

# **Dean Moor**Solar Farm

### **Grid Connection Statement**

on behalf of FVS Dean Moor Limited

March 2025

Prepared by: Stantec UK Ltd

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# DEAN MOOR SOLAR FARM GRID CONNECTION STATEMENT PLANNING INSPECTORATE REFERENCE EN010155 PREPARED ON BEHALF OF FVS DEAN MOOR LIMITED

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

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#### Contents

1	Introduction		1
	1.1	Purpose of this Document	1
	1.2	The Proposed Development	1
	1.3	The Applicant	2
	1.4	Overview and Structure of the Statement	3
2	Descrip	otion of the Grid Connection	4
	2.1	Connecting to the Electricity Grid	4
	2.2	Grid Connection Agreement	4
	2.3	Relevant Works	4
3	Respor	nsibilities for Designing and Building the Grid Connection	7
4		ights	
5	Conclu	sion	9
Fig	ures		
Figur	e 1.1: Sit	e Area Plan	2



#### 1 Introduction

#### 1.1 Purpose of this Document

- 1.1.1 This Grid Connection Statement (the 'Statement') has been produced by FVS Dean Moor Limited (the 'Applicant') to support the DCO application for the Dean Moor Solar Farm (the 'Proposed Development').
- 1.1.2 This Statement is submitted pursuant to Section 55 of the Planning Act 2008 and Regulations 5 and 6 of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) ('the APFP Regulations'). In particular, Regulation 6(1)(a)(i) of the APFP Regulations requires an application for a DCO in respect of a generating station to provide a statement of who will be responsible for designing and building the connection to the electricity grid.
- 1.1.3 This Statement provides confirmation that the electricity generated by Dean Moor Solar Farm will be exported via an existing on-Site 132kV overhead line which connects to Harker 132kV Substation near Carlisle, Cumbria. The Harker 132kV Substation is owned, operated and managed by the local Distribution Network Operator ('DNO'), Electricity North West Limited ('ENW').

#### 1.2 The Proposed Development

- 1.2.1 The Proposed Development comprises the construction, operation, and decommissioning of a solar photovoltaic ('PV') energy generating station with a total capacity exceeding 50 Megawatts ('MW') comprising solar PV arrays, grid connection infrastructure, associated infrastructure, and green infrastructure.
- 1.2.2 The Proposed Development will be located on approximately 276.5ha of land located between the villages of Gilgarran and Branthwaite in West Cumbria (the 'Site') (as shown on the Location Plan [REF: 2.1]), which is situated within the administrative area of Cumberland Council (the 'Council'). The Proposed Development will be within the 'Order Limits' (the



land shown on the Works Plans [REF: 2.3] within which the Proposed Development can be carried out), and Figure 1.1 below. The extent of the Site is the same as the Order Limits. The Site is divided into several areas, the grid connection infrastructure would be located in Area C.

Branthwaite Road

Area A

Area B

Area C

Area D

Area B

Area C

Area D

Area B

Collegar

Area C

Area B

Collegar

Area C

Area B

Collegar

Area C

Area D

Area C

Area D

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Figure 1.1: Site Area Plan

1.2.3 A detailed description of the Proposed Development is provided in ES Chapter 3 – Site and Proposed Development Description [REF 6.1].

#### 1.3 The Applicant

1.3.1 FVS Dean Moor Limited is a joint-venture partnership between two renewable energy development specialists: Firma Energy and ib vogt ('IBV').



#### 1.4 Overview and Structure of the Statement

- 1.4.1 The Statement is divided into the following sections:
  - Section 1 Introduction;
  - Section 2 Description of the grid connection;
  - Section 3 Responsibilities for designing and building the connection;
  - Section 4 Land rights;
  - Section 5 Conclusion.



#### 2 Description of the Grid Connection

#### 2.1 Connecting to the Electricity Grid

- 2.1.1 The Point of Connection ('POC') for the Proposed Development would be via one of the existing pylons, which run east-west across the north of Area C (as shown on Figure 1.1) and connect into the existing 132kV overhead lines ('OHL').
- 2.1.2 The existing OHL are connected to the local distribution network, which connects to Harker 132kV Substation near Carlisle, Cumbria. ENW own, operate and manage the distribution of the existing OHL to Harker 132kV Substation.
- 2.1.3 No new cable route is required outside of the Site to connect to the electricity grid.

#### 2.2 Grid Connection Agreement

- 2.2.1 The Applicant has accepted a grid connection offer (reference number 5500241249H) made by ENW to carry out the electricity connection works to provide a connection to the ENW distribution network. The grid connection agreement allows for an export capacity of 150MW.
- 2.2.2 The Applicant originally received the offer from ENW on the 27 January 2023. A revised (second) grid connection offer was accepted on the 21 October 2023, and a novation contract was signed on the 26 July 2024.

#### 2.3 Relevant Works

- 2.3.1 The relevant Work Numbers, described in Schedule 1 of the draft DCO [REF: 3.1] and shown on the Works Plans, that would facilitate the grid connection for the Proposed Development include:
  - Work No. 2 Grid Connection Infrastructure
  - Work No. 2A POC Masts
  - Work No. 3 Associated Works
- 2.3.2 Work No. 2 and Work No. 2A are both within Area C (Figure 1.1 above).



2.3.3 The parameters for components within the Works Nos. described within this section are set out within the Design Parameters Document (DPD) [REF: 5.7].

#### Work No. 2 Grid Connection Infrastructure

- 2.3.4 Work No. 2 includes the following infrastructure to support the connection to the grid via existing DNO infrastructure:
  - The POC Compound comprising external electrical equipment and ancillary infrastructure;
  - The Customer Substation Building and Customer Control Building;
  - DNO Substation Building;
  - Communication Mast;
  - Electrical cables; and
  - POC Masts (Work No. 2A).
- 2.3.5 The Customer Substation Building, DNO Substation Building, and Control House would be contained within a partially or fully fenced grid connection infrastructure compound, as well as a further fully fenced 'POC Compound' for external electrical equipment which includes Medium Voltage > High Voltage (MV>HV) Transformers, relays, circuit breakers, and harmonic filters. A network of electricity cables, up to two POC Masts, and Communication Mast will also be included within the vicinity of the compounds within Work No. 2.

#### Work No. 2A POC Masts

- 2.3.6 Two POC masts (up to 30m in height) may be located in proximity to the connecting pylon within Work No. 2.
- 2.3.7 Detailed design would be undertaken with the DNO post consent to establish whether the Proposed Development would make the connection to the connecting pylon via two POC masts or buried cables.



#### Work No. 3

- 2.3.8 Work No. 3 contains components that are relevant to the grid connection (Work No. 2 and Work No. 2A), including:
  - Electrical cables including connecting equipment within Work No. 1 and within Work No. 2 and connecting Work Nos.1 and 2 to one another; and
  - Monitoring, communications, and control systems.



## 3 Responsibilities for Designing and Building the Grid Connection

- 3.1.1 Two bodies will be responsible for designing and building elements of the grid connection:
  - ENW as the relevant DNO will be responsible for designing and building the 'non-contestable' works, which are aspects that connect to the live DNO equipment.
  - The Applicant will be responsible for designing and building the 'contestable' works and will either appoint an accredited Independent Connection Provider ('ICP') or ENW post-DCO consent to undertake these works.
- 3.1.2 The Applicant (and appointed ICP) or ENW will be responsible for the design and build of the Customer Substation building and Control Building. ENW (as the DNO) will be responsible for the design and build of the DNO Substation building and POC Masts. ENW and the Applicant (and appointed ICP) will be jointly responsible for the design and build of:
  - The POC Compound comprising external electrical equipment and ancillary infrastructure;
  - Communication Mast; and
  - Electrical cables.
- 3.1.3 Article 9 of the draft DCO provides that the benefit of the order may be transferred. The consent of the Secretary of State is required for a transfer, except in the specified cases which include a transfer to ENW for the purposes of undertaking Work Nos. 2 and 2A and a transfer to a person licensed under section 6 of the Electricity Act 1989. These provisions enable the electrical connection to be implemented as described above.



#### 4 Land Rights

- 4.1.1 The electricity generated by the Proposed Development will be exported via an existing on-Site 132kV overhead line which connects to Harker 132kV Substation near Carlisle, Cumbria.
- 4.1.2 All land required for the Proposed Development is included within the Order Limits. The Applicant has successfully concluded the necessary voluntary agreements required for the Proposed Development, with only agreements relating to residual interests outstanding.
- 4.1.3 The Applicant remains committed to obtaining necessary land and rights by negotiation wherever possible and discussions with other interested parties remain ongoing. The status of negotiations is reported in the Pre-Application Land and Rights Negotiations Tracker [REF: 4.4].
- 4.1.4 It is necessary for the Applicant to seek compulsory acquisition powers in the draft DCO to be able to secure such land, rights and interests where agreements cannot be reached voluntarily. This ensures that any third-party interests affected by the Proposed Development may be acquired, overridden or extinguished, thereby ensuring that the Proposed Development can be constructed, operated (and maintained) and decommissioned without impediment.



#### 5 Conclusion

- 5.1.1 This Statement has been prepared pursuant to Regulation 6(1)(a)(i) of the APFP Regulations and confirms who will be responsible for designing and building the connection to the electricity grid.
- 5.1.2 Electricity generated by the Proposed Development will be exported via an existing on-Site 132kV overhead line which connects to the ENW Harker 132kV Substation near Carlisle, Cumbria. The connection agreement with ENW is for the export of 150MW.
- 5.1.3 The relevant Work Nos. that will facilitate the grid connection for the Proposed Development include Work No. 2 Grid Connection Infrastructure and Work. No 2A POC Masts. Elements of Work No. 3 are also relevant.
- 5.1.4 Further to development consent the Applicant will appoint an accredited ICP or ENW who will be responsible for designing and implementing the contestable connection works. ENW will oversee, review, and sign off the design and implementation of the contestable works. ENW will be responsible for designing and implementing the non-contestable works.
- 5.1.5 The Applicant has successfully concluded the necessary voluntary agreements required for the Proposed Development, with only agreements relating to residual interests outstanding. The Applicant remains committed to obtaining necessary land and rights by negotiation wherever possible and discussions with other interested parties remain ongoing. The status of negotiations is reported in the Pre-Application Land and Rights Negotiations Tracker. The draft DCO allows for compulsory purchase powers in the event that agreements with landowners cannot be reached voluntarily.