

Great North Road Solar and Biodiversity Park

Grid Connection Statement

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Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009, APFP Regulation 6(1)(a)(i)



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1 INTRODUCTION

1.1 BACKGROUND

- This Grid Connection Statement has been prepared 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.
- The Applicant has secured a grid connection agreement with the National Energy System Operator (NESO), permitting the export and import of around 800 megawatts (MW) (AC) of electricity via the 400kV National Grid Staythorpe substation.
- The connection to the National Grid Staythorpe substation allows the solar PV and BESS electrical capacity straightforward 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.
- The Application is for a Development Consent Order (DCO) for the construction, operation and maintenance, and decommissioning of Great North Road Solar and Biodiversity Park (GNR), a proposed solar photovoltaic (PV) electricity generating facility with a total capacity exceeding 50 megawatts (MW) and electrical storage facility with an export connection to the National Grid (hereafter referred to as "the Development"). Therefore, the Development is classified as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008. An Environmental Impact Assessment (EIA) is required to be undertaken for the Development and as such The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) apply.
- The Development would be located to the northwest of Newark, in Newark and Sherwood district, Nottinghamshire, East Midlands. The Development would be within an area bound by the Order Limits. The Order Limits are to the west of the A1, north of the A617, east of Eakring, and south of Egmanton, occupying two main areas to the north and north-west of Staythorpe. The Order Limits are shown on Environmental Statement (ES) Figure 1.1: Development Location [EN010162/APP/6.3.1.1].
- The Development consists of land parcels proposed for solar PV panels and associated infrastructure (Work No. 1), connected by cable route areas (Work No. 2). Up to four intermediate substations (Work No. 4) will be located around the solar areas, and a Battery Energy Storage System (BESS; Work No. 5a) and a 400 kV Compound (Work No. 5b) will collate the electrical energy and step up the voltage before cabling it to the National Grid Staythorpe Substation, either through Work No. 6 or alternatively via the Consented Staythorpe BESS (Work No. 7). Road works (Work No. 8) will be undertaken principally to create passing places and to create or upgrade access points. Other areas within the Order Limits are identified for mitigation and enhancement (Work No. 3). The Work Areas are shown on ES Figure 5.1 [EN010162/APP/6.3.5.1], and a description of the physical



characteristics of the whole Development and the land-use requirements during the construction and operational phases is provided in ES Volume 2, Chapter 5, Development Description [EN010162/APP/6.2.5].

A glossary of terms is provided in ES Chapter 20 [EN010162/APP/6.2.20].

1.2 PURPOSE AND STRUCTURE OF THIS STATEMENT

- Paragraph 4.11.2 of the National Policy Statement (NPS) for Energy (EN-1)1 states that it is for the Applicant to ensure that there will be necessary infrastructure and capacity within an existing or planned transmission or distribution network to accommodate the electricity generated.
- This Grid Connection Statement forms part of a suite of documents required to accompany the Application in accordance with Section 55 of the Planning Act 2008² and Regulations 5 and 6 of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the APFP Regulations).
- This Statement has been prepared in accordance with Regulation 6(1)(a)(i) of the APFP Regulations³, which requires an applicant for a Development Consent Order (DCO) relating to an onshore generating station to submit a statement identifying the party responsible for designing and constructing the connection to the electricity grid.
- 11 This Statement is structured into the following Sections:
 - Introduction:
 - Grid Connection Contractual Agreements;
 - Responsibilities for Designing and Building the Grid Connection;
 - Acquisition of Land Rights Required for the Grid Connection; and
 - Conclusion.

¹ Department for Energy Security and Net Zero (2024). National Policy Statement for Energy (EN-1), Paragraph 4.11.2, November 2023. [Online]. Available: https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1 (accessed: June 2025).

² UK Government (2008). Planning Act 2008, Section 55 – Acceptance of applications, [Online]. Available: https://www.legislation.gov.uk/ukpga/2008/29/section/55 (accessed: June 2025).

³ UK Government (2009). The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009, Regulation 6(1)(a)(i), [Online]. Available: https://www.legislation.gov.uk/uksi/2009/2264/regulation/6 (accessed: June 2025).



2 GRID CONNECTION CONTRACTUAL AGREEMENTS

2.1 NATIONAL GRID

- The Applicant has received a grid connection offer from National Grid Electricity System Operator Limited (NGESO) to connect the Development to the National Electricity Transmission System (NETS) (A/NGET/LOND/21/STAY-EN). NGESO, which was the system operator for the NETS and part of National Grid responsible for making connection offers, transitioned to the National Energy System Operator (NESO) on 1 October 2024. Any references to NESO should be understood to include prior interactions with NGESO. National Grid Electricity Transmission (NGET) serves as transmission owners and is the entity within National Grid responsible for the ownership and maintenance of the National Grid Staythorpe Substation (Work no. 6).
- The engagement between the Applicant, NESO and NGET to date has resulted in the Applicant receiving a revised grid connection offer in the form of an Agreement to Vary the Bilateral Connection Agreement (AtV BCA) on the 13th June 2025. This agreement amended the Stage 1 connection date to May 2027. The Stage 2 connection date is 2028.
- As part of the agreement with NESO, the Applicant is also required to agree to comply with the Connection and Use of System Code (CUSC), which sets out the contractual framework for connecting to and using the National Electricity Transmission System (NETS). This agreement was entered into in 1 October 2024 with a CUSC accession agreement with NESO.

3 RESPONSIBILITIES FOR DESIGNING AND BUILDING THE GRID CONNECTION

3.1 RESPONSIBILITIES OF THE APPLICANT

- The Applicant is required to deliver the infrastructure in Work no. 5a (BESS) and Work no. 5b (400 kV Compound) that would include transformers and other electrical equipment to combine the electricity from Work no. 4 (Intermediate Substations), storing if required for release when electricity demand necessitates. Electricity would be transmitted from Work no. 5b 400 kV compound (either directly from the Work no.1 Solar PV or via storage in the batteries) at 400 kV along a cable either ducted or direct-buried below the surface of the ground to Work no. 6 National Grid Staythorpe Substation.
- Two alternative options are proposed to connect the 400 kV cable to the National Grid Staythorpe Substation:
 - Connect via the Consented Staythorpe BESS (Work no. 7) 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); or
 - Connect the 400 kV cable to connect directly to the National Grid Staythorpe Substation (Work no. 6).



- 17 The need for these alternative options results from the grid support BESS not having yet been constructed. If this were to be constructed in time for the Development, then connecting via its substation allows for a shared connection. Alternatively, the 400 kV cable could run directly to the same connection point at the existing National Grid Staythorpe Substation (Work no. 6). Both of these options are assessed within the DCO to allow for this flexibility.
- At the existing National Grid Staythorpe Substation, the electricity would pass through new metering equipment and connect to the existing 400 kV electrical infrastructure within the NGET compound (Work No. 6). This new equipment and connection would either be installed as part of the Consented Staythorpe BESS (Work No. 7) or, if not delivered through that project, installed separately as part of this Development.
- In accordance with the grid connection offer with NESO the Applicant will construct and connect solar generation equipment to the National Grid Staythorpe Substation (Work no. 6) at a level consistent with the Connection Entry Capacity as set out in Appendix C of the Bilateral Connection Agreement.
- In addition, the Applicant is to construct and connect a Battery Energy Storage System (additional capacity) to the National Grid Staythorpe Substation (Work no. 6) at a level consistent with the Connection Entry Capacity as set out in Appendix C of the Bilateral Connection Agreement.
- The Applicant will also design and complete the following to support the connection:
 - Protection and control modifications as required
 - Associated civil works
 - Miscellaneous and minor works

3.2 RESPONSIBILITIES OF NATIONAL GRID ELECTRICITY TRANSMISSION

- There are various transmission network enabling works required to securely connect the Development to the electricity transmission network. These wider works, on the National Grid network, will be completed by National Grid in accordance with National Grid's contract with the Applicant. Furthermore, there are minor works at the Staythorpe BESS substation to facilitate the interconnection of the project.
- NGET will be responsible for the design and construction of all non-contestable works (Staythorpe 400kV busbar extension). These works will fall under NGET's control, form part of the Applicants grid connection agreement with NESO, and are therefore not included as part of the authorised development in the Draft Development Consent Order [EN010162/APP/3.1].
- Any requirements or modifications necessary to facilitate the connection at the Staythorpe 400kV substation will be carried out by NGET and are not included as part of the authorised development. These include minor works such as protection setting modifications.



4 ACQUISITION OF LAND RIGHTS REQUIRED FOR THE GRID CONNECTION

- The status of land rights, at the time of the DCO submission, is detailed in the Pre-application Land and Rights Negotiations Tracker [EN010162/APP/4.4].
- Negotiations for the purchase of land, rights, and interests are ongoing for any new rights required for the Development, where voluntary agreements have not yet been reached. If these agreements cannot be secured, the Applicant will need to seek compulsory acquisition powers (CPO) to obtain the necessary land, rights, and interests. This will also allow for the acquisition, overriding, or extinguishment of any third-party interests or encumbrances affecting such land, rights, and interests, as outlined in the draft DCO, ensuring that the Development can be constructed, operated, and maintained.
- 27 The Applicant remains committed to acquiring the necessary land and rights through negotiation wherever possible, and discussions with landowners are ongoing.

5 CONCLUSION

- The Applicant is required to submit a statement in accordance with Regulation 6(1)(a)(i) of the APFP Regulations³, outlining who will be responsible for designing and constructing the connection to the electricity grid.
- It is considered that this Statement confirms to the Secretary of State the requirement outlined above, namely:
 - The Applicant has received and accepted a grid connection offer from NESO to connect the Development to the NETS;
 - The grid connection would be to the National Grid Staythorpe Substation from Work No. 5b, either directly via cables laid pursuant to Work No. 2 via Work No, 6, or via cables pursuant to Work No. 2 through the Consented Staythorpe BESS at Work No. 7;
 - The Applicant will be responsible for designing and constructing the onsite substations (Work no. 4 and 5b) laying the cable (within Work no. 2) and connecting into either Work no. 6 or Work no. 7. NGET are responsible for the non-contestable works in Work no. 6; and
 - The Applicant has, or will have, the ability to secure the necessary land and rights to construct, operate, maintain, and ultimately decommission the Development.