

Steeple Renewables Project

Grid Connection Statement

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Grid Connection Statement

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1. Introduction

1.1 Overview

- 1.1.1 Steeple Solar Farm Limited (“the Applicant”) is applying to the Secretary of State for Energy Security and Net Zero for a Development Consent Order (“DCO”) under Section 37 of the Planning Act 2008 (“PA 2008”) for the construction, operation, maintenance and decommissioning of ground mounted solar photovoltaic arrays and an associated Battery Energy Storage System (“BESS”) (the “Proposed Development”) on land located within the administrative area of Bassetlaw District Council (“BDC”) and approximately 5km to the south of Gainsborough including part of the existing West Burton Power Station site around the existing 400kV substation.
- 1.1.2 The Proposed Development would have a generating capacity of over 50MW and would be situated on land to the south of the former West Burton Power Station. The Proposed Development, comprising photovoltaic panel arrays, a central electricity substation and associated BESS together with access, landscaping and other works would be located on 888.3 hectares of land currently in use for arable production and grazing. New high voltage 400kV underground electricity cabling would be installed by The Applicant from the Proposed Development’s substation located through land at the northern edge of the Order limits, to connect the Proposed Development to the national grid at West Burton electricity substation, located at the former West Burton Power Station which sits immediately to the west of the river Trent.

1.2 Purpose of this Document

- 1.2.1 Regulation 6(1)(a)(i) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (“the APFP Regulations”) requires applicants seeking development consent for an onshore generating station to provide a statement as to who will be responsible for designing and building the connection to the electricity grid. This Statement provides that information, and should be read as necessary alongside the other documents which form the application for Development Consent.
- 1.2.2 This Statement describes the context to the grid connection and explains the responsibilities for the designing, consenting and construction of the grid connection together with the necessary land and rights required for making the connection to the grid.

1.3 Definition and Terms

1.3.1 This document uses the following specific terminology:

- **Project substation** – the new substation to be constructed as part of the Proposed Development on land to the south of the former West Burton Power Station; and
- **West Burton substation** – the existing substation located within the boundary of the former West Burton Power Station which is operated by National Grid Electricity Transmission.

2. Grid Connection

2.1 Context

- 2.1.1 The solar photovoltaic panel arrays within the Order limits would generate electricity which would be collected and directed to the Proposed Development's substation, to be constructed on the northern most part of the site.
- 2.1.2 The Proposed Development includes a Battery Energy Storage System (BESS) which would be located to the south east of the Project Substation. The BESS would be used to store electricity generated by the solar photovoltaic arrays in order to then release that to the national electricity grid when appropriate. The BESS would also be capable of importing and storing electricity from the national grid, before then releasing that back to the grid at appropriate times. BESS facilities perform an important role in managing supply and demand across the national grid and improving grid resilience in performing that storage role.
- 2.1.3 The Proposed Development's substation would be connected to the national grid via an underground 400kV cable which would run northeastwards through land within the Order limits, passing under the access road to the sand and gravel quarry under construction by Aggregate Industries, before passing into land at the former West Burton Power Station and then into the National Grid Electricity Transmission West Burton Substation, at which point it would be connected into the substation infrastructure and the national electricity grid.
- 2.1.4 The Proposed Development makes provision for various permanent and temporary tracks and construction laydown area and compounds for the purpose of constructing the Proposed Development's substation and for the laying of the cable.
- 2.1.5 To lay the cabling within the land ownership of EDF and National Grid at West Burton substation, the existing vehicular access to the former power station will be used as the access to the site. National Grid's existing access points and vehicular parking would then be used as necessary for any maintenance and monitoring of the connection infrastructure within the West Burton substation compound.

2.2 Works

- 2.2.1 There are a number of key works which relate specifically to the grid connection:

- Work No. 3 – works in connection with a new 400/33kV onsite substation, which provides for the construction of the project substation itself;
- Work No.4 – works to install 400kV electrical cables connecting Work No. 3 to Work No. 5; and
- Work No.5 – connection installation works to the existing transmission network substation.

2.2.2 The spatial location of those Works is shown on the Works Plan, EN010163/APP/2.2.

2.2.3 Work Nos. 3, 4 and 5 therefore provide for the construction of the Proposed Development's substation, the installation of cables between the Proposed Development's substation and West Burton substation, and the connection of that cable into the existing electrical infrastructure within West Burton substation.

2.2.4 Work No.10 provides for temporary construction and decommissioning of site compounds, which would include those used for the purpose of constructing the grid connection.

2.3 Grid Connection Agreement and Generation Licence

2.3.1 The solar photovoltaic arrays and the BESS within the Proposed Development would supply electricity to National Grid, who are the electricity transmission system operator responsible for supplying electricity to Great Britain.

2.3.2 The Proposed Development would connect to the electricity system via the West Burton Substation which is infrastructure operated by National Grid Electricity Transmission ("NGET") on land which is owned by EDF.

2.3.3 Due to the generating capacity of the Proposed Development being greater than 50MW, the Applicant made an application to the Office of Gas and Electricity Markets authority (OFGEM) on the 9th March 2023 for an electricity generation licence under the Electricity Act 1989. Notice was given on the 14th April 2023 that the electricity generation licence had been granted.

2.3.4 The Applicant has separately secured a grid connection agreement with NGET to import and export the full electrical capacity of the Proposed Development and has secured a connection date of October 2029.

2.3.5 The Applicant therefore confirms that the electricity generated by Work No.1 (the solar photovoltaic panel arrays) and the electricity imported and exported by Work

No.2 (the BESS) would be transmitted to the National Grid, via the West Burton Substation which is owned and operated by NGET.

3. Design, Consent and Construction Responsibilities

3.1 Responsibilities of Steeple Renewables Projects

3.1.1 The Applicant, and those contractors it appoints to construct the Proposed Development, would be responsible for designing, building and commissioning each element of the grid connection in accordance with National Grid specification, as follows:

- The Proposed Development's substation (Work No.3);
- The cable connection between the Proposed Development's substation and the West Burton Substation (Work No .4)
- The connection point of the cable to the West Burton substation infrastructure (Work No.5); and
- Associated works including construction site compounds (Works No. 10).

3.1.2 The Applicant would also have the responsibility of decommissioning the same infrastructure identified above at the end of the operational lifetime of the Proposed Development.

3.1.3 The construction, operation and decommissioning of the Proposed Development, including the grid connection, will be undertaken in accordance with a Construction Environmental Management Plan, Decommissioning Management Plan and Fire Risk Management Plan respectively. The application includes an Outline CEMP, DMP and FRMP (Appendices 4.1, 4.2 and 4.3 of the Environmental Statement, Document 6.3.4) and detailed versions of these management plans are secured by DCO requirement.

3.2 Responsibilities of National Grid

3.2.1 NGET will be responsible for facilitating the physical connection to the West Burton substation via the infrastructure present, which is sufficient to allow for that connection to be made without any expansion of the West Burton substation. NGET are expected to be responsible for some elements of works within the West Burton substation to make that connection.

3.3 Acquisition of Land Rights

3.3.1 The 400/132kV substation for the Proposed Development sits within the Order limits. The underground 400kV cabling will travel northeast through the Steeple

- Renewables Project and cross the quarry access road via horizontal directional drilling or trenching, into the land surrounding West Burton Substation.
- 3.3.2 The Statement of Reasons, EN010163/APP/4.1, provides detail of the engagement of the Applicant with those parties who would be affected by the Proposed Development. As detailed in the Statement of Reasons, the Applicant has sought to secure voluntary option agreements with landowners for all land required to install, maintain and decommission of the cable route, including EDF, UKIFS and National Grid for the land at the West Burton Substation. As part of the DCO, the Applicant is seeking compulsory acquisition of the land and rights required to deliver the Proposed Development to the extent that those rights would be necessary for the installation, operation and maintenance of the Proposed Development and are not secured voluntarily.
- 3.4 Consent for the Grid Connection Works**
- 3.4.1 The Grid Connection forms part of the Proposed Development for which development consent is being sought via the DCO Application and is reflected in the various works identified in Section 2.2 of this Statement.
- 3.4.2 As such if the DCO is granted on the same terms as set out in the draft DCO, EN010163/APP/3.1, then development consent for all aspects of the electrical connection will have been secured.

4. Summary and Conclusion

4.1.1 The Applicant is required to submit a statement pursuant to Regulation 6(1)(a)(i) of the APFP Regulations, stating who will be responsible for designing and building the connection to the electricity grid.

4.1.2 This Grid Connection Statement confirms the following:

- The Applicant has secured an electricity generation licence for the proposed scheme under the Electricity Act 1989;
- The Applicant has secured a grid connection agreement from NGET to connect the Proposed Development to the national electricity grid at West Burton substation;
- The connection will be made from the Proposed Development's substation within the solar site to the NGET West Burton Substation via a new underground 400kV cable to be installed by the Applicant;
- The Applicant will be responsible for designing and building the Project Substation (Work No.3), the grid connection cable (Work No.4) and the connection to the West Burton substation (Work No.5). NGET will conduct some works within the West Burton substation compound to facilitate connection to the existing electrical infrastructure;
- The Applicant has, or will have via the DCO, the ability to obtain the necessary land and rights in order to provide for the grid connection between the Proposed Development and the West Burton substation electrical infrastructure;
- Consent for the grid connection would be provided through the DCO, as the grid connection forms part of the Proposed Development for which Development Consent is being sought.