Springwell Solar Farm

Grid Connection Statement

Reg 6(1)(a)(i) and Reg 5(2)(p)

Planning Act 2008

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

EN010149/APP/7.6
November 2024
Springwell Energyfarm Ltd

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1. Executive Summary

1.1.1. This Grid Connection Statement has been prepared with respect to an application for a Development Consent Order (DCO) for the construction, operation, maintenance, and decommissioning of Springwell Solar Farm (hereafter the 'Proposed Development').

1.1.2. A summary of the description of the Proposed Development can be found in Section 3.1 of the **Environmental Statement (ES) Volume 1, Chapter 3: Proposed Development Description [EN010149/APP/6.1].** The terminology used in this document is defined in the **Glossary [EN010149/APP/6.1]**.

1.1.3. The Proposed Development will comprise the construction, operation, maintenance, and decommissioning of a solar photovoltaic (PV) electricity-generating facility with a total capacity exceeding 50 megawatts (MW) and an export connection to the National Electricity Transmission System (NETS). The Scheme will be located within the Order Limits (as described in the DCO Application documents) and is the subject of the DCO Application.

1.1.4. Springwell Energyfarm Ltd has a grid connection agreement with National Grid Electricity Transmission to export 800MW (AC) of clean power to the NETS.

1.1.5. The Proposed Development will be connected to the NETS via a Point of Connection ('PoC') at Navenby 400kV Substation ('National Grid Navenby Substation'), which will be located in close proximity to the Proposed Development. The location of the Proposed Development's land parcels and the PoC minimise the additional above or below-ground transmission infrastructure required to export the power generated to customers in Lincolnshire and nationally.

1.1.6. As part of the Proposed Development, a new single substation (400/33kV) will also be located onsite (the 'Springwell Substation'), close to the new National Grid Navenby Substation. The Springwell Substation will comprise electrical infrastructure such as transformers, switchgear, control buildings, and metering equipment as required to facilitate the export of electricity from the Proposed Development to the NETS via the National Grid Navenby Substation. The Springwell Substation will also include ancillary buildings, including office space, welfare facilities, and operational monitoring and maintenance equipment.

1.1.7. The Proposed Development qualifies as a Nationally Significant Infrastructure Project (NSIP). It will require a Development Consent Order (DCO) from the Secretary of State for Energy Security and Net Zero (the 'Secretary of State'), due to its generating capacity exceeding 50 megawatts.

1.1.8. This Grid Connection Statement has, therefore, been prepared on behalf of the Applicant to support the DCO Application. It should be read with the other documents submitted with the DCO Application. This Grid Connection Statement is submitted pursuant to Regulation 6(1)(a)(i) of the Infrastructure

Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 ('APFP Regulations'), which requires the Applicant to state who will be responsible for designing and building the connection to the electricity grid from the Proposed Development.

1.1.9. The Applicant will be responsible for designing and building the Springwell Substation and Grid Connection to the PoC. The Applicant may also be responsible for construction of the relevant generator bay within the National Grid Navenby Substation. Responsibility for construction of the generator bay works will depend on the National Grid Navenby Substation design chosen by National Grid Electricity Transmission (NGET) and the outcome of the current Modification Application process which is expected in November 2024. NGET will be responsible for obtaining consent for, designing and building the National Grid Navenby Substation.

1.1.10. The Springwell Substation and associated cabling form part of the Proposed Development, and the Applicant has or will have the ability to procure the necessary land and rights to undertake the necessary works to connect the Springwell Substation to the National Grid Navenby Substation. This is stipulated in the **Draft DCO [EN010149/APP/3.1]**. The Grid Connection and the Springwell Substation, cabling and associated works required to facilitate this connection to the National Grid Navenby Substation form part of the Proposed Development for which development consent is sought.

2. Introduction

2.1.1. This Grid Connection Statement (the 'Statement') has been prepared by Springwell Energyfarm Ltd as part of the DCO Application for the Proposed Development.

2.1.2. Springwell Energyfarm Ltd has a grid connection agreement with National Grid Electricity Transmission to export 800W (AC) of clean power to the NETS.

2.1.3. The Proposed Development comprises the construction, operation and maintenance, and decommissioning of a Ground-mounted Solar PV generating station electricity generating facility with a total capacity exceeding 50MW and an export connection to the National Grid and will require an order granting development consent (DCO) under the Planning Act 2008.

2.1.4. This Statement forms part of the DCO Application for the Proposed Development submitted by the Applicant to the Planning Inspectorate (PINS). The decision on whether to grant a DCO will be made by the Secretary of State for Energy Security and Net Zero, hereafter referred to as the 'Secretary of State', pursuant to the Planning Act 2008.

2.1.5. The design of the Proposed Development has evolved throughout the environmental assessment process to avoid or minimise environmental effects and in response to consultation and engagement feedback, where appropriate. The location of the Proposed Development is shown in **ES Volume 2, Figure 1.1: Location Plan [EN010149/APP/6.2]** and described in **ES Volume 1, Chapter 2: Location of the Proposed Development [EN010149/APP/6.1]**, with the consideration of alternatives and the evolution of the design of the Proposed Development, is summarised in **ES Volume 1, Chapter 4: Reasonable Alternatives Considered [EN010149/APP/6.1].** The extent of the Order Limits is shown on the **Location, Order Limits, and Grid Coordinates Plans [EN010149/APP/2.1]**.

2.1.6. The area subject to the DCO Application where the Proposed Development will be carried out is shown in the Order Limits. The principal components of the Proposed Development include:

- Solar PV development including;
  - Ground Mounted solar PV generating station. The generating station will include Solar PV modules and mounting structures;
  - Balance of Solar System (BoSS), which comprises inverters, transformers, and switchgear;
- 400kV Grid Connection Corridor to connect the Springwell Substation and proposed National Grid Navenby Substation;
- Satellite Collector Compounds comprising switchgear, transformers, ancillary equipment and operation, maintenance, security and welfare units;

- A project substation (the 'Springwell Substation') compound, which will include substation, switching and control equipment, office/control/welfare/security buildings, storage areas, and provisions for vehicular parking and material laydown;
- Battery Energy Storage System (BESS) compound, including batteries and associated inverters, transformers, switchgear and ancillary equipment and their containers, enclosures, monitoring systems, air conditioning, electrical cables, fire safety infrastructure and operation, maintenance, security and welfare facilities;
- Underground cabling will connect the Solar PV modules and BESS compound to the BoSS, Collector Compounds, and the Springwell Substation.
- Ancillary infrastructure works, including boundary treatments, security equipment, earthing devices, fencing, lighting, earthworks, surface water management, internal tracks and any other works identified as necessary to enable the development;
- Landscaping, habitat management, biodiversity enhancement and amenity improvements; and
- Works to facilitate vehicular access to the Site.

2.1.7. **ES Volume 1, Chapter 3: Description of the Proposed Development [EN010149/APP/6.1]** includes a detailed description of the scheme.

2.2. Purpose and Structure of this Statement

2.2.1. Paragraph 4.11.2 of the Overarching National Policy Statement (NPS) for Energy (EN-1) emphasises 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.

2.2.2. This Statement is part of a suite of documents which must accompany the DCO Application pursuant to Section 55 of the PA 2008 and Regulations 5 and 6 of the APFP Regulations.

2.2.3. This Statement has been prepared in accordance with Regulation 6(1)(a)(i) of the APFP Regulations, which requires an applicant for a DCO in respect of an onshore generating station to provide a statement of who will be responsible for designing and building the connection to the electricity grid.

2.2.4. The Statement is structured as follows:

- Section 1: Executive Summary
- Section 2: Introduction;
- Section 3: Grid Connection Agreement;
- Section 4: Elements of Grid Connection;

- Section 5: Responsibilities for Designing and Building the Grid Connection;
- Section 6: Acquisition of Land Rights;
- Section 7: Consent for the Grid Connection Works;
- Section 8: Conclusion.

3. Grid Connection Agreement

3.1.1. The Applicant has received a grid connection offer from National Grid Electricity System Operator Limited (NGESO) to connect the Scheme to the NETS. NGESO was the system operator for the NETS, and the body within National Grid that made connection offers. The system operator changed to National Energy System Operator (NESO) on 1 October 2024. National Grid Electricity Transmission (NGET) operate as the transmission owner, and as such, NGET is the body within National Grid responsible for constructing, owning and operating the National Grid Navenby Substation.

3.1.2. The Applicant first met with NGESO regarding the potential of a grid connection on 12th November 2020. The grid connection offer for connection at National Grid Navenby Substation was issued on 17th December 2021 and accepted by the Applicant on 20th April 2022.

3.1.3. The grid connection agreement contains 2 stages of connection dates, with a 50:50 split of capacity between April 2028 and April 2030 connection dates. As publicly available on the 'TEC Register' which is found on National Energy System Operator (NESO) website (https://www.neso.energy/data-portal/transmission-entry-capacity-tec-register)

3.1.4. The Applicant submitted a Modification Application on 23rd May 2024 to modify the Completion Date and certain technical details of the connection agreement, in line with 1) a revised project schedule, as reflected in the construction period defined within the DCO Application, and 2) the projected timeline for the National Grid Navenby Substation to be constructed (forecast operational by Q4 2029 based on 2024 consultation materials). A revised connection offer resulting from this Modification Application is expected by November 2024, and the Applicant has 3 months to review and agree any changes to the existing agreement.

3.1.5. The grid connection offer allows the export of up to 800MW of electricity, and for the import of electricity for ancillary services / grid balancing services, to/from the NETS via a connection to the National Grid Navenby Substation.

3.1.6. As such, the Applicant confirms that the output of Ground Mounted solar PV generating station (Work No. 1 of **Schedule 1** of the **Draft DCO [EN010149/APP/3.1]**), and Battery Energy Storage System (Work No. 4) of Schedule 1 of the **Draft DCO [EN010149/APP/3.1]**, will be exported to the NETS via the National Grid Navenby Substation, owned and operated by NGET.

4. Elements of Grid Connection

4.1. Introduction

4.1.1. All Works No. stated below, reference **Schedule 1** of the **Draft DCO [EN010149/APP/3.1].**

4.1.2. The electricity generated by the Proposed Development will be exported to the NETS via new below-ground grid connection cables located within the Grid Connection Infrastructure (Work No. 5). This will connect the new Springwell Substation Compound (Work No. 2) and the National Grid Navenby Substation.

4.1.3. The grid connection cables comprised in Grid Connection Infrastructure (Work No. 5) will consist of one or two 400kV cable circuits, each consisting of three cables, which will run approximately 2.8km from Springwell Substation to National Grid Navenby Substation.

4.1.4. The Works Areas where the following Works will be located are identified on the **Works Plans [EN010149/APP/2.3]:**

- Work No. 2: Springwell Substation Compound;
- Work No. 3: Satellite Collector Compounds;
- Work No. 4: Battery Energy Storage System Compound;
- Work No. 5: Grid Connection Infrastructure.

4.1.5. It is assumed that the construction phase, including the process of building the Springwell Substation and Grid Connection Route, would be commenced in Q3 2027, and be for a period of 24 months.

4.2. Springwell Substation

4.2.1. The Springwell Substation (Work No. 3) will convert electricity generated by the Solar PV Site (Work No. 1) and stored by the Battery Energy Storage System Compound (Work No. 4) to 400kV for onward transmission to the NETS via the Grid Connection Infrastructure (Work No. 5).

4.2.2. The Springwell Substation will also convert from 400kV electricity imported from the NETS via the Grid Connection Route for storage in the Battery Energy Storage System Compound (Work No. 4).

4.2.3. The Springwell Substation (Work No. 2) will comprise electrical infrastructure, as required to facilitate the export and import of electricity between the Proposed Development and the NETS, including:

- substation, switch room buildings and ancillary equipment including auxiliary transformers and reactive power units;

- buildings housing control, offices, storage, workshop, security and welfare facilities;
- monitoring and control systems for this Work No. 2 and Work Nos. 1, 3, 4 and 5;
- 400 kV harmonic filter compound, 400kV reactive power compensation compound; and
- electrical and control cables including electrical cables connecting to Work Nos. 1, 3 and 4.

4.3. Grid Connection Infrastructure

4.3.1. The route of the Grid Connection Infrastructure (Work No. 5) will run from Springwell Substation (Work No. 2) passing Gorse Hill Covert to the east and running north and then west to connect to the National Grid Navenby Substation as shown in **ES Volume 2, Figure 3.1: DCO Zonal Masterplan [EN010149/APP/6.2].**

4.3.2. The cables between Springwell Substation and National Grid Navenby Substation will be installed below ground via excavated trenching or Horizontal Directional Drilling (HDD) construction methods. Cables will be laid at approximately 1.5m depth below ground level, except where crossing infrastructure such as utilities, roads or ditches (where cables will be laid at an appropriate separation depth from the infrastructure).

4.3.3. The construction, operation, and (where applicable) decommissioning of all elements of the Grid Connection will be undertaken (respectively) in accordance with the **Outline Construction Environmental Management Plan [EN010149/APP/7.7]**, the **Outline Operational Environmental Management Plan [EN010149/APP/7.10]** and the **Outline Decommissioning Environmental Management Plan [EN010149/APP/7.13]**

4.4. National Grid Navenby Substation

4.4.1. NGET is in the process of preparing and submitting a Planning Application under the Town and Country Planning Act 1990 (TCPA 1990) to North Kesteven District Council.

4.4.2. NGET conducted a consultation on their proposal to build a substation in the Navenby area between September to October 2024. The proposed National Grid Navenby Substation is located at Heath Lane, Navenby LN5 0AY, approximately 1.4km from the village of Navenby. National Grid's substation planning application will be submitted in Spring 2025 to North Kesteven District Council and section 37 of The Electricity Act 1989 to the Department of Energy Security and Net Zero (DESNZ).

4.4.3. Subject to approval, National Grid plans to start construction in summer 2026, the construction of the four new pylons in spring/summer 2028, and the completion of the National Grid Navenby Substation in late 2029.

4.4.4. The Applicant acknowledges that different levels of information may be available at different times and, as such, the Applicant has taken a proportionate approach to what information is available at the time of submission. Therefore, the Work No. 5 Grid Connection Infrastructure secured through **Schedule 1** of the **Draft DCO [EN010149/APP/3.1]** has been shown on the **Works Plans [EN010149/APP/2.3]** to cover the proposed National Grid Navenby Substation site for cabling and associated works required to facilitate this connection to the National Grid Navenby Substation. This is to ensure the Applicant has the necessary authorisation and powers to connect into the National Grid Navenby Substation.

5. Responsibilities for Designing and Building the Grid Connection

5.1. Responsibilities of the Applicant

5.1.1. The Applicant and its appointed contractors will be responsible for designing and building the following elements of the grid connection:

- Springwell Substation (Work No. 2);
- Grid Connection Infrastructure (Work No. 5).

5.1.2. The Applicant may also be responsible for construction of the relevant generator bay within the National Grid Navenby Substation, under the planning consent for the National Grid Navenby Substation that will be obtained by NGET. These works are expected to comprise the termination of the underground Grid Connection Infrastructure cables to above-ground cable sealing ends, the connection of the sealing ends to busbars within the National Grid Navenby Substation, and the installation of related infrastructure including disconnectors, switches and instrument transformers. Responsibility for constructing the generator bay works will depend on the substation design chosen by NGET and the outcome of the current Modification Application process which is expected in November 2024.

5.1.3. Under the **Draft DCO [EN010149/APP/3.1]** the Applicant has proposed that NGET would also have the benefit of the powers (in addition to the Applicant) in connection with the Grid Connection Infrastructure (Work No. 5) and it may therefore also be responsible for constructing that part of the grid connection route that connects into the National Grid Navenby Substation.

5.2. Responsibilities of National Grid Electricity Transmission

5.2.1. NGET will be responsible for the construction of the National Grid Navenby Substation and facilitating the connection of Springwell Solar Farm's grid connection cables within National Grid Navenby Substation.

5.2.2. NGET may also be responsible for construction of the relevant generator bay within the National Grid Navenby Substation. Responsibility for construction of the generator bay works will depend on the substation design chosen by NGET and the outcome of the current Modification Application process which is expected in November 2024.

5.2.3. NGET will be responsible for obtaining planning permission under the TCPA 1990 for the design and construction of National Grid Navenby Substation. NGET is conducting a consultation on their proposal to build a substation in the Navenby area. The proposed National Grid Navenby Substation is located at Heath Lane, Navenby LN5 0AY, approximately 1.4km from the village of Navenby. National Grid's substation planning application will be submitted in

Spring 2025 to North Kesteven District Council and section 37 of The Electricity Act 1989 to DESNZ.

5.2.4. The works will be carried out in accordance with the TCPA Consent and National Grid requirements; it is intended that NGET will be responsible for constructing the point of connection for the Springwell Solar Farm to connect into via Works No. 5 Grid Connection Infrastructure secured through Schedule 1 of the **Draft DCO [EN010149/APP/3.1]**.

6. Acquisition of Land Rights

6.1.1. As shown in the **Schedule of Negotiations and Powers Sought [EN010149/APP/4.4],** discussions have been ongoing with the relevant land interests, detailed below.

6.2. Solar PV Site

6.2.1. The Applicant has been successful in securing the majority of the property rights it needs for the Solar PV Site, whilst they continue to negotiate and finalise agreements for the remaining land, compulsory acquisition powers are sought for the Solar PV Site to ensure that no third-party rights encumber the ability to undertake the Proposed Development.

6.3. Grid Connection Route

6.3.1. The Grid Connection route involves cabling from the Springwell Substation, within and through the fields owned by the same landowner as the majority of the Solar PV Site to the field proposed to be used for the new National Grid Navenby Substation. The Applicant has been engaging with National Grid and the owners of the land impacted by Grid Connection route to secure the necessary agreements via negotiation. The cable route will pass under two existing roads, to reach the proposed National Grid Navenby Substation.

6.3.2. The cabling route then passes under the field proposed to be acquired by National Grid for the new National Grid Navenby Substation, in order to connect the Proposed Development to the National Grid Navenby Substation. Currently the freehold of this land is held by a third-party landowner with whom the Applicant has been engaging to secure the land and rights required to construct and operate the Scheme. The Applicant is also likely to need to reach a voluntary agreement with National Grid if it subsequently acquires an interest in this land (it currently only holds Category 2 rights with respect of apparatus) for rights over this land.

6.3.3. Despite the agreements reached to date and the intention to continue to negotiate to reach voluntary agreements, it is necessary for the Applicant to seek compulsory acquisition powers to secure such land, rights and interests and to ensure that any third-party interests or encumbrances affecting such land, rights and interests may be acquired, overridden or extinguished pursuant to the draft DCO, thereby ensuring that the Proposed Development can be constructed, operated and maintained. The Applicant nevertheless remains committed to obtaining necessary land and rights by negotiation where possible.

7. Consent for the Grid Connection Works

7.1.1. The Grid Connection, comprising the Springwell Substation (Work No. 2) and the Grid Connection Infrastructure (Work No. 5), forms part of the Proposed Development for which development consent is being sought via the DCO Application.

7.1.2. If the same terms as those set out in the **Draft DCO [EN010149/APP/3.1]** are granted, development consent for the Grid Connection works for which the Applicant is responsible, as described in this Statement, will have been secured.

7.1.3. NGET is preparing and submitting a Planning Application to North Kesteven District Council, expected to be submitted in Spring 2025 as stated at NGET public consultation.

7.1.4. NGET will seek consent for the Navenby 400kV Substation, which is expected to be via a TCPA application due to be submitted in Spring 2025 to North Kesteven District Council and via section 37 of The Electricity Act 1989 to DESNZ. The Applicant is not aware of any reason why this permission should not be obtained, in which case permission for the National Grid Navenby Substation will have been secured.

8. Conclusion

8.1.1. 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.

8.1.2. This Grid Connection Statement provides confirmation to the Secretary of State of the requirement above, namely:

- The Applicant has received a grid connection offer from NGESO to connect the Scheme to the NETS and has accepted that offer;
- A connection to the proposed Navenby 400kV Substation will be provided via 400kV underground cables from the proposed Springwell Substation within the Proposed Development.

8.1.3. All parts of the Grid Connection are within the Order Limits; the works required for the Grid Connection are included in the works describing the authorised development set out in **Schedule 1** of the **Draft DCO [EN010149/APP/3.1]** and are assessed in the Environmental Statement submitted as part of the DCO application for the Proposed Development.

8.1.4. The Applicant has or will have, the ability to procure the necessary land and rights in order to accommodate the Grid Connection Corridor.

8.1.5. Consent for Navenby 400kV Substation will be sought by NGET. The Applicant is not aware of any reason why this permission should not be obtained.

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