



Great North Road Solar and Biodiversity Park

Statement of Need (Planning Need)

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1 STATEMENT OF NEED

1.1 INTRODUCTION & PURPOSE OF DOCUMENT

- 1 The Statement of Need has been prepared by RPS Group (a Tetra Tech Company) on behalf of Elements Green Trent Ltd ('the Applicant') in relation to an application ('the Application') to be made to the Secretary of State (SoS) for the Department for Energy Security & Net Zero (DESNZ), under Section 37 of the Planning Act 2008.
- 2 The Application is for a Development Consent Order (DCO) for the construction, operation, maintenance and decommissioning of Great North Road Solar and Biodiversity Park (GNR) a solar photovoltaic (PV) electricity generating facility with a total capacity exceeding 50 megawatts (MW), electrical storage facility and an export connection to the National Grid (hereafter referred to as "the Development"). The component parts of the Development are described in Chapter 5 – Development Description of the Environmental Statement (ES) [EN010162/APP/6.2.5] and two alternative options are proposed to connect the 400kV cable to the existing National Grid Staythorpe Substation.
- 3 The Development will have a Generating Capacity of around 800MW, which would be equivalent to meeting the electricity requirements of up to 400,000 homes.
- 4 The purpose of the Statement of Need is to provide an overview of the strategic need for renewable energy generation embedded in key relevant Legislation and Government Policy. The Statement will further outline how the Development is able to be deployed so that it can contribute to meeting the need for renewable energy generation, set out in National Policy.
- 5 As this Statement focuses on matters solely relating to Need, a review of the broader legislative and policy context surrounding a DCO application can be found in the Planning Statement (PS) [EN010162/APP/5.4] and associated Policy Compliance [EN010162/APP/5.5] which accompanies this Application. All terminology used in this document is defined in the ES Volume 2, Chapter 20: Glossary [EN010162/APP/6.2.20].

1.2 LEGISLATIVE & POLICY CONTEXT RELEVANT TO NEED

1.2.1 Overview of Key Legislation & Government Policy

- 6 The UK Government has legislated to commit the country to achieving net zero carbon emissions by 2050, and de-carbonising electricity by 2035. These commitments mean that the UK urgently needs more renewable forms of electricity to be produced. The reliance on fossil fuels as part of the UK's energy mix will have to be displaced by cleaner and more secure sources of energy, resulting in greatly increased renewable electricity demand. The Climate Change Act 2008, set legally binding carbon budgets, requiring the UK to reduce its greenhouse gas emissions by 100% from 1990 levels, known as 'net zero', by 2050¹. This makes decarbonisation in

¹ Government Legislation (2008). Climate Change Act. Available at <https://www.legislation.gov.uk/ukpga/2008/27/contents> [accessed on 20.05.25].

the UK a legal requirement and is a matter of global significance. To achieve this, the UK must decarbonise its energy system, electrify heating, industry and transport and there is strong legal, policy and industry evidence in support of the urgent need for decarbonisation.

- 7 The 'British Energy Security Strategy' (April 2022)² set out the intention to rely upon wind, solar, hydrogen and nuclear to replace our reliance upon fossil fuels, bring energy costs down and, above all, make our supply of energy secure. In respect of solar, whilst only contributing approximately 2.4% of the UK's total electricity generation (DESNZ Energy Trends, Table 1.1) a five-fold increase in deployment by 2035 was expected. The British Energy Security Strategy stated that in 2022 the total installed solar capacity in the UK stood at approximately 14GW - a five-fold increase is approximately 70GW of solar power, meaning another 55GW of new solar power was needed, as per the 2022 figures.
- 8 In 'Powering Up Britain: Energy Security Plan' (Updated 2023)³, security and lowering of energy prices is noted as a priority. It states that the:
"...strategy to increase supply of low-carbon energy is dependent on enhancing our strengths on wind, solar and nuclear power generation alongside hydrogen production and carbon capture, usage and storage. This includes the infrastructure to produce, store and transport low-carbon energy around the country and to capture, transport and store carbon dioxide. We aim to remove barriers and address blockages, whilst developing new options...."
- 9 This Plan reaffirmed the key commitment of achieving 70GW of solar generation by 2035.
- 10 The Research Briefing Paper on 'Planning for Solar Farms', published by the House of Commons on 20 May 2024⁴, stated that:
"As of March 2024, the cumulative installed capacity of solar power in the UK was 15.8 GW. The government aims to achieve 70 GW of solar power by 2035.
The Environmental Audit Committee, a Commons Select Committee, said meeting this target would be "challenging given existing barriers and current rates of deployment". The government's advisory Climate Change Committee also said current deployment rates were "significantly off track".
Two of the main barriers to the expansion of solar power they identified were grid capacity and delays in securing grid connections. The Environmental Audit Committee said "upgrading the electricity grid is a crucial prerequisite to the achievement of net zero..."

2

Department for Energy Security and Net Zero, Prime Minister's Office, 10 Downing Street and Department for Business, Energy & Industrial Strategy (2022). British Energy Security Strategy. Available at <https://www.gov.uk/government/publications/british-energy-security-strategy> [accessed on 20.05.25].

³ Department for Energy Security & Net Zero (2023). Powering Up Britain: Energy Security Plan - Updated April 2023. Available at <https://www.gov.uk/government/publications/powering-up-britain/powering-up-britain-energy-security-plan> [accessed on 20.05.25].

⁴ House of Commons Library (2024). Research Briefing: Planning for Solar Farms - May 2024. Available at <https://researchbriefings.files.parliament.uk/documents/CBP-7434/CBP-7434.pdf> [accessed on 20.05.25].

- 11 The scale of the problem of meeting net zero and to deliver clean, reliable and secure energy to the UK, is immense; the scale of the solution needs to mirror the scale of the problem. Whilst the above Publications were issued under the previous Conservative administration, it is clarified that they have not been revoked.
- 12 The following announcements/publications came into effect following the election of the Labour administration in July 2024. The commitment to Net Zero targets remain the same under the current UK Government, but more recent publications issued since July 2024 have an increased emphasis on speeding up the delivery of low carbon projects and in particular to achieve Clean Power by 2030. These are considered in further detail below.
- 13 It was announced at COP24 (Azerbaijan) in November 2024 that there will be new ambitious climate targets for the UK with an aim for an 81% cut in emissions by 2035⁵ (previously 78%), demonstrating the commitment of the current Government to achieving climate change targets. The announcement references both the need for clean energy and the 'green jobs' associated with homegrown British energy.
- 14 The above provides an overview of the key legislative and policy frameworks, which sets out and shapes the compelling and urgent need for clean energy. However, of particular relevance and importance is the Policy Paper - Clean Power 2030 Action Plan ("Clean Power 2030"), published in December 2024⁶.

1.2.2 Clean Power 2030

- 15 Clean Power 2030 sets out a clear pathway to a clean power system by the UK Government. The publication of Clean Power 2030, has already triggered several key actions relevant to National Strategic Infrastructure Projects (NSIPs), including a consultation on an update to the National Policy Statements (NPS), to ensure that Government Policy on the need for renewable energy is fully aligned to support and deliver the actions set out in Clean Power 2030.
- 16 In addition, the Draft Planning and Infrastructure Bill (2024-25) has been introduced and at the time of drafting, was at the Report Stage in preparation for the 3rd Reading⁷. Of particular relevance in the context of the Development, the Bill seeks to deliver a faster and more certain consenting process for critical infrastructure. An overview of the measures, which the Bill seeks, is set out in the accompanying Factsheet: Critical Infrastructure Reforms⁸ and includes an outline of the measures to speed up the DCO

⁵ Department for Energy Security and Net Zero (2024). Press Release November 2024. Available at <https://www.gov.uk/government/news/uk-shows-international-leadership-in-tackling-climate-crisis> [accessed on 20.05.25].

⁶ Department for Energy Security and Net Zero (2024). Clean Power 2030 Action Plan – December 2024 (and updated April 2025). Available at <https://www.gov.uk/government/publications/clean-power-2030-action-plan>. [accessed on 20.05.25].

⁷ House of Commons (2025). Planning and Infrastructure – May 2025 (As Amended in in Public Bill Committee). Available at <https://publications.parliament.uk/pa/bills/cbill/59-01/0250/240250.pdf> [accessed on 06.06.25].

⁸ Ministry of Housing, Communities and Local Government – Guidance. Factsheet: Critical Infrastructure Reforms – June 2025 Available at <https://www.gov.uk/government/publications/the-planning-and-infrastructure-bill/factsheet-critical-infrastructure-reforms> [accessed 12.06.25]

consenting regimes. These measures include; requirements for NPSs to be kept up to date to support quicker decision making; allowing for a proportionate approach to acceptance of DCO applications; reducing consultation requirements at the pre-application stage and a streamlined process for challenge.

- 17 Whilst the content of the Bill is still being debated in Parliament, the Explanatory Notes⁹ to the Draft Bill make it clear, that the proposed changes intend to support the delivery of the targets set out in Clean Power 2030. Section 20 of the Explanatory Notes states that:

"In the Clean Power 2030 Action Plan, the government outlined its pathway to delivering the target and the barriers that would need to be removed to do so. All routes to a clean power system will require mass deployment and connection of offshore wind, onshore wind, and solar across Great Britain, with renewables providing the vast majority of generation, and nuclear continuing to deliver a backbone of vital firm low carbon power".

- 18 Whilst the Bill is not in effect at the time of submission the Government had intended the Bill to achieve Royal Assent by July 2025. Whilst the precise timescales are unknown, the Bill is making notable progress in Parliament and may be enacted during the Examination stage of the application. At this stage, some of the provisions may become relevant. In any event, the measures introduced by the Bill are intended to support the delivery of Clean Power 2030 and the Development will provide low carbon energy generation consistent with these objectives
- 19 **Strategic Spatial Energy Plan (SSEP), Centralised Strategic Network Plan (CSNP) & Regional Energy Strategic Planning (RESP)**
- 20 The National Energy Systems Operator (NESO) confirms that a SSEP is intended to accelerate and optimise the transition to clean, affordable and secure energy. The Methodology for the SSEP was published May 2025¹⁰.
- 21 The SSEP is intended to provide the first high-level blueprint for Great Britain's energy infrastructure from 2030 to 2050 to provide further clarity on what a future energy system will look like. At the time of submission, the SSEPs are not in place (either in draft or final form) and these cannot, therefore, be considered material at this stage.
- 22 In addition, NESO has consulted on a Transitional Centralised Strategic Network Plan methodology¹¹ to plan future delivery of projects. The Methodology has been submitted to OFGEM at the time of drafting. Consequently, the SSEP is not considered material at this stage.
- 23 Finally, work is ongoing on the development of Regional Energy Strategic Plans. A decision on the Policy Framework was published in April 2025, but

⁹House of Commons (2025). Planning and Infrastructure Bill Explanatory Notes – March 2025. Available at <https://publications.parliament.uk/pa/bills/cbill/59-01/0196/en/240196en.pdf> [accessed on 20.05.25].

¹⁰ National Energy System Operator (2025). Strategic Spatial Energy Plan Methodology – May 2025. Available at <https://www.neso.energy/document/360501/download> [accessed on 05.06.25].

¹¹ National Energy System Operator (2025). Transitional Centralised Strategic Network Plan 2 Refresh Methodology - March 2025. Available at <https://www.neso.energy/document/358056/download> [accessed on 05.06.25].

NESO advise that the Plans are unlikely to be in effect until 2027 and these are not therefore available at the time of submission of the Application¹².

- 24 Whilst these publications and decisions signal a pro-active approach to strategic planning to be applied in the future to meet the low carbon energy requirements in Great Britain, the strategies are not yet in effect and, therefore, at the time of drafting carry little or no weight. These are mentioned in the draft updates to EN-1 (see section 1.3.4 below) and it is expected that any future updates to EN-1 will further consider the relevance of these emerging plans.

1.3 LEGISLATIVE AND NATIONAL POLICY CONTEXT

- 25 The legislative framework for decision making along with a description of the relevant Policies and an assessment of compliance, is set out in the Planning Statement [EN010162/APP/5.4] which supports this Application.
- 26 In deciding an application for development consent in accordance with Sections 104(2) and 104(3) of the 2008 Act, the Secretary of State (SoS) must have regard to the relevant National Planning Policy Statements (NPS). The NPSs contain very clear Policy in respect of the *urgent need* for renewable forms of energy. The key sections in the NPSs relevant to the need for the Development are outlined below.

1.3.1 National Policy Statement EN-1

- 27 Following adoption of the revised EN-1 in 2024, this policy statement now explicitly includes solar schemes greater than 50 MW EN-1 states that large scale renewable energy projects are needed (amongst other types of generation capacity) in order to meet the demand for electricity generation in the United Kingdom (UK), and to reduce greenhouse gas emissions from electricity generation in order to meet the Government's decarbonisation targets. NPS EN-1 sets out that the delivery of a large amount of solar generation capacity is an essential element required for delivery of the Government's energy objectives and legally binding net zero commitments. In NPS EN-1, paragraphs 3.2.6 to 3.2.8 it states 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, as described for each of them in this Part.

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

¹² OFGEM (2025). Decision on the Regional Energy Strategic Plan Policy Framework – April 2025. Available at <https://www.ofgem.gov.uk/sites/default/files/2025-04/RESP-policy-framework-decision.pdf> [accessed on 05.06.25].

- 28 *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*.¹³**[emphasis added]**
- 29 Section 3.3.62 states that the Government has concluded that there is a Critical National Priority (CNP) for the provision of nationally significant low carbon infrastructure. Low carbon infrastructure is defined in Section 4 of EN-1 (see below). Section 3.3.63 clarifies the weighting to be attached to CNP Infrastructure and emphasises that delivery should be progressed as quickly as possible:
- 30 *“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.”*
- 31 The mitigation hierarchy has been applied throughout Environmental Impact Assessment, as demonstrated in the Environmental Statement. The mitigation hierarchy is defined in the Glossary of EN-1 as:
- 32 *“A term to incorporate the avoid, reduce, mitigate, compensate process that applicants need to go through to protect the environment and biodiversity.”*
- 33 In policy terms the starting point in connection with any need case is set out in Section 4.2.6. It states:
- 34 *“The overarching need case for each type of energy infrastructure and the substantial weight which should be given to this need in assessing applications, as set out in paragraphs 3.2.6 to 3.2.8 of EN-1, is the starting point for all assessments of energy infrastructure applications”.*
- 35 Section 4.2 of EN-1 stipulates that there is a CNP for the provision of nationally significant low carbon infrastructure, which further highlights this urgent need at a strategic scale. Section 4.2.5. states that for the purposes of policy, low carbon infrastructure means:
- 36 *“• 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*
- 37 *• for electricity grid infrastructure, all power lines in scope of EN-5 including network reinforcement and upgrade works, and associated infrastructure such as substations. This is not limited to those associated specifically with a particular generation technology, as all new grid projects will contribute towards greater efficiency in constructing, operating and connecting low carbon infrastructure to the National Electricity Transmission System*

¹³ Department for Energy Security and Net Zero (2023). Overarching National Policy Statement for Energy (EN-1) – November 2023 (Updated Jan 2024). Available at <https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1> [accessed on 03.06.25].

- 38 • *for other energy infrastructure, fuels, pipelines and storage infrastructure, which fits within the normal definition of “low carbon”, such as hydrogen distribution, and carbon dioxide distribution*
- 39 • *for energy infrastructure which is directed into the NSIP regime under section 35 of the Planning Act 2008, and fit within the normal definition of “low carbon”, such as interconnectors, Multi-Purpose Interconnectors, or ‘bootstraps’ to support the onshore network which are routed offshore*
- 40 • *Lifetime extensions of nationally significant low carbon infrastructure, and repowering of projects.”*
- 41 This makes it clear that the low carbon infrastructure including solar generation and its associated development (including sub-stations and storage), which the Development provides, is regarded as CNP, in policy terms. CNP is also defined in the Glossary of EN-1.
- 42 Specific to the role of electricity storage, EN-1 acknowledges the importance in the role it has to provide flexibility, reliability and reducing energy costs. It states in Sections 3.3.25 to 3.3.27 that:
- 43 *“Storage has a key role to play in achieving net zero and providing flexibility to the energy system, so that high volumes of low carbon power, heat and transport can be integrated.*
- 44 *Storage is needed to reduce the costs of the electricity system and increase reliability by storing surplus electricity in times of low demand to provide electricity when demand is higher. There is currently around 4GW of electricity storage operational in GB, around 3GW of which is pumped hydro storage and around 1GW is battery storage. Storage can provide various services, locally and at the national level. These include maximising the usable output from intermittent low carbon generation (e.g. solar and wind), reducing the total amount of generation capacity needed on the system; providing a range of balancing services to the NETSO and Distribution Network Operators (DNOs) to help operate the system; and reducing constraints on the networks, helping to defer or avoid the need for costly network upgrades as demand increases.”*
- 45 Section 4.6 of EN-1 relates to Environmental and Biodiversity Net Gain. Section 4.6.1. confirms that achieving biodiversity net gain is not currently an obligation on Applicants and Section 4.6.3 highlights that appropriate weight is to be afforded environmental and biodiversity net gain. The Department for Environment, Food and Rural Affairs (DEFRA) launched a consultation on the 28th May 2025, which closes on the 24th July 2025. The consultation proposes introducing biodiversity net gain requirements for National Strategic Infrastructure Projects (NSIPs) from May 2026.
- 46 Overall, there is a compelling need set out in Policy for the delivery of energy generating developments and the associated development, which helps to provide a stable and reliable supply of electricity.

1.3.2 National Policy Statement EN-3

- 47 Following adoption of the revised EN-3 in 2024, this policy statement now explicitly includes solar schemes greater than 50 MW. EN-3¹⁴ reinforces the **urgent need** for new electricity capacity to meet our energy objectives, set out in EN-1.
- 48 In the context of locational considerations, Section 2.3.9 states that:
- "As most renewable energy resources can only be developed where the resource exists and where economically feasible, and because there are no limits on the need established in Part 3 of EN-1, the Secretary of State should not use a consecutive approach in the consideration of renewable energy projects (for example, by giving priority to the re-use of previously developed land for renewable technology developments)."*
- 49 Section 2.10.18 to 2.10.27 explain that the availability of grid connection, suitable irradiance levels and local topography are key inputs to the selection of sites suitable for large-scale solar generation developments. The number of locations within the UK at which large-scale solar generation is suitable is, therefore, likely to be limited, which is a material issue when considering how the UK is to meet the urgent need for low-carbon generation as is set out in the NPSs.
- 50 Many factors are important in the design of a large-scale solar scheme within the context of a particular location, and EN-3 acknowledges that flexibility in design is important to allow for a scheme to be designed in order to optimise its benefits.
- 51 Section 2.10 of EN-3 specifically considers solar PV generation and acknowledges that solar is a key part of the government's strategy for low-cost decarbonisation of the energy sector. Paragraph 2.10.13-14 states that:
- "Solar farms are one of the most established renewable electricity technologies in the UK and the cheapest form of electricity generation. Solar farms can be built quickly and, coupled with consistent reductions in the cost of materials and improvements in the efficiency of panels, large-scale solar is now viable in some cases to deploy subsidy-free."*
- 52 Paragraph 2.10.16 acknowledges that Associated Infrastructure may be proposed as Associated Development and can include energy storage.
- 53 Section 2.10 of EN-3 sets out the factors influencing site selection and design specific to solar generation and includes considerations relating to network connection. Of particular note, Section 2.10.24 acknowledges that availability of network capacity and distance from the solar farm to the existing network can have a significant effect on the commercial feasibility of a development proposal and 2.10.25 states that:

¹⁴ Department for Energy Security and Net Zero (2023) – National Policy Statement for renewable energy infrastructure (EN-3) – November 2023 (Updated Jan 2024). Available at <https://www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3> [accessed on 03.06.25].

“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.”

54 The need for solar and associated functions (including storage) is further reiterated in EN-3. Section 2.10.10 states that:

55 *“Solar also has an important role in delivering the government’s goals for greater energy independence. The British Energy Security Strategy states that government expects a five-fold increase in combined ground and rooftop solar deployment by 2035 (up to 70GW). It sets out that government is supportive of solar that is “co-located with other functions (for example, agriculture, onshore wind generation, or storage) to maximise the efficiency of land use”.*”

56 From a technical perspective, EN-3 acknowledges that applications for solar parks/farms are likely to include a number of elements and include associated development (such as storage). Section 2.10.49 states that:

57 *“Applications for solar farms are likely to comprise a number of elements including solar panel arrays, piling, inverters, mounting structures, cabling, earthworks, and measures associated with site security, and may also include associated infrastructure such as energy storage and electrolyzers associated with the production of low carbon hydrogen.”*

58 Critically, EN-3 considers solar as a key part of the government’s strategy for low-cost decarbonisation of the energy sector (Section 2.10.9). There are various factors which affect the site selection from an operational and commercial perspective, in addition to environmental considerations.

59 EN-3 acknowledges there are a range of over-arching positive factors associated with solar generated electricity. These include the following points:

- Section 2.10.11 advocates that solar and farming can be complimentary, supporting each other financially and environmentally.
- Section 2.10.13 solar farms/parks are one of the most established renewable electricity technologies in the UK and the cheapest form of electricity generation.
- Section 2.10.14 acknowledges that solar farms/parks can be built quickly.
- Section 2.10.89 highlights that solar farms/parks have the potential to increase the biodiversity of a site.
- Section 2.10.95 through appropriate land topography and the implementation of effective screening, the zone of visual influence can be appropriately minimised in the case of ground mounted solar development.

1.3.3 National Policy Statement EN-5

- 60 NPS EN-5¹⁵ is primarily concerned with high voltage long distance transmission and distribution infrastructure (400 kilovolts (kV) and 275 kV lines) and lower voltage lines (132 kV to 230 kV) from transmission substations to the end user and associated infrastructure, as set out in Section 1.6.1. Therefore, EN-5 is considered important and relevant due to the inclusion of inverters, transformers, switchgear, cabling and substation within the Development. The Glossary associated with EN-5 provides the following definition of CNP
- 61 *“A policy set out at paragraphs 2.8.8 – 2.8.13 EN-3 which applies a policy presumption that, 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. CNP Infrastructure is defined as nationally significant new offshore wind development and supporting onshore and offshore network infrastructure and related network reinforcements.”*
- 62 Section 1.1.5 further acknowledges that associated infrastructure such as substations are considered to be CNP Infrastructure and should be progressed as quickly as possible.

1.3.4 Consultation on Updates to NPSs

- 63 In April 2025, Draft Updates to EN-1, EN-2 and EN-3 were published for consultation. The consultation closed on the 29th May 2025. Importantly, the updates are triggered by the publication of Clean Power 2030 in December 2024, which aims to push the Country to Net Zero by 2050 and reflects one of the five missions set out by the government to make Britain a ‘Clean Energy Superpower’¹⁶. The Draft Updates state that the capacity ranges are achievable, but that:

“we need to see very significant deployment to make this a reality”¹⁷ and “deployment at a sharply accelerated scale and pace”¹⁸.

¹⁵ Department for Energy Security and Net Zero (2023). NPS for Electricity Networks Infrastructure (EN-5) – November 2023 (Updated Jan 2024) Available at <https://www.gov.uk/government/publications/national-policy-statement-for-electricity-networks-infrastructure-en-5> [accessed on 09.06.25].

¹⁶ Department for Energy Security & Net Zero (2025). Overarching National Policy Statement for Energy (EN-1) Paragraph 2.25 and 2.3.1. Available at <https://assets.publishing.service.gov.uk/media/68093d68148a9969d2394f59/draft-nps-en-1.pdf> [accessed on 05.06.25].

¹⁷ Department for Energy Security & Net Zero (2025). Overarching National Policy Statement for Energy (EN-1) Paragraph 2.35. Available here at <https://assets.publishing.service.gov.uk/media/68093d68148a9969d2394f59/draft-nps-en-1.pdf> [accessed on 05.06.25].

¹⁸ Department for Energy Security & Net Zero (2025). Overarching National Policy Statement for Energy (EN-1) Paragraph 2.3.6. Available at <https://assets.publishing.service.gov.uk/media/68093d68148a9969d2394f59/draft-nps-en-1.pdf> [accessed on 05.06.25].

The DESNZ 'Clean Power Mission Capacity Range' for low carbon ranges is set out in the Clean Power 2030 Action Plan and the capacity range for solar is 45-47 GW. This is further considered in Section 1.4 below.

- 64 The closure of Ratcliffe-on-Soar Power Station on the 24th November 2024, which is also located in the County of Nottinghamshire, was the final UK coal-fired plant to close, as acknowledged in the draft updated EN-1. The draft updated EN-1 makes specific reference to the need for a secure and resilient supply within our energy infrastructure, due to increasing threats from climate change and cyber threats, which the Clean Power Action Plan sets out (Section 2.4.6).
- 65 These updates seek to bring Clean Power 2030 front and centre as the primary policy. Draft EN-1 reinforces that the pace of planning delivery needs to significantly increase to allow the Government targets to be achieved and Draft NPS EN-3 highlights that Solar Power is at the heart of the 2030 Clean Power Mission. Draft NPS EN-5 emphasises the importance of new network infrastructure to deliver Clean Power 2030 targets.
- 66 The Draft Update to EN-1 confirms the Government's strategic framework includes Clean Power 2030 Action Plan and the Pathways to 2030, the Strategic Spatial Energy Plan and the Centralised Strategic Network Plan and that these should be considered by Applicants. It further clarifies in paragraphs 4.2.4 and 4.2.5 the need for a 'significant and sustained effort' from all parties including applicants, planners, local planning authorities, statutory advisors, the Examining Authority and decision makers to achieve the Clean Power mission.
- 67 Transitional Arrangements are set out in the consultation. They confirm that the amended energy NPSs will only have effect in relation to those applications for development consent accepted for Examination after the publication of the final amended energy NPSs. However, the Transitional Arrangements do acknowledge that the emerging energy draft NPSs are potentially capable of being important and relevant considerations in the decision-making process, as deemed appropriate by the Secretary of State.
- 68 These updates reflect the increasingly urgent need to rapidly increase deployment of all relevant infrastructure to meet the Clean Power 2030 Mission capacity ranges. The publication of Clean Power and the associated draft update to the NPSs highlight the direction of travel of Government Policy, which is a clearly defined pathway to meeting its Net Zero targets, with an increasing emphasis on expediting delivery of low carbon projects.

1.4 NEED FOR SOLAR GENERATION

- 69 The compelling need for low carbon developments is firmly established in current relevant national policy as set out above. The need is *urgent* and *substantial weight* is to be afforded to need in decision making terms. This is the starting point for the assessment of need in Policy terms as set out in Section 1.3.1 above. There are no limits on need set out in current Policy for low carbon developments, such as solar parks The Development is regarded as CNP.

- 70 The pressing need for delivery at *an accelerated pace* is highlighted in ‘The Challenge’ section of Clean Power 2030:
- “Meeting the renewable capacities set out in the DESNZ ‘Clean Power Capacity Range’ is achievable but will require deployment at a sharply accelerated scale and pace. This can only be delivered by unblocking delivery challenges throughout the development lifecycle”.*¹⁹
- 71 The DESNZ has established a ‘Clean Power Capacity Range’ based on ‘new dispatch’ scenarios, alongside an assessment of maximum feasible deployment, based on knowledge of the project pipeline, which is set out on page 31. For solar this is between 45-47 GW. The Installed Capacity for Solar as of Quarter 2, 2024 was 16.6 GW, with a further 7.2 GW Committed or Under Construction. This leaves a gap of between 21.3-23.3 GW to meet the 2030 DESNZ ‘Clean Power Capacity Range by 2030’²⁰.
- 72 The challenges that developers face in land assembly, the consenting process, as well as Grid constraints mean this is an ambitious target. In the Applicants’ view these targets cannot be achieved by rooftop solar panels and brownfield sites alone. This is supported by the National Policy Statements (NPSs) which confirm that large-scale ground mounted solar farms have a critical role to play in achieving the Government’s aims as set out in Section 2.1 of EN-3. The Government has determined that there exists a Critical National Priority (CNP) for low carbon infrastructure as set out in paragraph 4.2.4 of EN-1, including large-scale solar farms. EN-3 acknowledges the decarbonisation, energy security and affordability benefits that solar development delivers, as set out in Section 1.3.2 above. Large-scale solar projects such as the Development, are required in addition to other technologies to diversify the UK’s low-carbon portfolio to meet its legal obligations to achieve net zero by 2050, making best use of available Grid connections to help deliver the amount of solar power now required. Section 3 of EN-1 stipulates that it is not the role of the planning system to limit any form of infrastructure it covers or propose limits on any new infrastructure that can be consented (Sections 3.2.3 to 3.2.4). In decision making terms, EN-1 is clear that the Application should be assessed on the basis that the Government has demonstrated there is a need for the Development and that substantial weight is to be afforded to this need (paragraphs 3.2.6 and 3.2.7 of EN-1). This is further reinforced in Section 2.3.9 of EN-3, as outlined in Section 1.3.2. above.
- 73 Current Policy acknowledges that there will be limited opportunities to deliver large scale solar development, due to grid connection and locational constraints (as set out in Section 1.3.2 above). In the case of GNR Solar and Biodiversity Park a robust and thorough site selection process has been undertaken and this has been informed by topographical and environmental constraints. Chapter 4 – Site Selection and Design [EN010162/APP/6.2.4]

¹⁹ Department for Energy Security and Net Zero (2024). Clean Power 2030 Action Plan (Page 52) – December 2024 (and updated April 2025). Available at <https://www.gov.uk/government/publications/clean-power-2030-action-plan> [accessed on 20.05.25].

²⁰ Department for Energy Security and Net Zero (2024). Clean Power 2030 Action Plan (Page 73) – December 2024 (and updated April 2025). Available at <https://www.gov.uk/government/publications/clean-power-2030-action-plan> [accessed on 20.05.25].

further demonstrates detailed analysis of the rationale for the site selection, including an appraisal of alternative options considered. The Planning Statement [EN010162/APP/5.4] and associated Policy Compliance Tables demonstrate that the Development is in accordance with relevant national and local planning policy.

- 74 From a design perspective, the design of the Development has been refined, following consultation and informed by environmental and technical considerations. This is further explained in the Design Approach Document (DAD) (Parts 1-3) [EN010162/APP/5.8] and Chapter 4 – Site Selection and Design [EN010162/APP/6.2.4].
- 75 Current Policy acknowledges that availability of network capacity and distance from the solar farm to the existing network can have a significant effect on the commercial feasibility of a development proposal and that sites may be chosen based on nearby available grid capacity. In the case of the Development solar generation can be achieved in an area that has been carefully selected and will benefit from efficient connection to the grid. Chapter 4 Site Selection and Design of the ES [EN010162/APP/6.2.4] (Section 4.4.1) further describes the process of land assembly, to achieve efficiency and utilisation of land with fewer constraints.
- 76 The Development makes good use of existing infrastructure capacity at Staythorpe Substation. The Development is expected to have a Generating Capacity of around 800MW, which is equivalent to providing the electricity requirements of up to 400,000 homes, will make a significant contribution to meeting the urgent need identified in Policy. Chapter 4 – Site Selection and Design [EN010162/APP/6.2.4] confirmed that in order to deliver the 800MW (AC) as per the grid connection contract with NGET, the Development needs to provide installed DC capacity of approximately 1,120 MW based on 1.4 ratio for overplanting. Overplanting is considered acceptable in planning terms, as defined in Footnote 92 of EN-3:
- 77 *““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.”*
- 78 The Development will allow for large scale deployment of solar generation to be delivered by an experienced solar Developer with a proven track record. The Development is capable of being implemented promptly and once operational, will actively contribute to the ambitious renewable energy generation targets set out in Clean Power 2030. There are no known site constraints which would prohibit or delay the delivery of the Development.
- 79 Overall and as outlined in Section 1.3 above there is a compelling need for the provision of nationally significant low carbon infrastructure by virtue of it being defined as a CNP and the **substantial weighting** to be attributed to

the urgent need for such development, in decision-making terms in EN-1. The Development will make a significant contribution to meeting this need as demonstrated above.

1.5 NEED FOR ENERGY STORAGE

1.5.1 Grid Connection

- 80 As set out in Sections 1.3.1. and 1.3.2. above, both EN-1 and EN-3 acknowledge the importance of storage in the context of renewable energy generated, by providing efficiencies and stability in energy supply. Solar generation can fluctuate due to its intermittency and storage helps to balance the supply and meet the requirements of peak demand. Energy storage is accepted as 'Associated Development' in the context of solar development and is typically included in other Developments of a similar scale.
- 81 Two alternative options are proposed to connect the 400 kV cable serving the Development to the National Grid Staythorpe Substation to provide flexibility. This is explained in Section 5.4.1.7 of Chapter 5 – Development Description of the ES [EN010162/APP/6.2.5]. The 2 options are as follows:
- Connect via the substation associated with the consented BESS on land immediately to the west of the existing National Grid Staythorpe Substation. This grid support BESS has been granted planning consent (Newark and Sherwood District Council, planning reference 22/01840/FULM and 24/01261/FULM); or
 - Connect the 400 kV cable to connect directly to the National Grid Staythorpe Substation.
- 82 The Planning Application details for the BESS (References: 22/01840/FULM and 24/01261/FULM) are available on the Newark and Sherwood District Council website.

1.5.2 Energy Storage

- 83 There is a need for the delivery of energy storage to provide for stability in supply in the case of renewable forms of generation, such as solar and these often take the form of grid scale batteries. Clean Power 2030 confirms that there is 4.5GW of battery storage capacity in Great Britain, the majority of which is grid scale and that 23-27GW of battery storage is needed by 2030 to support clean power, which it acknowledges as a 'very significant level of increase'. Paragraph 2.10.16 of EN-3 states that:
- 84 "Associated infrastructure may also be proposed and may be treated, on a case by case basis, as associated development, such as energy storage, electrolyzers associated with the production of low carbon hydrogen, or security arrangements (which may encompass flood defences, fencing, lighting and surveillance)".²¹

²¹ Department for Energy Security and Net Zero (2023). National Policy Statement for renewable energy infrastructure (EN-3) – November 2023 (Updated Jan 2024). Available at <https://www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3> [accessed on 03.06.25].

- 85 The Development includes a BESS, which the Grid Connection Statement [EN010162/APP/5.4] confirms is associated development. The location of the BESS is shown on the Detail Area Masterplans [EN010162/APP/2.12].
- 86 BESS are typically provided close to renewable sources of energy, to store up surplus energy, to balance the supply particularly during peak demands. EN-3 acknowledges that associated development (including energy storage) is often required. The BESS is located to provide operational efficiency in this context, so that it can best serve the Development. Section 4.4.1 of Chapter 4 – Site Selection and Design [EN010162/APP/6.2.4] outlines the site selection process and confirms that greater distances from the Staythorpe Substation than the defined Site Search Area, involving laying of longer cables, would involve additional costs, transmission losses and the potential for increased environmental effects.
- 87 The maximum export capacity at the grid connection point is 800MW (AC), however the Development has been sized to generate 1120MWp, as energy generation for renewable sources fluctuates throughout the day. Energy Storage provision captures any surplus energy, allowing for a steady and controlled supply of energy to the Grid.
- 88 A BESS is included in the Submission, as associated development. The BESS has a direct relationship with the principal development and is proportionate to nature and scale of the development, as per the Guidance on Associated Development²². The BESS is located towards the southern-most part of the Order Limits (north of the A617) close to both the source of the energy being generated and the Staythorpe Substation. The location of the BESS has been selected based on design considerations and to provide operational effectiveness and efficiency. The BESS is included in Phase 5, with implementation at month 13, as confirmed in Table 5.11 of Chapter 5 – Development Description of the ES [EN010162/APP/6.2.5]. The BESS will ensure that appropriate storage provision is available to serve the operational lifespan of the Development and would be removed in accordance with the finally agreed Decommissioning Strategy. Replacement of equipment would take place during the operational stage of the Development.
- 89 As established in other comparable NSIP Developments, the precise detail of the BESS is undetermined and will be further refined, at a later stage. BESS technologies are rapidly advancing and the final design and layout arrangements will take advantage of the latest advancements in technology, albeit within the Design Parameters set out in the ES. There is no requirement to impose a capacity limit, as established in other comparative cases. However the final design will fall within the maximum design parameters used for EIA and confirmed in table 5.9 – BESS Design Parameters of Chapter 5 – Development Description of the ES

²² Department for Communities and Local Government – Guidance on Associated Development Applications for Major Infrastructure Projects (Planning Act 2008) - Feb 2013 Available at <https://www.gov.uk/government/publications/planning-act-2008-associated-development-applications-for-major-infrastructure-projects> Accessed 16.06.25

[EN010162/APP/6.2.5] and the environmental effects will not exceed those set out in the ES.

- 90 Overall there is a direct and demonstrable link between the BESS and the energy generated by the solar park and the benefits of co-locating the two, are very clear, particularly in the context of bridging the necessary supply to meet fluctuating demands.

1.5.3 Other Matters Relevant to Need

- 91 Whilst the Statement of Need principally considers matters relating to the urgent need for the delivery of low carbon energy development, it is of relevance that the Development will facilitate notable Biodiversity Net Gain. Matters relating to Biodiversity Net Gain are comprehensively assessed in Chapter 8 - Ecology and Biodiversity Chapter of the ES [EN010162/APP/6.2.8] and summarised in the Planning Statement [EN010162/APP/5.4]. Section 4.6 of EN-1 'Environmental and Biodiversity Net Gain' is of relevance and stipulates that enhancements should be considered. Paragraph 4.6.6 states that:
- 92 *"Energy NSIP proposals, whether onshore or offshore, should seek opportunities to contribute to and enhance the natural environment by providing net gains for biodiversity, and the wider environment where possible."*
- 93 The design approach in this case, has sought to maximise opportunities to secure biodiversity net gain, alongside other objectives which include, facilitating improved public accessibility to the Countryside from a recreation perspective. In decision making terms, paragraph 4.6.3 of EN-1 states that *appropriate weight* should be afforded to biodiversity net gain. The weighting of BNG provisions is not as great as that to be afforded to the *significant weight* to be attributed to the delivery of low carbon energy generating development. Regardless of the weighting to be attributed in Policy terms, the BNG provision associated with the Development, demonstrates a commitment by the Applicant to deliver significant enhancements to biodiversity in and around the Development, as a key design objective.

1.6 DELIVERABILITY

- 94 The Applicant is an experienced Solar Developer and based on their expertise can provide reassurances on delivery of the development and delivery within the timescales set out in the Application.
- 95 Once complete, the Development will make a significant contribution to installed capacity in respect of Government targets. There is no limit on the need for low carbon energy development and the Development provides CNP infrastructure against the demonstrable urgent need, embedded in key national Legislation and Policy. The site is located geographically close to existing, long-established energy related infrastructure, including Staythorpe Power Station and associated substation, which allows for efficient transmission of electricity and a scheme which is commercially viable. Electricity has been generated at the Staythorpe Power Station since the 1950's to meet energy demands in the UK.

- 96 The existing Staythorpe Substation has available capacity and can comfortably accommodate the additional power being generated by the Development. The Applicant has secured and accepted a Grid Connection Offer from the National Grid Electricity System Operator (NGESO) to connect the Development to the National electricity Transmission System (NETS) with a connection date of 2027, which provides further certainty on the implementation of the Development and importantly contributing to delivery at an 'accelerated pace and scale' as set out in Clean Power 2030 (see Section 68. Above). Further details are provided in the Grid Connection Statement [EN010162/APP/5.3] included in the Submission.
- 97 Overall, the Applicant can provide re-assurances to deliver against the accelerated Government targets for clean power energy generation, set out in Clean Power 2030. The Development will make a significant contribution to the compelling need for low carbon energy generation, as set out in National Policy.

1.5 SUMMARY & CONCLUSIONS

- 98 The Development is designed to spearhead the renewable transformation of UK energy generation. The UK grid is constrained, and the 400 kV overhead line (OHL) network is being reinforced across the country. This means that in many areas no new generation can be connected until 2032 or later. Crucially, in this case, there is existing and available capacity at the Staythorpe Substation and a Grid Offer in place for connection to the Staythorpe Substation.
- 99 The Development can be delivered, efficiently and within the timescales set out in the Submission, to contribute to the accelerated pace of delivery that Clean Power 2030 states is *urgently required*. Table 5.11 of Chapter 5 – Development Description of the ES [EN010162/APP/6.2.5] confirms a 24-month implementation programme for construction of the Development. The Development benefits from an acceptance of a Grid Connection Offer.
- 100 The Application demonstrates a robust site selection has taken place and the development accords with relevant Planning Policies. The need for the development is to be afforded *substantial weight* and this is further reinforced by the need for *deployment at a sharply accelerated scale and pace*, as set out in Clean Power 2030.
- 101 The Development, including its provisions for associated energy storage will make a significant contribution to meeting the clear need established in current Policy by providing generation equivalent to the energy requirements of 400,000 homes.