



BEACON FEN ENERGY PARK

Planning Inspectorate Reference: EN010151

Chapter 1 – Introduction
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Revision History

Revision	Revision date	Details	Authorized	Name	Position

List of Outstanding Issues and Information

Outstanding issue/info.	Section/Paragraph	Responsibility	Action

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Table of Contents

1.	Introduction.....	1
1.1	Background.....	1
1.2	The Proposed Development	1
1.3	Legislative Context & Planning Policy.....	2
1.4	Purpose of PEIR	5
1.5	Statement of Expertise.....	7
1.6	Structure of the PEIR.....	6

Figures

- Figure 1.1 Site Location Plan
- Figure 1.2 Site Boundary Plan
- Figure 1.3 Site Area Plan
- Figure 1.4 Full Extents Layout
- Figure 1.5 Indicative Mitigation Layout

Tables

Table 1.1 – Structure of the PEIR.....	6
Table 1.2 – Technical Leads	7

Appendices

- Appendix 1.1 Scoping Report
- Appendix 1.2 Scoping Opinion
- Appendix 1.3 Arboricultural Impact Assessment
- Appendix 1.4 Ground Conditions Desk Study
- Appendix 1.5 Statement of Expertise

1. Introduction

1.1 Background

- 1.1.1 This Preliminary Environmental Information Report (PEIR) has been prepared by Wardell Armstrong LLP (WA) on behalf of Beacon Fen Energy Park Ltd¹ (the ‘Applicant’) in support of an application for a Development Consent Order (DCO) for Beacon Fen Energy Park (the ‘Proposed Development’).
- 1.1.2 The purpose of this PEIR is to provide a preliminary assessment of the likely significant environmental effects from the construction, operational and decommissioning phases of the Proposed Development.

1.2 The Proposed Development

- 1.2.1 The Proposed Development consists of a ground-mounted solar photovoltaic (PV) electricity generation and battery energy storage system (BESS), together with associated grid connection infrastructure, at an area sited approximately 6.5 km northeast of the village of Sleaford and 2.5 km north of Heckington (the ‘Site’) as illustrated on Figures 1.1 and 1.2. The Proposed Development would have a generation capacity of approximately 400 megawatts (MW) of electricity per year, with a 600MW BESS.
- 1.2.2 The Site is made up of three key sections, the Solar Array Area (comprising the solar PV and BESS infrastructure) the Cable Route Corridor (connecting the Solar Array Site to the Bicker Fen National Grid 400kV substation) and the Access Route Corridor (for a bespoke site access) as illustrated on Figure 1.3.
- 1.2.3 At the County level, the Site is located within the administrative area of Lincolnshire County Council (LCC). At the local level, the majority of the Site is within the administrative area of North Kesteven District Council (NKDC), with the southern extent of the Cable Route Corridor located within the administrative area of Boston Borough Council (BBC).
- 1.2.4 The following Figures illustrate the location and extent of the Site, the indicative areas of the key components of the Proposed Development, the ‘worst case’ layout considered within this PEIR and the Indicative Mitigation Layout:
- Figure 1.1 Site Location Plan: Illustrating the location of the Site.
 - Figure 1.2 Site Boundary Plan: Illustrating the extents of the Site considered within the PEIR.
 - Figure 1.3 Site Area Plan: Illustrating the indicative areas of the key components of the Proposed Development, comprising the Solar Array Area, Cable Route Corridor and Access Route Corridor.

¹ Beacon Fen Energy Park Ltd is the Applicant and Developer of the project which is owned by Low Carbon Limited

- Figure 1.4 Full Extents Layout: Illustrating the ‘worst case’ layout considered within this PEIR (see Chapter 2 for further details).
- Figure 1.5: Indicative Mitigation Layout: Illustrating the key proposed environmental mitigation measures identified at this preliminary stage, including ecological, landscape and visual mitigation and enhancements avoidance of areas of archaeological potential and buffers to residential properties (see Chapter 2 for further details).

1.2.5 Further information on the Proposed Development is set out within Chapter 2.

Design Evolution from Scoping

1.2.6 At the stage of Scoping and the Early (Non-Statutory) Consultation, the Proposed Development also included a second solar panel array area, which was planned for land southwest of Helpringham and Burton Pedwardine. This area was referred to as Beacon Fen South (BFS), and the current Solar Array Area was referred to as Beacon Fen North (BFN).

1.2.7 BFS was located partially within the area identified by Anglian Water for the proposed Lincolnshire reservoir. Following continued engagement with Anglian Water and the increased maturity in the design and timing for their project, the Applicant elected to refine the Proposed Development by removing BFS, avoiding any continued overlap with the proposed Anglian Water reservoir project.

1.2.8 As a result of the removal of BFS from the Proposed Development, the Applicant re-appraised the proposed grid connection cable route from that presented in Scoping (that contemplated the Solar Array area on BFN and BFS) to ensure the most appropriate corridor was taken forward for the refined development. The Cable Route Corridor presented within this PEIR reflects the output of that further analysis and shows a revised route, outside of the area initially identified for the cable route corridor in Scoping.

1.2.9 Further details on the above and the evolution of the Site design are set out within Chapter 3.

1.3 Legislative Context & Planning Policy

Consenting Process

1.3.1 The Proposed Development constitutes a Nationally Significant Infrastructure Project (NSIP) under Sections 14(1)(a) and 15(2) of the Planning Act 2008 as an onshore generating station in England exceeding 50MW generating capacity, which requires a DCO application to the Secretary of State (SoS).

1.3.2 The Planning Act 2008 provides that the Secretary of State (SoS) is responsible for determining a DCO application, with the power to appoint a single person or a panel from the Planning Inspectorate to manage and examine the application. The Planning Inspectorate will examine the application for the Proposed Development and make a recommendation to the SoS who will then make the decision whether to grant a DCO.

Policy Framework

- 1.3.3 Under the Planning Act 2008 regime, the policy framework for examining and determining applications for development consent is provided by National Policy Statement (NPSs). Section 5 of the Planning Act 2008 allows the relevant SoS to designate NPSs setting out national policy in relation to the types of NSIPs listed at Section 14 of the Act. The NPSs are the primary policy used by the relevant SoS to examine and determine applications for NSIPs.
- 1.3.4 Section 104 of the PA 2008 provides that where a NPS has effect, the SoS must determine the application in accordance with the relevant NPS(s), unless doing so would lead to the UK being in breach of its international obligations, be in breach of any statutory duty imposed on the SoS, be unlawful, the adverse impacts of the development outweigh its benefits, or be contrary to any condition prescribing how decisions regarding an NSIP application are to be taken.
- 1.3.5 There is no current NPS that explicitly deals with solar or energy storage of the nature proposed as part of the Proposed Development. As matters currently stand, therefore, the DCO application for the Proposed Development would need to be determined by the SoS under Section 105 of the PA 2008. Section 105 provides that the SoS must, in cases where no NPS has effect, have regard to any local impact report, any matters prescribed in relation to development of the description to which the application relates, and any other matters which the SoS thinks are both important and relevant to the decision.
- 1.3.6 Whilst there is no current NPS which has direct effect in respect of the Proposed Development, the Department for Energy Security and Net Zero (DESNZ) has published but not yet designated a suite of revised Energy NPSs. This includes a revised EN-3, which has specific policies relating to solar PV, in contrast to the 2011 NPSs (which at the time of writing remain the designated NPSs but likely for only weeks longer). Paragraphs 2.10.9 and 2.10.10 of the Emerging (November 2023) EN-3 state:
- “The government has committed to sustained growth in solar capacity to ensure that we are on a pathway that allows us to meet net zero emissions by 2050. As such solar is a key part of the government’s strategy for low-cost decarbonisation of the energy sector.*
- Solar also has an important role in delivering the government’s goals for greater energy independence and 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.”*
- 1.3.7 Once designated, the Emerging Energy NPSs will replace the 2011 NPSs EN-1 to EN-5. Paragraphs 1.6.2 and 1.6.3 of the revised Overarching NPS for Energy (EN-1) states that: *“The Secretary of State has decided that for any application accepted for examination before designation of the 2023 amendments, the 2011 suite of NPSs should have effect in accordance with the terms of those NPSs...The 2023 amendments will therefore have effect only*

in relation to those applications for development consent accepted for examination, after the designation of those amendments.”

- 1.3.8 The DCO application for the proposed development is anticipated to be submitted in mid-2024, by which date it is anticipated that the Emerging NPSs will have been designated. If so, the new NPSs will have effect for the Proposed Development and the DCO Application will fall to be determined pursuant to s104 of the PA 2008.
- 1.3.9 On the basis of the above, this PEIR has been prepared taking account of the Emerging NPSs (November 2023). If, when preparing the ES circumstances have changed and it appears the Emerging NPSs will not be designated by the time the DCO Application is submitted then the ES will make appropriate reference to the existing relevant NPSs to assist with the SoS determination under s105 of the PA 2008.
- 1.3.10 The SoS will also consider other important and relevant matters, which may include other national policy and all local planning policy. For example, the revised National Planning Policy Framework (NPPF) published in September 2023² and the adopted relevant local plans may be considered by the SoS to be important and relevant.
- 1.3.11 The adopted local planning policy for the land in which the Proposed Development is located includes the following:
- Central Lincolnshire Local Plan, adopted 13 April 2023;
 - Southeast Lincolnshire Local Plan 2011 – 2036, adopted 8 March 2019; and
 - Lincolnshire Minerals and Waste Local Plan including the Core Strategy & Development Management Policies Plan adopted in June 2016 and the Site Locations Plan adopted in December 2017.
- 1.3.12 A list of national and local planning policy relevant to each technical assessment is provided for each environmental aspect (Chapters 6 to 17). An assessment of the Proposed Development against policy will be undertaken and set out within the Planning Statement, which will be submitted as part of the DCO application.

Environmental Impact Assessment Regulations

- 1.3.13 The Proposed Development falls under Schedule 2, Section 3(a) "*Industrial installations for the production of electricity...*" of the Infrastructure Planning (Environmental Impact Assessment (EIA)) Regulations 2017 (the 'EIA Regulations').
- 1.3.14 Pursuant to the EIA Regulations, developments listed in Schedule 2 are only subject to an EIA if they are considered 'Likely to have significant effects on the environment by virtue of factors such as its nature, size or location'. Owing to the scale of the Proposed Development, it is considered that the proposals may result in potential significant effects upon the environment and, therefore, an EIA is required. The criteria on which this judgment must be made are set out in Schedule 3 of the EIA Regulations.

² It is noted that during the course of preparing the PEIR a further update to the NPPF was published in December 2023. The Applicant will have regard to the updated NPPF when preparing the ES in support of the DCO Application.

- 1.3.15 As it is considered there is the potential for the Proposed Development to meet the criteria set out in Schedule 3 of the EIA Regulations, the Applicant confirmed to PINS that, under Regulation 8(1)(b) of the EIA Regulations, an ES will be prepared and submitted with the DCO application.
- 1.3.16 The Applicant undertook initial baseline surveys of the Site and surrounding area in order to identify the likely significant effects of the Proposed Development. This work informed the production of a Scoping Report (Appendix 1.1), which set out the issues that the Applicant considered the EIA needs to address and was submitted to PINS on 19th April 2023.
- 1.3.17 PINS reviewed and consulted on the EIA Scoping Report and adopted a Scoping Opinion (Appendix 1.2) on 26th May 2023. PINS formally consulted prescribed consultation bodies and their responses are included within the Scoping Opinion. Key issues raised in the Scoping Opinion are summarised and responded to in Chapter 4.

1.4 Purpose of PEIR

- 1.4.1 Regulation 12(2) of the EIA Regulations defines ‘preliminary environmental information’ as information which:
- a) *has been compiled by the applicant; and*
 - b) *is reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development (and of any associated development).*
- 1.4.2 Paragraph 8.4 of PINS Advice Note Seven states:
- “A good PEI document is one that enables consultees (both specialist and non-specialist) to understand the likely environmental effects of the Proposed Development and helps to inform their consultation responses on the Proposed Development during the pre-application stage.”*
- 1.4.3 The information contained within the PEIR is ‘preliminary’, reflecting design development to date. This PEIR contains the initial findings of the assessment of the likely significant environmental effects resulting from the construction, operation, and decommissioning phases of the Proposed Development. To ensure a conservative ‘worst-case’ preliminary assessment of the likely significant effects of the Proposed Development, this PEIR has considered a Full Extents Layout as illustrated at Figure 1.4.
- 1.4.4 Whilst this ‘worst-case’ layout has informed the assessment in the PEIR and the reporting of the impacts in each of the topic chapters, the Applicant has also considered and presented an alternative ‘Indicative Mitigation Layout’ (Figure 1.5) to demonstrate the likely impact and reduction in the residual effects of the Proposed Development once proposed further mitigations are applied. The Indicative Mitigation Layout provides an illustration of the likely direction of travel of the design evolution of the Proposed Development to enable an informed consultation to be undertaken.
- 1.4.5 In addition to the above, the Cable Route Corridor, as considered within this PEIR, has been set conservatively to allow sufficient flexibility in locating the cable route. The extent of the Cable Route Corridor is currently being refined,

informed by results from environmental surveys and consultation feedback. The latest refinements to the Cable Route Corridor are presented on Figure 3.4.

- 1.4.6 It is important to note that the scheme considered within this PEIR and the Indicative Mitigation Layout do not represent a final project design and environmental assessment conclusions contained herein are also preliminary and subject to change.
- 1.4.7 This PEIR is being published to accompany formal consultation and publicity under Sections 42, 47 and 48 of the PA 2008 and the Applicant is actively seeking comments on the PEIR from consultees. Consultation responses on the information provided will be considered and may aid the Applicant in refining the design of, and mitigation proposals for, the Proposed Development.
- 1.4.8 Following consultation and refinement of the Proposed Development, this PEIR will be developed into a full ES which will set out the assessment of the final design, taking into consideration feedback received during consultation. The ES will be submitted with the DCO Application.

1.5 Structure of the PEIR

- 1.5.1 Table 1.1 sets out the structure of this PEIR.

Table 1.1 – Structure of the PEIR

#	CHAPTER
1	Introduction
2	Proposed Development
3	Alternatives & Design Evolution
4	Scope & Methodology
5	Consultation
6	Landscape & Visual
7	Ecology
8	Cultural Heritage
9	Access & Traffic
10	Noise & Vibration
11	Water Resources
12	Climate Change
13	Glint
14	Soils & Agricultural Land
15	Socio-Economic
16	Air Quality
17	Summary of Environmental Effects

- 1.5.2 A number of technical appendices to this PEIR are provided and referenced in the relevant Chapter. The following technical appendices are also provided, appended to this chapter, as they are of relevance to multiple technical chapters:

- Appendix 1.3: Arboricultural Impact Assessment
- Appendix 1.4: Ground Conditions Desk Study

1.5.3 A Non-Technical Summary (NTS) has been produced and is provided as a separate, standalone document in accordance with the EIA Regulations.

1.6 Statement of Expertise

1.6.1 WA is a multi-disciplinary environmental and engineering consultancy and has extensive experience of assessing the environmental impacts of developments. WA is accredited under The Institute of Environmental Management and Assessment’s (IEMA) benchmark scheme for consultancies capable of managing EIAs, demonstrating their commitment to excellence in EIA services.

1.6.2 Table 1.2 provides a summary of the lead authors and their respective qualifications. All are qualified professionals, a member of their respective professional institutions and deemed to be a ‘competent expert’.

1.6.3 A full Statement of Expertise providing further details is included at Appendix 1.5.

Table 1.2 – Technical Leads

ROLE	TECHNICAL LEAD
Co-ordination & Non-Technical Aspects	Susan Raine BSc (Hons) MSc PIEMA
	Glen Shah BSc (Hons) MSc Affiliate IEMA
Landscape & Visual	Lukasz Mazur MLA/MHort CMLI
Ecology	Tim Bradford BSc (Hons) MSc MCIEEM CEnv
Cultural Heritage	Victoria Anderton-Johnson BA (Hons) MA PCIfA
Access & Traffic	Ian Cronshaw BA (Hons) MCIHT
Noise & Vibration	Malcolm Walton BSc MCIEH AMIOA
Water Resources	Rachel Graham BSc (Hons) MSc MCIWEM MIEnvSc
Flood Risk Assessment	Emma Keegan BSc (Hons)
Climate Change	Rupert Gale BA (Hons) MSc PIEMA AMEI
Glint	Simon Allen BSc (Hons) BSc (Hons) AEI
Soils & Agricultural Land	Bill Crooks PhD MSc BSc (Hons) FACTS MISoilSci
Socio-economics	Alexandra Ommer BSc (Hons) MSc ACSM MIMMM
Air Quality	Mariam Weatherley BSc (Hons) MSc MIEnvSc MIAQM CEnv

BFEP Appendices