75 ha (4.2%) of non-agricultural and not surveyed land under the ALC. ES Chapter 17 is informed by **ES Volume 4, Appendix A17.1: Agricultural Land Classification** [APP-288] [APP-289] which reports the findings of detailed ALC surveys for the Order Limits.

6.8.11 Approximately 1,093 ha (62%) of the Order Limits is categorised as BMV land comprising 149 ha (8.5%) of Grade 2 land and 944 ha (53.5%) of Grade 3a land. This compares with the national proportion of BMV which is 41.3%, whereas in Nottinghamshire County it is just over 50% and in Newark and Sherwood District it is 48.4%.

6.8.12 NPS EN-3 states at paragraph 2.10.29 that *"While land type should not be a predominating factor in determining the suitability of the site location applicants should, where possible, utilise suitable previously developed land, brownfield land, contaminated land and industrial land. Where the proposed use of any agricultural land has been shown to be necessary, poorer quality land should be preferred to higher quality land avoiding the use of "Best and Most Versatile" agricultural land where possible."*

6.8.13 As set out earlier, **ES Volume 2, Chapter 4: Alternatives [EN010162/APP/6.2.4]** [APP-047] explains that one of the main factors considered in the site selection process for the Order Limits was the ALC

[39] https://questions-statements.parliament.uk/written-statements/detail/2024-05-15/hcws466

grade of land and BMV with the clear objective of avoiding / minimising the use of Grade 1 and Grade 2 land.

6.8.14 At the end of the Development's operational phase, the decommissioning phase would include the removal of Work no. 1 (Solar PV) and Work no. 5a (BESS) with the land being returned to the landowner and restored for agricultural use. Other elements, including the substations and some of the habitats created as part of the Development, may be retained depending on the need for this equipment for other purposes at that time.

6.8.15 Further details of the decommissioning phase works are set out in section 5.7 of **ES Volume 2, Chapter 5: Development Description [EN010162/APP/6.2.5]** [APP-048] and **ES Volume 4, Appendix A5.6: Outline Decommissioning and Restoration Plan (DRP) [EN010162/APP/6.4.5.6]** [APP-207]**.** Requirement 19 of Schedule 2 in the **Draft Development Consent Order [EN010162/APP/3.1A]** [AS-012] requires a decommissioning and restoration plan to be submitted to NSDC for approval in consultation with NCC.

6.8.16 The nature of the Development is that, once the Solar PV modules have been installed, the land could continue in, albeit altered, agricultural use, either being used by sheep for grazing or, alternatively, being used for managed grassland.

6.8.17 **ES Volume 2, Chapter 17: Agricultural Land [EN010162/APP/6.2.17]** [APP-060] includes an assessment of the Development's potential effects to soil quality and the availability of BMV land. Although there would be temporary disturbance of soils and land quality in the areas in which the construction compounds are erected, only limited areas of land would continue to be affected for the operation of the Development, namely the agricultural land required for construction of the base areas for fixed equipment (such as substations), the internal access tracks and the BESS compound. This would result in a temporary disturbance of 19.4 ha of BMV land during operation of the Development.

6.8.18 Development in Work no. 4 (Intermediate substations), Work no. 5b (400 kV compound) and Work no. 7 (Consented Staythorpe BESS and Connection) may remain following the decommissioning phase which would, at worst case, result in the permanent loss of 4.5 ha of BMV. The rest of the BMV land would be capable of restoration to a comparable grade at the decommissioning phase.

6.8.19 Solar projects typically involve minimal ground disturbance and can provide a valuable break from intensive agricultural practices associated with arable rotation. As explained in ES Chapter 17 (Paragraph 34), this 'fallow' (resting) period allows the soil to recover from the constant cultivation, chemical inputs, and compaction associated with modern farming practices. As a result, over the course of the operational life of the Development (up to a maximum of 40 years) evidence would suggest that soil health indicators, (e.g. organic matter content, soil nutrients, worm count) would improve under grassland, increasing its resilience and capacity for future agricultural use.

6.8.20 Table 17.14 in ES Chapter 17 indicates that the national proportion of BMV is 41.3%, whereas in Nottinghamshire County it is just over 50% and in Newark and Sherwood District it is 48.4%. In area terms, across England there is an estimated 3,700,000 hectares of BMV land and the Development

would result in a loss of 0.028% of national BMV (as set out in para 233 of **ES Volume 2, Chapter 17: Agricultural Land [EN010162/APP/6.2.17]** [APP-060]).

6.8.21 The temporary disturbance of 19.4 ha of BMV and, at worst case, the permanent loss of 4.5 ha of BMV is not therefore considered to have a material impact on the overall supply of BMV land in Newark and Sherwood or on food production and food security of the wider region.

6.8.22 With regard to soil impacts, standard good practice soil management measures, such as those set out in Defra's Code of Practice for the Sustainable Use of Soils on Construction Sites, will be prepared to ensure that the levels of loss and damage are minimised. This will ensure compliance with local and national planning policy regarding the protection and sustainable use of soil resources with **ES Volume 4, Appendix A17.2: Outline Soil Management Plan (SMP) [EN010162/APP/6.4.17.2]** [APP-290] [APP-291] [APP-292] [APP-293] securing the appropriate handling of soils for the construction and decommissioning works.

6.8.23 The Development would minimise impacts on agricultural land in line with national policy by keeping the permanent loss of BMV land to a very low amount; retaining the ability to reinstate arable agriculture after decommissioning; and facilitating a continued agricultural use through making the land available for biodiversity management grazing throughout the operational life of the Development. There are no other alternative sites within the search area (15 km from the POC) that could fulfil the requirements of the Development that would have a lesser effect on BMV agricultural land.

b. Justification for the use of BMV agricultural land

6.8.24 As set out above, NPS EN-1 and NPS EN-3 include a preference for development of non-agricultural land over agricultural land, and when unavoidable, for development of agricultural land to be directed towards land of the lowest available quality. Accordingly, the Applicant has sought to avoid the use of BMV land where possible, with preference given to the use of land in areas of poorer quality and, in particular, avoiding / minimising the use of Grade 1 and Grade 2 land.

6.8.25 Although ALC was taken into account as one of the influencing factors in the site selection process, NPS EN-3 (paragraph 2.10.29) states that land type should not be a predominating factor in determining the suitability of the site location. Indeed, a High Court judgment made clear that national policy and guidance on BMV land does not mandate the consideration of alternatives or the adoption of a sequential assessment (Bramley Solar Farm Residents Group v SSLUHC [2023], paragraphs 179-18019).

6.8.26 At worst case, the Development would result in the permanent loss of 4.5 ha of BMV arising from the retention of development in Work no. 4 (Intermediate substations), Work no. 5b (400 kV compound) and Work no. 7 (Consented Staythorpe BESS and Connection). These elements of the development could be retained if they are required for the ongoing functioning of any substations that are to be retained, albeit that this would not ultimately be known until nearer the time of decommissioning.

6.8.27 Any limited degree of harm that would arise from the potential permanent loss of 4.5 ha of BMV to retain this infrastructure would be more than outweighed by the substantial public benefits of the Development. These include its contribution to meeting the urgent need for low carbon energy infrastructure, delivering benefits at the national scale, in accordance with the objectives of NPS EN-1 and NPS EN-3.

Conclusion

6.8.28 The Development minimises impacts on agricultural land in line with national policy by minimising the use of BMV as far as is practicable. Newark and Sherwood District has a higher concentration of BMV land than the national average and any other site selection would be likely to result in similar, or greater, impacts.

6.8.29 The temporary use of BMV land during the Development lifetime relates to Work Areas 1, 4, 5 and 8, which totals 745.6ha[40]. This amount of BMV represents 0.04% of the total BMV land in Nottinghamshire, or 0.13% of the total BMV in Newark and Sherwood District. The permanent loss of BMV land represents 0.008% of the total BMV land in Newark and Sherwood District. The Development is therefore not considered to have a material impact on the overall supply of BMV land in the District and would not have a material impact on food security.

6.8.30 Overall, in consideration of objective b above, in accordance with national and local policy the inclusion of some BMV land within the Development is justified and the impacts on BMV land have been minimised by the nature of the Development and its design. The benefits of the Development outweigh the loss of BMV land, particularly noting that NPS EN-3 paragraph 2.10.29 states that land type should not be the predominating factor in determining the suitability of a site for solar development.

6.9 PROJECT LIFETIME AND DECOMMISSIONING

6.9.1 Paragraphs 2.10.146 – 2.10.151 of NPS EN-3 set out decision-making considerations for the Development's lifetime and decommissioning. NPS EN-3 paragraph 2.10.147 states that DCOs should include a requirement securing a time-limit from the date the solar farm starts to generate electricity. The **Draft Development Consent Order [EN010162/APP/3.1A]** [AS-012] includes requirements which provide that the authorised development must cease generating electricity on a commercial basis no later than the 40th anniversary of the first export date and that a decommissioning and restoration plan must be submitted for approval by NSDC not less than six months before the 40th anniversary date.

6.9.2 NPS EN-3 paragraph 2.10.151 states that *"The Secretary of State should consider the period of time the applicant is seeking to operate the generating station, as well as the extent to which the site will return to its original state, when assessing impacts such as landscape and visual effects and potential effects on the settings of heritage assets and nationally designated landscapes."* The outline management plans submitted with the DCO Application provide a framework from which final, detailed management

[40] Totals taken from Table 17.8 of **ES Volume 2, Chapter 17: Agricultural Land [EN010162/APP/6.2.17]** [APP-060] for WAs 1, 4, 5, and 8 for Grade 2 and Sub Grade 3A. WAs 6 and 7 have been excluded as they are either non-agricultural land or relate to the consented Staythorpe scheme.

plans will be developed after the DCO is granted, to avoid, minimise or mitigate any likely significant effects on the environment. The management plans will be secured by DCO requirements.

6.9.3 This includes outline decommissioning plans (see **ES Volume 4, Appendix A5.6 Outline Decommissioning and Restoration Plan (DRP) [EN010162/APP/6.4.5.6]** [APP-207]) which will ensure the land will be restored to a suitable use in accordance with NPS EN-3 paragraphs 2.10.68 and 2.10.69.

6.9.4 Accordingly, the Development complies with NPS policy regarding the Development's lifetime and decommissioning.

6.10 BIODIVERSITY, ECOLOGICAL, GEOLOGICAL CONSERVATION AND WATER MANAGEMENT

6.10.1 Biodiversity, ecological, geological conservation and water management considerations have played a key role in the design of the Development.

Geological Conservation and Water Management

6.10.2 Paragraph 2.10.154 of NPS EN-3 states that *"Water management is a critical component of site design for ground mount solar plants. Where previous management of the site has involved intensive agricultural practice, solar sites can deliver significant ecosystem services value in the form of drainage, flood attenuation, natural wetland habitat, and water quality management."*

6.10.3 **ES Volume 2, Chapter 9: Water Resources [EN010162/APP/6.2.9]** [APP-052] presents an assessment of likely significant effects of the Development on water resources. The key issues considered in the assessment comprised:

- Potential chemical pollution effects on the hydrological environment;
- Potential erosion and sedimentation effects on the hydrological environment;
- Potential impediments to stream flow;
- Potential effects on private water supplies;
- Potential changes in soil interflow patterns;
- Potential for the compaction of soils; and
- Potential for an increase in runoff and flood risk.

6.10.4 **ES Volume4, Appendix A5.3: Outline Construction Environmental Management Plan (CEMP) [EN010162/APP/6.4.5.3]** [APP-204] includes mitigation measures to manage water and drainage during construction of the Development. Measures include water quality monitoring with monthly reports being provided to the EA and a water infrastructure 'watching brief'.

6.10.5 ES Chapter 9 concludes that the Development is not likely to have any significant effects on water resources.

Biodiversity and Ecology

6.10.6 Paragraph 5.4.39 of NPS EN-1 states that the SoS should have regard to the aims and goals of the government's Environmental Improvement Plan 2023. Paragraph 5.4.2 of NPS EN-3 recognises that failure to address the challenge of climate change will result in significant adverse impacts on biodiversity.

6.10.7 The NPPF within section 15 'Conserving and enhancing the natural environment', paragraph 187 states that planning policies and decisions should contribute to and enhance the natural and local environment. Furthermore, paragraph 192 sets out the aim to protect and enhance biodiversity and geodiversity.

6.10.8 Paragraph 5.4.17 of NPS EN-1 states that projects should include an ES that clearly sets out any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity.

6.10.9 Paragraph 5.4.41 of NPS EN-1 states that the benefits of nationally significant low carbon energy infrastructure development may include benefits for biodiversity and geological conservation interests and these benefits may outweigh harm to these interests.

6.10.10 **ES Volume 2, Chapter 8: Ecology and Biodiversity [EN010162/APP/6.2.8]** [APP-051 assesses the likely significant effects of the Development on ecology and biodiversity, which includes consideration of internationally, nationally and locally designated sites of ecological or geological conservation importance; protected species and habitats; and ancient woodland and veteran trees. It also outlines the studies and surveys undertaken to inform the DCO Application and enable the design of the Development to respond positively to sites of biodiversity and geological interest.

6.10.11 ES Chapter 8 concludes that the Development has been assessed as having no significant adverse effects, whilst significant beneficial effects are predicted for LWS, habitats and breeding birds during the operation of the Development.

Internationally Designated Ecological Sites

6.10.12 Paragraph 5.4.4 of NPS EN-1 sets out that *"The highest level of biodiversity protection is afforded to sites identified through international conventions. The Habitats Regulations set out sites for which an HRA will assess the implications of a plan or project, including Special Areas of Conservation and Special Protection Areas."*

6.10.13 The Order Limits do not include any International Sites, although there are two International Sites within 30 km of the Order Limits: Birklands and Bilhaugh SAC is 7.0 km north-west and Sherwood Forest possible Potential SPA (ppSPA) is 4.5 km west and north-west.

6.10.14 A **Habitats Regulations Screening Report [EN010162/APP/5.3A]** [AS-020] has been submitted with the DCO Application, which concludes that there will be no likely significant effects arising from the Development on any International Site either alone or in combination with other plans or projects.

6.10.15 **ES Volume 2, Chapter 8: Ecology and Biodiversity [EN010162/APP/6.2.8]** [APP-051] also assesses the impact of the Development on internationally designated ecological sites and concludes that there would be no significant effects.

6.10.16 Overall, the Development accords with NPS EN-1, the NPPF and local planning policies by avoiding impacts on internationally designated nature conservation sites.

Nationally Designated Ecological Sites

6.10.17 Paragraph 5.4.8 of NPS EN-1 states that *"Development on land within or outside a SSSI, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits (including need) of the development in the location proposed 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."* This principle is also set out in paragraph 193 part (b) of the NPPF.

6.10.18 Eakring and Maplebeck Meadows SSSI borders the Order Limits, abutting an unclassified road along its 1.5 km southern boundary. Mather Wood SSSI is located outside of the Order Limits but less than 100 m from the boundary. There is also one National Nature Reserve (NNR) and six other SSSIs within 5 km of the Order Limits. No works would take place within or on the boundary of these two SSSI and so there will be no permanent or temporary habitat loss.

6.10.19 **ES Volume 2, Chapter 8: Ecology and Biodiversity [EN010162/APP/6.2.8]** [APP-051] does not identify any significant adverse effects on the SSSI sites.

6.10.20 The Development therefore accords with NPS EN-1 and the NPPF in respect of nationally designated heritage sites.

Locally Designated Ecological Sites

6.10.21 Paragraph 5.4.52 of NPS EN-1 states that: *"The Secretary of State should 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."*

6.10.22 Paragraph 187 states that *"Planning policies and decisions should contribute to and enhance the natural and local environment".*

6.10.23 There are 16 Local Wildlife Sites (LWS) either within or bordering the Order Limits, 15 of which are noted for their botanical interest and one for its water beetle populations.

6.10.24 Habitat changes implemented through the **ES Volume 4, Appendix A5.1: Outline Landscape and Ecological Management Plan (LEMP) [EN010162/APP/6.4.5.1]** [APP-201] would provide widespread beneficial ecological effects and some of these will be designed specifically to benefit LWS, for example by creating habitats, such as ecotones and woodland, that extend, buffer and connect them. These effects include landscape connectivity for wildlife, buffering and connecting valuable retained habitats (e.g. ecotones around woodlands), the creation of riparian corridors, and the active management of some LWS.

6.10.25 **ES Volume 2, Chapter 8: Ecology and Biodiversity [EN010162/APP/6.2.8]** [APP-051] does not identify any significant adverse effects on locally designated ecological sites and predicts significant beneficial effects on the LWS during operation of the Development.

6.10.26 Consequently, the Development complies with paragraph 5.4.52 of NPS EN-1 and paragraph 187 of the NPPF.

Protected Species and Habitats of Importance

6.10.27 Many individual wildlife species receive statutory protection under a range of legislative provisions. Other species and habitats are also identified as being of principal importance for the conservation of biodiversity.

6.10.28 Paragraph 5.4.48 of NPS EN-1 states that *"the Secretary of State should ensure that appropriate weight is attached to designated sites of international, national, and local importance; protected species; habitats and other species of principal importance for the conservation of biodiversity; and to biodiversity and geological interests within the wider environment."*

6.10.29 The vast majority of construction activities will take place in agricultural, predominantly arable, habitats of limited ecological value. Habitat change through the habitat creation and enhancement set out in the **ES Volume 4 Appendix A5.1: Outline Landscape and Ecological Management Plan (LEMP) [EN010162/APP/6.4.5.1]** [APP-201] would provide long-term beneficial effects to important habitats.

6.10.30 The potential beneficial effects of the Development with regard to protected species include habitat change (i.e., creation and enhancement), reduced disturbance, and changes to prey abundance. The Outline LEMP includes measures to increase the density of breeding territories, improving foraging resources and reducing the factors that contribute to mortality.

6.10.31 **ES Volume 2, Chapter 8: Ecology and Biodiversity [EN010162/APP/6.2.8]** [APP-051] does not identify any significant adverse effects on protected species and habitats of importance and predicts significant beneficial effects on habitats and breeding birds during operation of the Development.

6.10.32 Therefore, in consideration of the above, the Development is in accordance NPS policy.

Ancient Woodland and Veteran Trees

6.10.33 Paragraph 5.4.15 of NPS EN-1 seeks to protect ancient woodland and veteran trees. Paragraph 5.4.53 states that *"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."*

6.10.34 Similarly, the NPPF at paragraph 193 part (c) directs the decision maker to refuse consent for development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) unless there are wholly exceptional reasons, and a suitable compensation strategy exists.

6.10.35 **ES Volume 2, Chapter 8: Ecology and Biodiversity [EN010162/APP/6.2.8]** [APP-051] has assessed the likely significant effects of the Development on ancient woodlands and veteran trees. The ES considers that, given the large extent of the Order Limits, it is probable that it includes small, discrete areas of ancient woodland, which will be retained. Mather Wood SSSI which borders the Order Limits also includes ancient

woodland and Muskham Wood LWS, which also borders the Order Limits, includes a number of plant species indicative of ancient woodland.

6.10.36 Informed by the desk study results, the design proposals, including embedded mitigation would ensure that the Development avoids ancient woodland. Construction exclusion buffers have been included in the Development design which include 15 m buffers from mapped boundaries or woodland and ancient woodland and 15 m buffers from the stem centre of trees.

6.10.37 ES Chapter 8 (paragraph 2.19) concludes that there will be no loss of or harm to ancient woodland or veteran trees.

6.10.38 The Development therefore protects ancient woodland and veteran trees in accordance with paragraph 5.4.15 of NPS EN-1 and paragraph 193 part (c) of the NPPF.

Biodiversity Net Gain (BNG)

6.10.39 NPS EN-1 Paragraph 4.6.3 confirms that achieving a BNG is currently not an obligation on DCO applicants. However, NPS EN-1 Paragraph 4.6.6 encourages applicants to *"seek opportunities to contribute to and enhance the natural environment by providing net gains for biodiversity, and the wider environment where possible."*

6.10.40 Furthermore, NPS EN-3 states in paragraph 2.10.90 that *"For projects in England, applicants should consider enhancement, management, and monitoring of biodiversity in line with the ambition set out in the Environmental Improvement Plan and any relevant measures and targets, including statutory targets set under the Environment Act or elsewhere."*

6.10.41 The NPPF requires at paragraph 193(d) that *"opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate".*

6.10.42 From the outset the Applicant has worked with its ecologist to identify opportunities to deliver a significant level of BNG across the Order Limits. This principle has played a fundamental part of the design development of the Development and the benefits that it would deliver.

6.10.43 **ES Volume 4, Appendix A8.13: Biodiversity Net Gain (BNG) Assessment [EN010162/APP/6.4.8.13]** [APP-226] demonstrates that the Development would deliver a significant biodiversity net gain. Biodiversity and landscape mitigation have been proposed including 555 ha dedicated solely for these purpose and which will contribute to securing biodiversity net gains for habitats, hedgerows and watercourses.

6.10.44 **ES Volume 2, Chapter 8: Ecology and Biodiversity [EN010162/APP/6.2.8]** [APP-051] predicts significant beneficial effects for Local Wildlife Sites, habitats and breeding birds during the operation of the Development.

6.10.45 Therefore, in consideration of the above, the Development's commitment to BNG is in accordance with national policy.

Summary

6.10.46 **ES Volume 2, Chapter 9: Water Resources [EN010162/APP/6.2.9]** [APP-052] concludes that the Development is not likely to have any significant effects on water resources. This Development would therefore be in accordance with NPS EN-3 paragraph 2.10.154.

6.10.47 NPS EN-1 Paragraph 5.4.41 is clear that *"The benefits of nationally significant low carbon energy infrastructure development may include benefits for biodiversity and geological conservation interests and these benefits may outweigh harm to these interests. The Secretary of State may take account of any such net benefit in cases where it can be demonstrated."*

6.10.48 **ES Volume 2, Chapter 8: Ecology and Biodiversity [EN010162/APP/6.2.8]** [APP-051] concludes that the Development has been assessed as having no significant adverse effects, whilst significant beneficial effects are predicted for LWS, habitats and breeding birds during the operation of the Development.

6.10.49 There will be an increase of 31 ha of broadleaved woodland (excluding other trees and woodland types), 49 km of species-rich hedgerows, hedge and tree belts, and the creation of two new ponds and several scrapes, as well as an increase in watercourse quality and habitat connectivity. In addition to these important ecological features, the Outline LEMP includes the creation of 23 ha of ecotone, 8.5 ha of wood pasture and over 1,400 ha of diverse grassland.

6.10.50 **ES Volume 4, Appendix A5.1: Outline Landscape and Ecological Management Plan (LEMP) [EN010162/APP/6.4.5.1]** [APP-201] includes the following key elements:

- Habitat restoration and enhancement – to improve the condition of habitats, such as gapping up hedgerows, and increasing their value to other IEFs;
- Habitat creation – creating new habitats of greater value than those they replace, for the purposes of either compensation or enhancement;
- Landscape connectivity – the above measures will improve landscape connectivity for a range of ecological features, notably woodlands and riparian corridors and the wildlife they support;
- Visual screening – creating or modifying habitats to provide visual screening of Development features;
- Flood management – natural flood management solutions; and
- Species mitigation – compensation and enhancement for a range of IEFs, including habitat creation and enhancement and features such as bird and bat boxes.

6.10.51 The Development would result in significant beneficial effects and a BNG that substantially exceeds the requirements set out in the Environment Act 2021 (recognising this is not currently applicable to the Development).

6.10.52 The Development is therefore in accordance with NPS EN-1, NPS EN-3 and the NPPF relating to the protection and enhancement of ecology and biodiversity.

6.11 LANDSCAPE, VISUAL AND RESIDENTIAL AMENITY

6.11.1 NPS EN-1 is explicit on landscape and visual effects, stating that *"Virtually all NSIPs will have adverse effects on the landscape but that there may also*

be beneficial landscape character impacts arising from mitigation" (paragraph 5.10.5).

6.11.2 The Order Limits are not subject to any national or local landscape designations. In addition, there are no nationally designated landscapes within 30 km of the Order Limits and there are no locally designated landscapes within 2 km of the Order Limits.

6.11.3 The design of the Development has taken detailed account of the landscape and landform in which it would sit and has also given careful consideration to its impact on views from sensitive receptors. These have been factored into the design development at all stages, and the design has directly and effectively responded to potential impacts identified and consultation comments received in relation to landscape and visual impact.

6.11.4 As a result, the Development is sensitive to its location and, through embedded mitigation and enhancement measures, the design has effectively minimised landscape and visual effects, resulting in relatively few significant residual effects being identified, considering its scale is commensurate with the need to deliver the substantial renewable energy benefits it would yield.

6.11.5 **ES Volume 2, Chapter 7: Landscape and Visual Impact Assessment (LVIA) [EN010162/APP/6.2.7]** [APP-050] presents the findings of the assessment of the likely significant effects arising from the construction, operation and decommissioning of the Development on landscape and visual receptors. Landscape and visual aspects considered within the assessment include landscape fabric; landscape character; visual receptors (i.e. people in the public domain); and designated landscapes.

6.11.6 The ES assessment is informed by NE's National Character Area (NCA) profiles which define broad areas that share similar landscape characteristics at a national scale across England. It is also informed by the Newark & Sherwood Landscape Character Assessment SPD which provides a local analysis of Regional Character Areas (RCAs) defined across Nottinghamshire, identifying distinct Landscape Character Types (LCTs) and within these LCTs, more localised Policy Zones (PZs).

6.11.7 Mitigation measures, which include significant landscape enhancements, tree planting and new PRoW, would be secured via the **ES Volume 4 Appendix A5.1: Outline Landscape and Ecological Management Plan (LEMP) [EN010162/APP/6.4.5.1]** [APP-201] and **ES Volume 4, Appendix A18.1: Outline Recreational Routes Management Plan (oRRMP) [EN010162/APP/6.4.18.1]** [APP-295].

6.11.8 In addition, Requirement 8 and Requirement 18 in Schedule 2 of the **Draft Development Consent Order [EN010162/APP/3.1A]** [AS-012] require that no phase of the authorised development may commence until a written landscape and ecological management plan and a recreational routes management plan for each respective phase has been submitted to and approved by NSDC.

6.11.9 More specifically, in order to mitigate effects on residential visual amenity, solar panels would be set back at least 50m from homes where panel areas would be openly visible during early construction and operation.

6.11.10 The ES concludes that there would be no effects from the Development on designated landscapes.

6.11.11 No significant night-time effects would arise as a result of lighting associated with the Development.

6.11.12 The ES finds that, during the construction and early operation (before planting matures) of the Development, major/moderate (significant) effects are likely on the Mid-Nottinghamshire Farmlands / Village Farmlands with Ancient Woodlands LCT and nine visual receptors (comprising users of six PRoW and three local roads). No significant effects would arise for users of long distance recreational or transport routes.

6.11.13 During operation and decommissioning of the Development, major/moderate (significant) effects are likely on the Mid-Nottinghamshire Farmlands / Village Farmlands with Ancient Woodlands LCT and six visual receptors (users of six PRoW).

6.11.14 There would be areas of ecological enhancement and new woodland, tree and hedgerow planting within the LCT which would gradually improve the landscape condition from the commencement of the operational life of the Development, continuing to do so after decommissioning.

6.11.15 The effects on visual receptors would arise as a result of changes to views to include visibility of the short-term construction activities and the Development (solar panels, substations and/or the BESS) before planting matures. In many locations visibility would be reduced within 1-3 years where the mitigation measure is the growth of existing hedges. The screening of views would take longer (7-10 years) where new hedges or woodland are proposed.

6.11.16 After decommissioning of the Development, there are not likely to be any significant effects on character areas or other visual receptors.

6.11.17 Whilst some limited significant adverse effects have been identified, these are considered to be limited for a development of this nature. NPS EN-1 clearly states that virtually all NSIPs will have adverse impacts on the landscape. It is clear that the site selection and the landscape strategy have sought to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate. The benefits of the Development clearly outweigh the landscape and visual effects which would result.

6.11.18 Therefore, in consideration of the above, the Development is considered to be in accordance with NPS EN-1 and NPS EN-3.

6.12 GLINT AND GLARE

6.12.1 NPS EN-3 states within paragraph 2.10.158 that *"Solar PV panels are designed to absorb, not reflect, irradiation. However, the Secretary of State should 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)."*

6.12.2 Section 16.3 of **ES Volume 2, Chapter 16: Miscellaneous Issues [EN010162/APP/6.2.16]** [APP-059] includes a description and assessment of the potential effects of the Development in relation to glint and glare. It identified no potentially significant glint and glare effects on Caunton airfield, the East Coast Main Line, the River Trent (which is outside the study area, following design changes) nor any residential property.

6.12.3 The assessment has, however, identified limited potentially significant glint and glare effects on certain stretches of the A1 (northbound) and A616 (northwest-bound). Some mitigation will therefore be required to ensure that glint and glare effects are acceptable in all cases and the **Draft Development Consent Order [EN010162/APP/3.1]** [AS-012] includes a requirement for a glint and glare assessment which includes details of incorporated mitigation measures to be submitted for approval by NSDC.

6.12.4 Accordingly, the Development is in accordance with NPS EN-3 paragraph 2.10.158 – 2.10.159.

6.13 CULTURAL HERITAGE AND ARCHAEOLOGY

6.13.1 The Order Limits do not include any designated heritage assets, with the exception of a small western parcel that falls within the outer edges of Maplebeck Conservation Area.

6.13.2 There are no built heritage non-designated heritage assets within the Order Limits.

6.13.3 The Development has been carefully designed to take account of heritage assets and potential impacts on their settings. The Development has complied with relevant planning policy by minimising harm to heritage assets through sensitive design and protecting as much of their significance as practicable during the life of the Development.

6.13.4 An assessment of the likely significant effects of the Development on heritage significance and the ability to experience or appreciate the significance of a given heritage asset is provided in **ES Volume 2, Chapter 11: Cultural Heritage and Archaeology [EN010162/APP/6.2.11]** [APP-054]. The assessment considers both above ground and below ground heritage assets. It is informed by **ES Volume 4, Appendix A11.1: Archaeological Desk-Based Assessment [EN010162/APP/6.4.11.1]** [APP-251] [APP-252] [APP-253] [APP-254] and **ES Volume 4, Appendix A11.3 Geoarchaeological Desk-Based Assessment [EN010162/APP/6.4.11.3]** [APP-256].

Designated Heritage Assets

6.13.5 NPS EN-1 paragraph 5.9.28 states that: *"The Secretary of State should give considerable importance and weight to the desirability of preserving all heritage assets. Any harm or loss of significance of a designated heritage asset (from its alteration or destruction, or from development within its setting) should require clear and convincing justification."*

6.13.6 Paragraph 5.9.24 of NPS EN-1 states that: "*In considering the impact of a proposed development on any heritage assets, the Secretary of State should consider the particular nature of the significance of the heritage assets and the value that they hold for this and future generations. This understanding should be used to avoid or minimise conflict between their conservation and any aspect of the proposal."*

6.13.7 NPS EN-3 confirms that solar developments may affect heritage assets (sites, monuments, buildings, and landscape) both above and below ground, and their impacts will require expert assessment in most cases. The NPS recognises, however, that *"solar PV developments may have a positive effect, for example archaeological assets may be protected by a solar PV*

farm as the site is removed from regular ploughing and shoes or low-level piling is stipulated" (paragraph 2.10.110).

6.13.8 NPS EN-1 states that *"When considering the impact of a proposed development on the significance of a designated heritage asset, the Secretary of State should give great weight to the asset's conservation. The more important the asset, the greater the weight should be"* (paragraph 5.9.27).

6.13.9 Although the only designated asset included in the Order Limits is a small area of Malbeck Conservation Area, designated heritage assets located within 2 km of the Order Limits boundary comprise 19 Grade I Listed Buildings; 13 Grade II* Listed Buildings; 195 Grade II Listed Buildings; 17 Conservation Areas; 26 Scheduled Monuments; and 1 Grade II Registered Park and Garden.

6.13.10 ES Chapter 11 concludes that there are not likely to be any significant effects to designated heritage assets following the implementation of appropriate mitigation measures. With regard to buried archaeological remains, this mitigation is in the form of the form of preservation in situ or preservation by record, in accordance with **ES Volume 4, Appendix A11.8: Outline Archaeological Mitigation Strategy (AMS) [EN010162/APP/6.4.11.8]** [APP-269].

6.13.11 The ES also concludes that no significant effects to heritage assets arising from change within their setting leading to a reduction in significance have been identified.

6.13.12 NPS EN-1 paragraph 5.9.32 states that: *"Where the proposed development will lead to less than substantial harm to the significance of the designated heritage asset, this harm should be weighed against the public benefits of the proposal"*.

6.13.13 Any potential harm to designated heritage assets is considered to be demonstrably outweighed by the substantial public benefits that would only be realised if the Development was delivered.

Non-Designated Heritage Assets

6.13.14 NPS EN-1 paragraph 5.9.7 and paragraph 209 of the NPPF state that the decision maker should also consider the impacts on non-designated heritage assets.

6.13.15 Paragraph 5.9.12 of NPS EN-1 sets out that the applicant should ensure that the extent of the impact of the proposed development on the significance of any heritage assets affected can be adequately understood from the application and supporting documents. It subsequently states at paragraph 5.9.33 that *"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."*

6.13.16 NPS 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." (paragraph 2.10.160).

6.13.17 There are no built heritage non-designated heritage assets within the Order Limits. Selected unregistered parks and gardens were included within the settings assessment which formed part of the ES Chapter 11 assessment. Direct effects to non-designated archaeological assets were also included within the assessment.

6.13.18 The ES concludes that there are not likely to be any significant effects to non-designated heritage assets.

6.13.19 This clearly demonstrates that the Development is in accordance with NPS EN-1, NPS EN-3 and the NPPF.

6.14 CONSTRUCTION INCLUDING TRAFFIC AND TRANSPORT NOISE AND VIBRATION

Construction Traffic

6.14.1 Section 5.14 of NPS EN-1 discusses the requirements for considering the potential transport and traffic related impacts and mitigation of NSIPs. Paragraph 5.14.4 of NPS EN-1 explains the mitigation of such impacts is *"an essential part of Government's wider policy objectives for sustainable development"*. Paragraph 2.10.35 of NPS EN-3 sets out that solar NSIPs should consider the suitability of the access routes to the proposed site for both the construction and operation of the solar farm with the former likely to raise more issues.

6.14.2 The NPPF, at paragraph 109, also expects consideration and mitigation of transport impacts of development including the environmental impacts and impacts on transport networks. At paragraph 116, the NPPF also expects development to only be *"prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios."*

6.14.3 NPS EN-1 and the NPPF require a transport assessment and travel plans to manage demand where development is likely to have significant transport implications.

6.14.4 **ES Volume 2, Chapter 14: Traffic and Access [EN010162/APP/6.2.14]** [APP-057] presents the findings from the assessment of the potential transport related environmental effects arising during the construction, operation and decommissioning phases of the Development. The assessment considered the effect the increase traffic flow would have on severance; driver delay; pedestrian, cyclist and equestrian delay; pedestrian amenity, fear and intimidation; and accidents and safety. It concluded that all effects upon these issues are not significant.

6.14.5 The embedded mitigation measures to be implemented during the construction phase of the Development will be secured through **ES Volume 4, Appendix A14.2: Outline Travel Plan [EN010162/APP/6.4.14.2]** [APP-284]. This provides a framework for the management of construction vehicle movements to and from the Development to ensure that the construction phase can be undertaken in a safe and efficient manner and that disruption to the local highway network is managed and minimised.

6.14.6 Requirement 14 in Schedule 2 of the **Draft Development Consent Order [EN010162/APP/3.1A]** [AS-012] requires that no phase of the authorised development may commence until a construction traffic management plan for that phase has been submitted to and approved by NCC.

6.14.7 ES Chapter 14 concludes that none of the effects associated with traffic movements during the life of the Development are considered to lead to significant effects on environmental receptors.

6.14.8 The Development is therefore in accordance with the transport and access policies of NPS EN-1 and NPS EN-3.

PRoW

6.14.9 Paragraph 2.10.42 of NPS EN-3 encourages applicants to design the layout and appearance of their site to enable continued recreational use of PRoW where possible during operation and construction. Paragraph 2.10.45 of NPS EN-3 sets out that an Outline PRoW management plan should be provided.

6.14.10 **ES Volume 2, Chapter 18: Recreation [EN010162/APP/6.2.18]** [APP-061] identifies and assesses the likely significant effects of the Development on PRoW. It concluded that the majority of potential effects on PRoW are assessed as being negligible and not significant. For some PRoW, adverse effects were assessed during construction, operation and decommissioning, but were found to be not significant in EIA terms as the affected PRoW are of local use or importance.

6.14.11 To ensure continued recreational use of the PRoW during construction, operation and decommissioning of the Development, the **ES Volume 4, Appendix A18.1: Outline Recreational Routes Management Plan (oRRMP) [EN010162/APP/6.4.18.1]** [APP-295] proposes measures to manage closures, diversions, and new permissive routes.

6.14.12 The Development is therefore in accordance with the PRoW policies of NPS EN-1 and NPS EN-3.

Construction Noise and Vibration

6.14.13 Paragraphs 2.10.120 - 2.10.126 of NPS EN-3 describes the impacts of construction including traffic and transport noise and vibration which it determines are relevant and important to decisions.

6.14.14 **ES Volume 2, Chapter 12: Noise and Vibration [EN010162/APP/6.2.12]** [APP-055] presents the findings of an assessment of the likely significant effects from noise and vibration as a result of the Development.

6.14.15 The assessment of construction noise presented in ES Chapter 12 includes the effects of hardstanding construction activities, construction traffic and vibration. The assessment concludes that with the embedded design and mitigation measures which would be secured, the effects from noise during the construction phase are not expected to be significant.

6.14.16 **ES Volume 4, Appendix A5.3: Outline Construction and Environmental Management Plan (CEMP) [EN010162/APP/6.4.5.3]** [APP-204] has been prepared by the Applicant and includes a list of noise mitigation measures. In addition, Requirement 12 in Schedule 2 of the **Draft Development Consent Order [EN010162/APP/3.1A]** [AS-012] prevents any phase of the Development commencing until a CEMP for that phase has been submitted

to and approved by NSDC. Each CEMP must be prepared in accordance with the aforementioned Outline CEMP.

6.14.17 The Development is in accordance with NPS EN-3 and the NPPF since significant adverse effects from construction traffic and transport noise and vibration would be avoided through the use of appropriate mitigation.

7 PLANNING BALANCE AND CONCLUSIONS

7.1 LEGISLATIVE AND POLICY CONTEXT

7.1.1 The DCO Application will be determined pursuant to section 104 of the PA 2008. On 17 January 2024, NPS EN-1, NPS EN-3 and NPS EN-5 came into force. These NPSs are the relevant NPSs that have effect. The main other documents that may be considered important and relevant to the SoS's decision include:

- The adopted Development Plan and other relevant planning policy documents;
- NPPF; and
- Planning Practice Guidance.

7.1.2 This Planning Assessment explains how the Development complies with the relevant prescribed matters, relevant planning policy and other matters the Applicant considers are likely to be important and relevant to inform the SoS's decision as to whether to grant a DCO for the Development.

7.1.3 The Energy NPSs and other national energy policy set out the Government's objectives to provide secure and affordable energy supplies whilst decarbonising the energy system. This is necessary for the UK to achieve the legally binding commitments set out in the Climate Change Act 2008 (as amended) to reduce carbon emissions and achieve net zero carbon emissions by 2050, as well as providing a resilient and low cost energy network for the future.

7.1.4 In April 2025 DESNZ published draft revisions to NPS EN-1, NPS EN-3 and NPS EN-5. The proposed revisions to the NPSs clearly demonstrate the Government's intended direction of travel: to speed up and scale up the delivery of new solar development.

7.1.5 The Clean Power 2030 Action Plan, published in December 2024, seeks to ensure that clean sources of energy produce at least 95% of Great Britain's electricity generation by 2030.

7.1.6 In simple terms, the Clean Power 2030 Action Plan requires an additional 28 to 30 GW of solar generation to be connected over the next five years, equivalent to approximately 6 GW per year or more than 100 MW per week.

7.1.7 Similarly, in relation to battery storage the Clean Power 2030 Action Plan requires an increase from 4.5 GW to 23-27 GW, a 400-500% increase in battery storage capacity over the next five years.

7.2 NEED AND BENEFITS

7.2.1 The Government recognises that the need to deliver these aims and commitments is immediate and, as such, renewable energy NSIPs, including large scale solar projects, are considered to be a Critical National Priority that need to be delivered urgently.

7.2.2 The Development will contribute towards the delivery of these policy aims and commitments, providing a significant amount of low carbon electricity over its lifetime; and providing resilience, security and affordability of supplies due to its large scale and proposed integration of battery storage. The Development will be an important part of the national portfolio of renewable energy generation infrastructure that is required to decarbonise

the UK's energy supply quickly whilst providing security and affordability to the energy supply.

7.2.3 It is clear that there is a compelling case for the need for the Development and that it will deliver national economic and social benefits in line with the Government's wider objectives of delivering sustainable development. In addition to meeting the urgent national need for secure and affordable low carbon energy infrastructure, solar schemes, such as the Development, also have the potential to deliver numerous other benefits.

7.2.4 In the case of the Development, these benefits include:

- A meaningful contribution to the UK's legally binding net zero commitment, with the Development anticipated to have a generating capacity of around 800 MW (AC), providing enough electricity to power the equivalent of approximately 400,000 homes (based on the Government estimate of annual average household power consumption of 2,700 kWh). Given that Nottinghamshire has 360,290 domestic properties[41], the Development would have the capacity to generate enough energy for the entirety of Nottinghamshire's domestic population with energy to spare.
- The Development is projected to result in a net reduction in emissions of 789,292 teCO2e, helping contribute to the UKs Net Zero targets.
- An additional source of domestic energy security that reduces the market price of electricity by generating power so that more expensive and more carbon intensive generation (such as gas) are not required to generate as much, reducing the overall cost of electricity to consumers.
- Provision of battery energy storage, co-located with the solar generation which maximises the efficiency of land use and grid capacity and allows the Development to maximise the usable output from intermittent generation, which will reduce the overall amount of generation capacity required whilst also providing the opportunity to deliver grid balancing to the local electricity network.
- Significant tree planting with approximately 64,500 proposed trees creating 31 ha of woodland, as well as 49 km of new hedgerow, hedge and tree belts.
- Significant landscape enhancements comprising approximately 989 ha of Solar PV (diverse) grassland, 405 ha of diverse grassland and 23 ha of ecotone.
- Enhanced public access legacy with the introduction of new public rights of way that will be created to provide new facilities for active travel, recreation and links between communities and developments. A total of 32.6 km of new permissive routes are proposed, comprising 27 new permissive routes (21 permissive footpaths and six bridleways). A circular recreational route would be created around the Order Limits, covering 50.6 km, including 12.5 km of new permissive path.
- Biodiversity and landscape mitigation have been proposed including 555 ha dedicated solely for these purpose and which will contribute to securing biodiversity net gains for habitats, hedgerows and watercourses.

[41] https://www.nottinghamshireinsight.org.uk/research-areas/key-facts-about-nottinghamshire/

- 180 direct local full time equivalent ('FTE') construction and manufacturing jobs could be created over the 24-month construction period. The direct construction employment would generate circa £10.4m in Gross Added Value ('GVA') within the regional construction economy (based on average GVA per head in the construction industry).
- It is anticipated that the decommissioning phase would require a similar level of employment and generate a similar scale and character of workforce spending and supply chain effects as the construction phase.
- The operational phase of the Development would support 19 direct local FTE jobs consisting of operational and maintenance roles for the Development's PV panels and other structures, as well as a further 21 jobs in the wider economy.
- Additional social, economic and educational benefits including opportunities for community farming and orchards, skills and training initiatives (apprenticeships; vocational qualifications; STEM education) and supply chain opportunities (local business networking and support; local procurement strategy).

7.2.5 These benefits are considered to carry substantial weight.

7.3 PLANNING BALANCE

7.3.1 The planning assessment provided in Section 6 of this Planning Statement has demonstrated that, alongside the need for the Development and the benefits it would provide, the Development is in accordance with relevant planning policy.

7.3.2 The Development has evolved over time through a fully collaborative approach involving community engagement, public consultation and ongoing discussions with key stakeholders and authorities.

7.3.3 The design of the Development has been carefully considered throughout this period and the proposals include embedded mitigation and enhancement measures. Whilst there has been a strong commitment to mitigating effects of the Development and effects have been reduced as far as reasonably possible, the ES finds however that the Development would have some residual significant adverse landscape and visual effects.

7.3.4 During the construction and early operation (before planting matures) of the Development, major/moderate (significant) effects are likely on the Mid-Nottinghamshire Farmlands / Village Farmlands with Ancient Woodlands LCT and nine visual receptors (comprising users of six PRoW and three local roads). No significant effects would arise for users of long distance recreational or transport routes.

7.3.5 During operation and decommissioning of the Development, major/moderate (significant) effects are likely on the Mid-Nottinghamshire Farmlands / Village Farmlands with Ancient Woodlands LCT and six visual receptors (users of six PRoW).

7.3.6 There would be areas of ecological enhancement and new woodland, tree and hedgerow planting within the LCT which would gradually improve the landscape condition from the commencement of the operational life of the Development, continuing to do so after decommissioning.

7.3.7 The effects on visual receptors would arise as a result of changes to views to include visibility of the short-term construction activities and the

Development (solar panels, substations and/or the BESS) before planting matures. In many locations visibility would be reduced within 1-3 years where the mitigation measure is the growth of existing hedges. The screening of views would take longer (7-10 years) where new hedges or woodland are proposed.

7.3.8 After decommissioning of the Development, there are not likely to be any significant effects on character areas or other visual receptors.

7.3.9 In terms of planning balance, NPS EN-1 states at paragraph 5.10.5 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".

7.3.10 It is clear that the site selection and the landscape strategy have sought to minimise harm to the landscape and the design of the Development has evolved as part of an iterative process in response to the baseline landscape and visual findings and subsequent studies. Once proposed planting is established, the number of receptors with significant effects is reduced.

7.3.11 A comprehensive series of mitigation measures has been embedded in the design of the Development, with the aim of reducing adverse effects resulting from its introduction. The mitigation measures include significant landscape enhancements, tree planting and new PRoW.

7.3.12 Paragraph 5.10.14 of NPS EN-1 states that *"The Secretary of State will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project."*

7.3.13 The significant national and local benefits of the Development are considered to outweigh the limited number of localised visual effects. Therefore, it is policy compliant with NPS EN-1.

7.3.14 In addition, NPS EN-1 is clear that substantial weight should be given to the need for the types of infrastructure covered by this NPS (paragraph 3.2.7) and that this need is urgent (paragraph 3.2.6).

7.3.15 Given the level and urgency of this need, paragraph 4.1.3 of NPS EN-1 states that the SoS should "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 NPSs clearly indicate that consent should be refused". In this case, there are no such policies which clearly indicate that consent should be refused. Accordingly, the presumption in favour applies and consent should be granted for the Development.

7.3.16 Furthermore, in accordance with NPS EN-1, there is a Critical National Priority ('CNP') for the provision of nationally significant low carbon infrastructure (paragraph 3.3.62) which is defined in paragraph 4.2.5 to include onshore renewable electricity generation, which includes the Development. NPS EN-1 makes special provision for considering the residual impacts of CNP Infrastructure:

- Paragraph 3.3.63 of NPS EN-1 states: *"Subject to any legal requirements, the urgent need for CNP Infrastructure to achieving our energy objectives, together with the national security, economic,*

commercial, and net zero benefits, will in general outweigh any other residual impacts not capable of being addressed by application of the mitigation hierarchy. Government strongly supports the delivery of CNP Infrastructure and it should be progressed as quickly as possible."

- Paragraph 4.1.7 of NPS EN-1 states: *"For projects which qualify as CNP Infrastructure, it is likely that the need case will outweigh the residual effects in all but the most exceptional cases. This presumption, however, does not apply to residual impacts which present an unacceptable risk to, or interference with, human health and public safety, defence, irreplaceable habitats or unacceptable risk to the achievement of net zero. 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."*
- Paragraph 4.2.15 of NPS EN-1 subsequently states: "*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".*

7.3.17 The residual impacts of the Development are not considered to be unacceptable in the terms of NPS EN-1 or to warrant refusal of the application for development consent.

7.4 CONCLUSIONS

7.4.1 The Development benefits from up to date, authoritative policy support. Not only does national policy establish an urgent need for new, low carbon energy generation, it specifically identifies solar energy as a key part of the government's strategy for low cost decarbonisation of the energy sector. The Development is also considered to be consistent with the NPPF and other important and relevant planning policies.

7.4.2 The presumption in favour of granting consent applies to the Development and the application should be determined in accordance with that presumption by granting consent.

7.4.3 This Planning Statement demonstrates that the Development would not cause any potential adverse effects that, considered individually, cumulatively or as a whole, are so severe that the decision maker should refuse the application and, moreover, that each aspect of the proposals is acceptable in planning terms when considered against the relevant national and local policies.

7.4.4 It is therefore concluded that the benefits of the scheme, particularly the delivery of new solar generating capacity, are overwhelmingly greater than the residual adverse effects.

7.4.5 Furthermore, the Development is defined as being CNP Infrastructure so there is an even greater basis of policy support, given the urgent national need for such infrastructure. The residual impacts of the Development are not defined as being unacceptable risks in the terms of NPS EN-1 and, as is evidently clear, there is no basis for suggesting that the Development qualifies as a most exceptional case to warrant refusal of the application for consent.

7.4.6 There is a clear and compelling case in favour of the DCO being made.

7.4.1 The Development accords with the relevant NPSs which have effect. None of sections 104(4) to (8) of the PA 2008 apply. Accordingly, the application should be determined in accordance with the relevant NPSs by granting consent.

Great North Road Solar and Biodiversity Park

Sequential and Exception Test Report

Document Reference – EN010162/APP/5.4A

Revision number 2

December 2025

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009, APFP Regulation 5(2)(q)

1 INTRODUCTION

1.1 PURPOSE OF THIS REPORT

1.1.1 This Sequential and Exception Test Report has been prepared on behalf of Elements Green Trent Limited ('the Applicant') in relation to the Development Consent Order ('DCO') application for Great North Road Solar and Biodiversity Park ('the Development').

1.1.2 This document should be read in conjunction with **ES Volume 4, Appendix A9.1: Flood Risk Assessment [EN010162/APP/6.4.9.1B]**.

1.1.3 This Sequential and Exception Test Report addresses the requirements of National Policy Statements ('NPSs'), the National Planning Policy Framework ('NPPF') and Planning Practice Guidance ('PPG') in respect of the Sequential Test and the Exception Test.

1.2 THE DEVELOPMENT

1.2.1 The Development comprises the construction, operation and maintenance, and decommissioning of Great North Road Solar and Biodiversity Park, a solar photovoltaic (PV) array electricity generating station and electrical storage facility, with a total capacity exceeding 50 megawatts (MW) and an export connection to the National Grid Staythorpe Substation.

1.2.2 The location of the Development is shown on **ES Volume 3, Figure 1.1 Development Location [EN010162/APP/6.3.1A]** [AS-028]. The Development will be located within the Order Limits (the land shown on the **Works Plans [EN010162/APP/2.3A]** [AS-005] within which the Development can be carried out).

1.3 THE DEVELOPMENT AND FLOOD RISK

1.3.1 The EA Flood Map for Planning (2025) shows that the Order Limits are mostly located in Flood Zone 1 (89.81%), which comprises land having less than 0.1% (i.e. less than 1 in 1,000) annual probability of river or sea flooding, which is defined as 'low' probability. The remaining area of the Order Limits (10.19%) is located in either Flood Zone 2 or Flood Zone 3.

1.3.2 The Development would be located predominantly in Flood Zone 1.

1.3.3 The only operational elements of the Development proposed in Flood Zone 3a and 3b are as follows:

- Work Area 2: Cables – these would be located entirely below ground and in waterproof ducting, ensuring no loss of floodplain storage or conveyance.
- Work Area 6: National Grid Staythorpe Substation – this is unlikely to flood due to the presence of private flood defences which serve the operational substation.
- Work Area 7: Consented Staythorpe BESS and Connection – this has incorporated flood resilient design.

- Work Area 8: Access – this would utilise existing roads or be flush to the existing ground level and will therefore not influence conveyance or displacement of water.

1.3.4 Notably, Work Area 1: Solar PV would be located outside of Flood Zone 3 and the future floodplain.

1.3.5 The built components of the Development are classed as 'Essential Infrastructure', which is subject to the Sequential Test and the Exception Test when located in areas designated as Flood Zone 3a and 3b.

2 PLANNING POLICY CONTEXT

2.1 INTRODUCTION

2.1.1 The planning policies and guidance which are relevant to the preparation of this Sequential and Exception Test Report are summarised below.

2.2 NATIONAL POLICY STATEMENTS

Need

2.2.1 Paragraph 3.3.60 of the Overarching NPS for Energy EN-1[1] ('NPS EN-1') includes solar PV in a list of technologies within the scope of the NPS and paragraph 3.3.61 states that *"The need for all these types of infrastructure is established by this NPS and a combination of many or all of them is urgently required for both energy security and Net Zero, as set out above."*

2.2.2 The NPS for Renewable Energy Infrastructure EN-3[2] ('NPS EN-3') states *"the Secretary of State should act on the basis that the need for infrastructure covered by this NPS has been demonstrated"* (paragraph 2.1.6). Due to the scale of need required, NPS EN-3 (paragraph 2.3.9) states that there are no limits on the need established in Part 3 of NPS EN-1.

2.2.3 The Government has therefore established that there is a compelling and urgent need for the delivery of solar infrastructure to support the national objectives of achieving net zero, energy affordability and security. The relevant policy context is set out in the **Planning Assessment [EN010162/APP/5.4A]** that supports the DCO Application for the Development.

Flood Risk

2.2.4 NPS EN-3 (paragraph 2.4.11) states that solar PV sites may be proposed on low lying exposed sites and for these proposals the applicant should consider in particular how plant will be resilient to increased risk of flooding and impact of higher temperatures.

2.2.5 NPS EN-1 section 5.8 sets out the preference for locating projects in areas of the lowest flood risk (paragraph 5.8.6) and states that where new energy infrastructure is, exceptionally, necessary in flood risk areas (for example where there are no reasonably available sites in areas at lower risk), policy aims to make it safe for its lifetime without increasing flood risk elsewhere and, where possible, by reducing flood risk overall (paragraph 5.8.7).

2.2.6 NPS EN-1 (paragraph 5.8.9) states that 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. It subsequently explains that the Exception Test provides a method of allowing necessary development to go ahead in situations where suitable sites at lower risk of flooding are not available.

2.2.7 Paragraph 5.8.10 explains that it would only be appropriate to move onto the Exception Test when the Sequential Test has identified reasonably available, lower risk sites appropriate for the project where, accounting for wider sustainable development objectives, application of relevant policies would provide a clear reason for refusing development in any alternative locations identified.

2.2.8 Where the Exception Test does apply, NPS EN-1 (paragraph 5.8.11) states that *"To pass the Exception Test it should be demonstrated that:*

• the project would provide wider sustainability benefits to the community that outweigh flood risk; and

• the project 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."

2.2.9 Paragraph 5.8.21 of NPS EN-1 states that the Sequential Test ensures that a sequential, risk-based approach is followed to steer new development to areas with the lowest risk of flooding, taking all sources of flood risk and climate change into account. Where it is not possible to locate development in low-risk areas, the Sequential Test should go on to compare reasonably available sites with medium risk areas and then, only where there are no reasonably available sites in low and medium risk areas, within high-risk areas.

2.2.10 Paragraph 5.8.36 of NPS EN-1 states that *"In determining an application for development consent, the Secretary of State should be satisfied that where relevant:*

- *the application is supported by an appropriate flood risk assessment (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.*
- *Sustainable Drainage System (SUDS) has been used unless there is clear evidence that its use would be inappropriate.*

[1] Department of Energy Security & Net Zero (2023). Overarching National Policy Statement for Energy (EN-1). https://assets.publishing.service.gov.uk/media/65a7864e96a5ec0013731a93/overarching-nps-for-energy-en1.pdf

[2] Department of Energy Security & Net Zero (2023). National Policy Statement for Renewable Energy Infrastructure (EN-3). https://assets.publishing.service.gov.uk/media/65a7889996a5ec000d731aba/npsrenewable-energy-infrastructure-en3.pdf

- *in flood risk areas the project is designed and constructed to remain safe and operational during its lifetime, without increasing flood risk elsewhere (subject to the exceptions set out in paragraph 5.8.42).*

- *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."*

2.3 NATIONAL PLANNING POLICY FRAMEWORK[3] ('NPPF')

2.3.1 The NPPF (paragraph 170) explains that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.

2.3.2 Paragraph 173 subsequently explains that a sequential risk-based approach should be taken to individual applications in areas known to be at risk now or in future from any form of flooding.

2.3.3 Paragraph 174 of the NPPF states:

"Within this context the aim of the sequential test is to steer new development to areas with the lowest risk of flooding from any source. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding."

2.3.4 Paragraph 177 explains that, having applied the sequential test, if it is not possible for development to be located in areas with a lower risk of flooding (taking into account wider sustainable development objectives), the exception test may have to be applied. The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in Annex 3.

2.3.5 Annex 3 of the NPPF defines solar farms as "Essential Infrastructure".

2.3.6 Paragraph 178 states:

"The application of the exception test should be informed by a strategic or site-specific flood risk assessment, depending on whether it is being applied during plan production or at the application stage. To pass the exception test it should be demonstrated that:

[3] Department for Levelling Up, Housing and Communities (2024). National Planning Policy Framework. https://www.gov.uk/government/publications/national-planning-policy-framework--2

a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; and

b) 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."

2.4 PLANNING PRACTICE GUIDANCE (PPG)[4]: FLOOD RISK AND COASTAL CHANGE

2.4.1 The PPG on flood risk and coastal change was last updated on 17 September 2025 and provides, amongst other things, guidance on application of the Sequential Test and the Exception Test.

2.4.2 The PPG defines 'reasonably available' sites in the context of the Sequential Test as follows:

"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." (Paragraph: 028 Reference ID: 7-028-20220825)

2.4.3 Table 2 of the PPG sets out the circumstances when the Exception Test will be required. It provides a table of flood risk vulnerability classification for different uses with the uses categorised into essential infrastructure, highly vulnerable, more vulnerable, less vulnerable and water-compatible development, as shown below. Table 2 is re-presented at Figure 1 below:

Figure 1: Flood Risk Vulnerability and Flood Zone 'Incompatibility' (PPG Paragraph: 079 Reference ID: 7-079-20220825)

[4] https://www.gov.uk/guidance/flood-risk-and-coastal-change#the-sequential-approach-to-the-location-of-development

Table 2: Flood risk vulnerability and flood zone 'incompatibility'

Flood Zones	Flood Risk Vulnerability Classification				
	Essential infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test required	✓	✓	✓
Zone 3a †	Exception Test required †	**X**	Exception Test required	✓	✓
Zone 3b *	Exception Test required *	**X**	**X**	**X**	✓ *

Key:

✓ Exception test is not required

X Development should not be permitted

2.4.4 Table 2 of the NPPF demonstrates that, given Annex 3 of the NPPF defines solar farms as "Essential Infrastructure", the Exception Test should be applied to the Development since it proposes essential infrastructure in Flood Zone 3.

2.5 LOCAL PLANNING POLICY

2.5.1 The Order Limits are located in the administrative area of Newark and Sherwood District Council ('NSDC').

2.5.2 Newark and Sherwood Local Development Framework – Amended Core Strategy DPD[5] ('the Amended Core Strategy') was adopted in March 2019.

2.5.3 Core Policy 10 (Climate Change) states:

"The District Council is committed to tackling the causes and impacts of climate change and to delivering a reduction in the Districts carbon footprint. The District Council will work with partners and developers to:

- *Promote energy generation from renewable and low-carbon sources, including community-led schemes, through supporting new development where it is able to demonstrate that its adverse impacts have been satisfactorily addressed. Policy DM4 'Renewable and Low Carbon Energy Generation' provides the framework against which the appropriateness of proposals will be assessed;*

- *Ensure that development proposals maximise, where appropriate and viable, the use of available local opportunities for district heating and decentralised energy;*

[5] https://www.newark-sherwooddc.gov.uk/media/nsdc-redesign/documents-and-images/your-council/planning-policy/local-development-framework/amended-core-strategy-dpd/amended-core-strategy-DPD.pdf

- *Mitigate the impacts of climate change through ensuring that new development proposals minimise their potential adverse environmental impacts during their construction and eventual operation. New proposals for development should therefore:*
    - *Ensure that the impacts on natural resources are minimised and the use of renewable resources encouraged; and*
    - *Be efficient in the consumption of energy, water and other resources.*
- *Steer new development away from those areas at highest risk of flooding, applying the sequential approach to its location detailed in Policy DM5 'Design'. Where appropriate the Authority will seek to secure strategic flood mitigation measures as part of new development;*
- *Where appropriate having applied the Sequential Test move on to apply the Exceptions Test, in line with national guidance. In those circumstances where the wider Exceptions Test is not required proposals for new development in flood risk areas will still need to demonstrate that the safety of the development and future occupants from flood risk can be provided for, over the lifetime of the development; and*
- *Ensure that new development positively manages its surface water run-off through the design and layout of development to ensure that there is no unacceptable impact in run-off into surrounding areas or the existing drainage regime."*

2.5.4 Newark and Sherwood Local Development Framework - Allocations and Development Management DPD[6] (the 'ADMDPD') was adopted in July 2013.

2.5.5 Policy DM5 (Design) states:

"In accordance with the requirements of Core Policy 9, all proposals for new development shall be assessed against the following criteria:…

…9. Flood Risk and Water Management

2.5.6 *The Council will aim to steer new development away from areas at highest risk of flooding. Development proposals within Environment Agency Flood Zones 2 and 3 and areas with critical drainage problems will only be considered where it constitutes appropriate development and it can be demonstrated, by application of the Sequential Test, that there are no reasonably available sites in lower risk Flood Zones.*

Where development is necessary within areas at risk of flooding it will also need to satisfy the Exception Test by demonstrating it would be safe for the intended users without increasing flood risk elsewhere. In accordance with the aims of Core Policy 9, development proposals should wherever possible

[6] https://www.newark-sherwooddc.gov.uk/media/nsdc-redesign/documents-and-images/your-council/planning-policy/supplementary-planning-information/allocations-and-development-management-dpd/Allocations-and-Development-Management-Development-Plan-Document.pdf

include measures to pro-actively manage surface water including the use of appropriate surface treatments in highway design and Sustainable Drainage Systems…"

3 SEQUENTIAL TEST

3.1 DEVELOPMENT REQUIREMENTS

3.1.1 Securing a viable point of connection ('POC') to the National Grid is a critical factor when developing renewable energy schemes. There is a significant shortage of grid capacity across the country, leading to long delays before grid connections are made available to operators, and this has been identified as a limiting factor in achieving the Government's objectives regarding renewable energy deployment.

3.1.2 The Applicant has secured and accepted a Grid Connection Offer from NESO to connect the Development to the National Electricity Transmission System (NETS) with a connection date of 2027, which provides further certainty on the deliverability of the Development and its ability to help meet the urgent need identified in the NPSs and Clean Power 2030. Further details are provided in the **Grid Connection Statement [EN010162/APP/7.15A]**.

3.1.3 The connection to the National Grid Staythorpe Substation would provide the solar PV and BESS components of the Development with direct access to one of the main transmission circuits that run from the North to South of the UK, as well as into the distribution network for local electrical demand in Newark, Nottingham and surrounding villages.

3.1.4 As stated in NPS EN-3, it is necessary for energy generation projects to have a connection point with sufficient capacity in close proximity. Paragraph 2.10.25 of NPS EN-3 states that *"To maximise existing grid infrastructure, minimise disruption to existing local community infrastructure or biodiversity and reduce overall costs applicants may choose a site based on nearby available grid export capacity."* This is a key consideration and an important determinant of site selection.

3.1.5 In order to deliver the 800 MW (AC) in accordance with the Grid Connection Offer, the Applicant considered that the Development would need to provide installed DC capacity of approximately 1,120 MW (based on a 1.4 ratio for overplanting). In 2021, the Applicant set a target of securing around 5,000 acres (c. 2,000 ha) of land, based on the assumption at the time of approximately 4.5 acres per 1 MW of solar.

3.1.6 In addition to securing the POC, the overarching requirements for the Development comprised:

- The ability to host a single, large-scale solar scheme which can make a meaningful contribution to the UK's urgent requirements for renewable energy capacity and onshore energy security by ensuring that use of the Development's grid connection capacity of 800 MW at Staythorpe Substation is fully utilised;

- The ability to host a co-located BESS within the site area to maximise the energy generated and exported and provide further resilience to the electricity network through utilisation of the 800 MW capacity at Staythorpe Substation; and

- Sufficient land for PV panels, BESS, supporting infrastructure, significant landscape planting and biodiversity enhancements to ensure the Development can deliver the overall amount of generation capacity outlined above.

3.2 APPROACH TO THE SEQUENTIAL TEST

3.2.1 A 'Site Search Area' was identified for the Development, comprising land within a 15 km radius of the National Grid Staythorpe Substation being classified as potentially suitable.

3.2.2 **ES Volume 3, Figure 4.1a Planning and Environmental Designations Sheet 1 [EN010162/APP/6.3.4.1.1]** [APP-068] and **ES Volume 3, Figure 4.1b Planning and Environmental Designations Sheet 2 [EN010162/APP/6.3.4.1.2]** [APP-069] show the planning and environmental designations which apply to the Site Search Area, including landscape and visual designations; heritage designations; Green Belt and other land use constraints; agricultural land; hydrological, ecological and geological designations.

3.2.3 NPS EN-1 paragraph 5.8.10 states that it would only be appropriate to move onto the Exception Test when the Sequential Test has identified *"reasonably available, lower risk sites appropriate for the proposed development where, accounting for wider sustainable development objectives, application of relevant policies would provide a clear reason for refusing development in any alternative locations identified. Examples could include alternative site(s) that are subject to national designations such as landscape, heritage and nature conservation designations, for example Areas of Outstanding Natural Beauty (AONBs), SSSIs and World Heritage Sites (WHS) which would not usually be considered appropriate."*

3.2.4 **ES Volume 3, Figure 4.1a and Figure 4.1b** demonstrate that the Site Search Area is highly constrained. In summary, these constraints include:

- **Brownfield land:** There are no brownfield sites of sufficient scale to meet the Development's requirements.
- **Transport infrastructure:** The A1 and other major roads such as the A616 and A617, as well as the East Coast Main Line railway and the River Trent constrain development.
- **Residential settlements:** The main residential area and other amenities associated with Newark-upon-Trent lie around 1 km to the southeast of Staythorpe Substation and the Order Limits.
- **Landscape and visual designations:** Local landscape designations including the potential Sherwood Forest Regional Park, as well as Southwell Protected Views.
- **Heritage assets:** The Site Search Area includes listed buildings; scheduled monuments; conservation areas; historic parks and gardens; battlefields; and local heritage designations.

- **Land use designations:** Green Belt; local plan allocations and safeguarded areas; minerals safeguarded areas; and agricultural land including Agricultural Classification Land (ALC) Grade 1 and Grade 2 land.

- **Ecological and geological sites:** The Site Search Area includes Sites of Special Scientific Interest (SSSIs); Special Areas of Conservation (SACs); National Nature Reserves (NNRs); ancient woodland; Local Nature Reserves (LNRs); local wildlife sites; irreplaceable habitats (as identified within the Priority Habitat Inventory) and Local Geological Sites.

3.2.5 Further details of the site selection process for the Development are provided in **ES Volume 2, Chapter 4: Alternatives [EN010162/APP/6.2.4]** [APP-047].

3.3 SEQUENTIAL TEST ANALYSIS

3.3.1 In accordance with national policy and guidance, the Applicant has considered the potential suitability of land that has a lower risk of flooding and whether such land is reasonably available for the Applicant to utilise for the Development.

Suitability

3.3.2 **ES Volume 3, Figure 4.1a and Figure 4.1b** indicate that potentially suitable land that has a lower risk of flooding is highly constrained, given the overarching requirements for the Development, principally a sufficiently large site capable of accommodating all of the Development's components within sufficient proximity of the POC.

3.3.3 It is also important to recognise that Staythorpe Substation is located on the northern fringe of a wide 'belt' of land which follows the River Trent corridor to the immediate south and east of the Order Limits and is designated as Flood Zone 3. Hence, any development that seeks to utilise the National Grid capacity which is available at Staythorpe Substation would inevitably need to include some land within higher risk flood zone areas and potentially considerably more if any such development were to be located to the south of the Substation for instance.

Availability

3.3.4 In tandem with the above, the Applicant also considered the availability of land, including the socio-economic effects on farm businesses and to the level of likely local opposition to the Development that would arise from pursuing compulsory purchase because the owners were not willing to enter agreement voluntarily. Accordingly, the Applicant has sought to avoid adversely affecting tenant farmers who farm the land under long term tenancies.

3.3.5 The Applicant considered any land that was available on the open market and, through exploratory discussions, was advised that certain landowners were only willing to let land for underground cable purposes, but not solar PV

or other above ground infrastructure, such as at the area near Earlshaw Farm, between Maplebeck and Caunton.

3.3.6 In addition, other areas of land within the Site Search Area are not considered to be reasonably available since they benefit from existing planning permissions for other solar farms:

- The area north of Winkburn hosting the consented Winkburn Solar Farm (Planning Reference 20/02501/FULM).
- The area south of Caunton where permission has been granted for two solar projects: Knapthorpe Solar Farm (Planning Reference 22/00975/FULM) and Muskham Wood Solar Farm (Planning Reference 22/00976/FULM).
- The area to the east of Kelham with a permitted Solar Farm (Planning Reference 23/01837/FULM).
- The area to the south of Norwell, associated with the proposed Foxholes Solar Farm (Planning Reference 22/01983/FULM).

3.4 CONCLUSION OF SEQUENTIAL TEST ANALYSIS

3.4.1 As set out in **ES Volume 4, Appendix A9.1: Flood Risk Assessment [EN010162/APP/6.4.9.1B]**, all new above ground infrastructure within Work Areas 1, 4 and 5 are located outside of Flood Zones 3(a) and 3(b). The Majority of all new above ground infrastructure within Work Areas 1, 4 and 5 is located in Flood Zone 1, with only Field 182/184 located in Flood Zone 2.

3.4.2 Infrastructure within all Work Areas will be located outside the 2076 and 2098 0.5 % AEP River Trent tidal breach event.

3.4.3 No built aspects in Work Area 1: Solar PV, Work Area 4: Substations, Work Area 5a: BESS or Work Area 5b: 400 kV substation are located within the extent of the 1 % AEP + 23 % CC (30 % CC used as a proxy) or 1 % AEP + 39 % CC events.

3.4.4 The above Sequential Test analysis demonstrates that there are no suitable and reasonably available sites appropriate for the Development in areas with a lower risk of flooding and therefore the Sequential Test is satisfied.

4 EXCEPTION TEST

4.1.1 NPS EN-1 (paragraph 5.8.9) states that 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, which provides a method of allowing necessary development to go ahead in situations where suitable sites at lower risk of flooding are not available.

4.1.2 There are two criteria which should be met, as set out in NPS EN-1 paragraph 5.8.11, for the Exception Test to be passed. These are:

- the project would provide wider sustainability benefits to the community that outweigh flood risk; and
- the project 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.

4.2 WIDER SUSTAINABILITY BENEFITS

4.2.1 NPS EN-1 paragraph 5.8.11 includes footnote 216 in relation to community benefits which confirms *"These would include the benefits (including need), for the infrastructure set out in Part 3"*.

4.2.2 The wider sustainability benefits to the community are considered to be substantial and are set out in the **Planning Assessment [EN010162/APP/5.4A]**.

4.2.3 It is therefore considered that the Development provides wider sustainability benefits to the community that outweigh flood risk and that this limb of the Exception Test is satisfied.

4.3 SITE SPECIFIC FLOOD RISK ASSESSMENT

4.3.1 **ES Volume 2, Chapter 9: Water Resources [EN010162/APP/6.2.9]** [APP-052] and **ES Volume 4, Appendix A9.1: Flood Risk Assessment [EN010162/APP/6.4.9.1B]** demonstrate that the Development will be safe, without increasing flood risk elsewhere, and will reduce flood risk overall given the reduction in surface water runoff following redevelopment.

4.3.2 As outlined in **ES Volume 4, Appendix A9.1: Flood Risk Assessment [EN010162/APP/6.4.9.1B]**, areas of hardstanding such as the BESS compound will be served by a drainage system which incorporates Sustainable Drainage Systems (SuDS) mechanisms to prevent an increase in surface water runoff compared with the baseline conditions.

4.3.3 Requirement 10 in Schedule 2 of the **Draft Development Consent Order [EN010162/APP/3.1B]** prevents any phase of the Development from commencing until details of the surface water drainage strategy and any foul water drainage system have been submitted to and approved by the planning authority in consultation with the county authority, internal drainage board, the EA and Severn Trent Water.

4.3.4 It is therefore considered that the Development satisfies this limb of the Exception Test.

5 CONCLUSION

5.1.1 As demonstrated in this report, the Sequential Test has not identified any sequentially preferable alternatives to the Order Limits that would meet the overarching requirements for the Development.

5.1.2 Furthermore, it is the only site that is also large enough to maximise the economic and environmental benefits of the Development and, in turn, maximise the Development's contribution towards meeting the urgent national need for low carbon energy infrastructure in accordance with the objectives of NPS EN-1 and NPS EN-3.

5.1.3 The Development is considered to provide significant wider sustainability benefits to the community that outweigh the limited flood risk. **ES Volume 2, Chapter 9: Water Resources [EN010162/APP/6.2.9]** [APP-052] and **ES Volume 4, Appendix A9.1: Flood Risk Assessment [EN010162/APP/6.4.9.1B]** demonstrate that the Development will be safe, without increasing flood risk elsewhere, and will reduce flood risk overall given the reduction in surface water runoff following redevelopment.

5.1.4 Therefore, it can be concluded that the Order Limits are sequentially preferable.