Fosse Green Energy

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EN010154

6.1 Environmental Statement

Chapter 1: Introduction

VOLUME

6

Planning Act 2008 (as amended)

Regulation 5(2)(a)

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

18 July 2025

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulation 2009 (as amended)

Fosse Green Energy

Development Consent Order 202[ ]

6.1 Environmental Statement

Chapter 1: Introduction

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Planning Inspectorate Scheme Reference	EN010154
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Author	Fosse Green Energy Limited

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Rev 1	18 July 2025	DCO Submission

Table of Contents

Tables

1. Introduction

1.1 Background

1.1.1 This Environmental Statement (ES) has been commissioned by Fosse Green Energy Limited (the 'Applicant') as part of an Environmental Impact Assessment (EIA) in relation to an application for a Development Consent Order (DCO) for the construction, operation and maintenance, and decommissioning of Fosse Green Energy (hereafter referred to as the 'Proposed Development'). The Applicant is a partnership between Windel Energy Limited and Recurrent Energy (a subsidiary of Canadian Solar), who are both experienced developers of renewable energy projects.

1.1.2 The Proposed Development will comprise the construction, operation and maintenance, and decommissioning of a solar photovoltaic (PV) electricity generating facility, with an on-site Battery Energy Storage System (BESS) and other associated infrastructure, with a total capacity exceeding 50 megawatts (MW), along with an import and export connection to the national transmission network at the proposed National Grid substation near Navenby.

1.1.3 The Proposed Development is located approximately 9km to the south and south west of Lincoln City Centre, in proximity to the villages of Thorpe on the Hill, Witham St Hughs, Haddington, Thurlby and Bassingham, extending towards Navenby.

1.1.4 The Proposed Development comprises two distinct parcels of land, collectively defined as the 'DCO Site', which are:

a. the 'Principal Site', which in turn includes the 'Solar PV Array Areas', 'Interconnecting Cable Corridors' and on-site BESS, comprising approximately 1,070 hectares (ha) of land; and

b. the 'Cable Corridor', which is approximately 10km in length and will comprise the underground electrical infrastructure required to connect the Principal Site to the proposed National Grid substation near Navenby. The Cable Corridor partly overlaps with the Principal Site and is approximately 351ha.

1.1.5 These elements are further described in **Section 1.2** and are illustrated in **Figure 1-2 [EN010154/APP/6.2]**. The overall area of the DCO Site is 1,368ha, wholly located within the administrative area of North Kesteven District Council.

1.1.6 The perimeter boundary of the DCO Site is also referred to as the 'DCO Site Boundary'.

1.1.7 With a generation capacity exceeding 50MW, the Proposed Development is classified as a Nationally Significant Infrastructure Project (NSIP) and therefore requires consent via a Development Consent Order (DCO), under the Planning Act 2008 (PA 2008) Section 14(1)(a), 15(1) and 15(2) (Ref 1-1).

The application for the DCO (hereafter referred to as 'the DCO') is submitted to the Planning Inspectorate, with the decision on whether to grant the DCO being made by the Secretary of State for Energy Security and Net Zero (DESNZ) (hereafter referred to as the 'Secretary of State' or 'SoS').

1.1.8 The Proposed Development is considered to fall within the definition of 'Environmental Impact Assessment (EIA) development' as defined by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) (Ref 1-2), therefore requiring an EIA to be undertaken as part of the DCO. The ES presents the findings of the EIA undertaken for the Proposed Development in accordance with the EIA Regulations and the PA 2008 (Ref 1-1).

1.1.9 A DCO would provide the necessary authorisations and consents for construction, operation and maintenance, and decommissioning of the Proposed Development, and associated infrastructure for connection of the Proposed Development to the national transmission network.

1.1.10 This Chapter is supported by the following figures **[EN010154/APP/6.2]**:

a. **Figure 1-1: Proposed Development Location**; and

b. **Figure 1-2: DCO Site**.

1.1.11 This Chapter is supported by the following appendices **[EN010154/APP/6.3]**:

a. **Appendix 1-A: EIA Scoping Report**;

b. **Appendix 1-B: EIA Scoping Opinion**; and

c. **Appendix 1-C: EIA Statement of Competence.**

1.1.12 A glossary and list of abbreviations for the ES is provided in **Chapter 0: Table of Contents, Glossary and Abbreviations** of this ES **[EN010154/APP/6.1]**.

1.2 The Proposed Development

1.2.1 The Proposed Development will comprise the installation of solar photovoltaic (PV) panels, an on-site BESS, other associated infrastructure including but not limited to: access provision, underground cabling between different areas of solar PV arrays and landscaping and biodiversity enhancement measures. The Proposed Development will export and import electricity to the national electricity transmission network via a buried 400 kilovolt (kV) import and export cable circuit of approximately 10km in length, connecting to the national electricity transmission network at the proposed National Grid substation near Navenby.

1.2.2 The Proposed Development will utilise either a fixed south facing PV arrangement or single axis tracker arrangement. The BESS will be either decentralised (known as 'direct current (DC) coupled' and hereafter referred to as the 'distributed BESS') with battery containers distributed across the Solar PV Array Areas alongside the 'Solar Stations', or centralised within a single compound (known as 'alternating current (AC) coupled' and hereafter referred to as the 'centralised BESS'). A more detailed description of the Proposed Development is provided in **Chapter 3: The Proposed**

Development of this ES **[EN010154/APP/6.1]**. The consideration of alternatives and design evolution in relation to the Proposed Development is described in **Chapter 4: Alternatives and Design Evolution** of this ES **[EN010154/APP/6.1]**.

1.2.3 The location of the Proposed Development is illustrated in **Figure 1-1** of this ES **[EN010154/APP/6.2]**, with the DCO Site shown in more detail on **Figure 1-2 [EN010154/APP/6.2]**. The land within the DCO Site and its surroundings are described in **Chapter 2: The Site and Surroundings** of this ES **[EN010154/APP/6.1]**.

1.2.4 The Principal Site covers an area of 1,070ha and is centred on approximate National Grid Reference SK 90388 62514. It will comprise Solar PV Array Areas containing ground-mounted solar PV panels, BESS, and associated infrastructure such as a series of Interconnecting Cable Corridors, internal tracks, inverters, transformers, switchgear, and an Onsite Substation (which will include transformers, switchgear and metering equipment required to facilitate the import and export of electricity to the National Grid). The Interconnecting Cable Corridors comprise buried 33kV cables which will transport the electricity generated from the solar PV and stored in the BESS to the Onsite Substation, where it is gathered, and the voltage is stepped up to 400kV prior to transmission via the connecting cable. The Principal Site also includes substantial habitat and landscaping enhancement.

1.2.5 The Cable Corridor partly overlaps with the Principal Site, whereby the Cable Corridor covers approximately 351ha in total, overlapping approximately 53ha of the Principal Site (which covers a total approximately 1,070ha) at its south eastern extent, resulting in a total DCO Site area of approximately 1,368ha. The Cable Corridor is the area within which the 400kV Grid Connection Cables will be installed, linking the Onsite Substation to the proposed National Grid substation near Navenby, approximately 10km south east of the Principal Site. The Cable Corridor for the Proposed Development is shown in **Figure 1-2** of this ES **[EN010154/APP/6.2]**. The working width within the Cable Corridor will be approximately 40m in width following detailed design and refinement of the cable route at the post consent stage. The current Cable Corridor width, which varies along its length, is wider than the final working area to allow flexibility, should localised constraints such as new third party infrastructure be identified prior to commencement of construction. The width of the Cable Corridor, and further detail on the basis for its varying width, is described in **Chapter 3: The Proposed Development** and **Chapter 5: EIA Methodology** of this ES **[EN010154/APP/6.1]**.

1.2.6 Further information on the Proposed Development design and infrastructure is provided in **Chapter 3: The Proposed Development [EN010154/APP/6.1]**.

1.2.7 Subject to obtaining the necessary consents, construction of the Proposed Development is anticipated to commence in 2031 (although construction could commence sooner, as discussed in **Chapter 5: EIA Methodology** of this ES **[EN010154/APP/6.1]**) and would likely be completed for operation in 2033. The Proposed Development will have a 60-year lifetime, with

decommissioning therefore expected around 2093 (based on a 2033 commissioning).

1.2.8 The objective of the Proposed Development is to maximise the generation of low carbon energy and deliver a scheme that is designed sensitively in the environment. The Proposed Development will help to meet the UK's urgent need for low carbon energy generation as well as the Government's legal and policy obligations with regards to climate change and net zero. Solar power plays an important role in moving the UK away from its reliance on fossil fuels as further discussed in paragraphs 1.6.21 to 1.6.26 of this ES chapter and **Section 4.3: Need for the Proposed Development** within **Chapter 4: Alternatives and Design Evolution** of this ES **[EN010154/APP/6.1]**. The Proposed Development will therefore be compliant with the Overarching National Policy Statement (NPS) for Energy (EN-1) (Ref 1-4), the NPS for Renewable Energy Infrastructure (EN-3) (Ref 1-5) and the NPS for Electricity Networks (EN-5) (Ref 1-6), which seek to deliver security of electricity supply, as further discussed in **Section 4.3: Need for the Proposed Development** within **Chapter 4: Alternatives and Design Evolution** of this ES **[EN010154/APP/6.1]**, the **Statement of Need [EN010154/APP/7.1]**, and the **Planning Statement [EN010154/APP/7.2]**.

1.3 Assessment of Impacts and Mitigation

1.3.1 Potential environmental impacts arising from the Proposed Development have been studied systematically as part of the EIA process, and the results are presented within this ES. The baseline for the assessment has been derived from surveys and studies carried out within and around the DCO Site. This is explained further in **Chapter 5: EIA Methodology** of this ES **[EN010154/APP/6.1]**, and in the methodology section of each technical assessment chapter (**Chapters 6** to **14** of this ES **[EN010154/APP/6.1]**).

1.3.2 The EIA process assesses impacts resulting from the construction, operation (including maintenance), and decommissioning of the Proposed Development, and considers measures to avoid, reduce, or mitigate any likely significant adverse effects on the environment and, where possible, enhance the environment. It also identifies 'residual' effects, defined as effects remaining following the implementation of mitigation measures.

1.3.3 Where necessary and appropriate, the technical assessments within this ES (**Chapters 6** to **14** of this ES **[EN010154/APP/6.1]**) identify mitigation measures that would be provided as part of the Proposed Development. Over and above any proposed mitigation measures provided as part of the Proposed Development, the Applicant will provide various economic, environmental and social enhancement measures, to provide additional benefits across the DCO Site and its surroundings. These enhancement measures are not required to mitigate any likely significant adverse effects of the Proposed Development, as these have already been addressed in the proposed mitigation measures, but provide additional opportunities and benefits associated with the Proposed Development.

1.3.4 An **Environmental Commitments Register [EN010154/APP/6.5]** has been produced. This standalone document sets out the environmental mitigation and commitment measures presented in this ES which will be adopted during the construction, operation, and decommissioning phases of the Proposed Development, and identifies how these measures are secured.

1.4 Structure of the Environmental Statement

1.4.1 The structure of this ES is outlined in **Table 1-1** below.

Table 1-1: ES Structure

ES Volume	Chapter	Description
EN010154/APP/6.1	**Chapter 1: Introduction**	This chapter provides an introduction to the requirement for and nature of the ES, the EIA process, and the Proposed Development.
	Chapter 2: The Site and Surroundings	This chapter provides a description of the DCO Site and its surroundings.
	Chapter 3: The Proposed Development	This chapter provides a description of the Proposed Development.
	Chapter 4: Alternatives and Design Evolution	This chapter provides a description of the alternatives to the Proposed Development considered and how the design of the Proposed Development has evolved over time.
	Chapter 5: EIA Methodology	This chapter details the standard assessment methodology used throughout the technical assessments presented in ES (**Chapters 6** to **14** of this ES **[EN010154/APP/6.1]**) and outlines the approach to consultation and engagement that has been undertaken for the Proposed Development.
	Chapter 6: Climate Change	The technical chapters of the ES consider the environmental impacts associated with several identified topics, which have the potential to result in likely
	Chapter 7: Cultural Heritage	
	Chapter 8: Ecology and Nature Conservation	
	Chapter 9: Water Environment	

ES Volume	Chapter	Description
	Chapter 10: Landscape and Visual Amenity	significant environmental effects. Each topic is presented in a separate technical chapter and details the results of the environmental assessment, likely significant effects arising from the Proposed Development, and the proposed avoidance and/or reduction of effects and mitigation measures. The chapters also present a detailed assessment of the potential Cumulative Effects resulting from other past, present, or reasonably foreseeable projects together (i.e., cumulatively) with the Proposed Development where information is available. **Chapter 14: Other Environmental Topics** includes consideration[1] of air quality, ground conditions, glint and glare, major accidents and disasters, telecommunications, electromagnetic fields and materials and waste.
	Chapter 11: Noise and Vibration	
	Chapter 12: Socio-Economics and Land Use	
	Chapter 13: Traffic and Transport	
	Chapter 14: Other Environmental Topics	
	Chapter 15: Cumulative Effects and Interactions	This chapter considers Effect Interactions (or intra-project Cumulative Effects) that lead to potential combined effects on sensitive receptors. Additionally, this chapter presents a summary of any potential likely significant inter-project Cumulative Effects, as established within the respective technical chapters of the ES (**Chapters 6** to **14** of this ES **[EN010154/APP/6.1]**), i.e.,

[1] The EIA Scoping Report (**Appendix 1-A: EIA Scoping Report** of this ES **[EN010154/APP/6.3]**) concluded that several topics, whilst not 'scoped out' of the EIA, did not require a full chapter within the ES, proposing that **Chapter 14: Other Environmental Topics** of this ES **[EN010154/APP/6.1]** addressed the likelihood for significant effects proportionately within the ES. This includes a brief assessment of each of the topics noted, including a summary of the relevant effects and mitigation, supported by a technical note appended to the ES, where relevant, containing further information that evidences the ES section conclusion. This approach was accepted by the Planning Inspectorate in the Scoping Opinion (**Appendix 1-B: EIA Scoping Opinion** of this ES **[EN010154/APP/6.3]**).

ES Volume	Chapter	Description
		potential likely significant effects arising from the Proposed Development in combination with other proposed schemes (reasonably foreseeable and/or consented but not yet constructed or operational).
	Chapter 16: Summary of Environmental Effects	This chapter provides a summary of the ES outlining the residual significant effects remaining following the implementation of mitigation.
EN010154/APP/6.2	**Figures**	This volume contains a set of figures to accompany the ES to aid the reader's understanding.
EN010154/APP/6.3	**Technical Appendices**	This volume contains a set of appendices provided for reference. These appendices comprise background data, technical reports, tables, figures, and surveys which support the assessments in this ES.
EN010154/APP/6.4	**Non-Technical Summary (NTS)**	The NTS is presented in a separate document and provides a concise description of the Proposed Development, the considered alternatives, baseline, assessment methodology, potential and/or likely significant environmental effects and mitigation and enhancement measures. The NTS is designed to provide information on the Proposed Development in an accessible format using non-technical language which can be understood by a wide audience and to assist interested parties with their familiarisation with the Proposed Development.

1.5 The Applicant

1.5.1 The Applicant, Fosse Green Energy Limited, is a partnership between Windel Energy Limited and Recurrent Energy.

1.5.2 Founded in 2018, Windel Energy is a privately held company dedicated to driving the transition towards a sustainable future. Specialising in the origination, development and integration of renewable energy projects and low-carbon disruptive technologies, Windel Energy is at the forefront of clean energy innovation.

1.5.3 With a portfolio exceeding 5 gigawatts of renewable power in various stages of development, our team of talented professionals bring a deep understanding & high level of expertise in land viability, electricity networks, planning TCPA, DNS and NSIP consenting, legal processes and construction feasibility.

1.5.4 At Windel Energy, we adopt a long-term ownership approach, ensuring the efficient operation and management of renewable assets. Leveraging an extensive network of relationships, institutional grade infrastructure and in-house industry expertise, we are committed to delivery impactful and enduring energy solutions.

1.5.5 Recurrent Energy, a subsidiary of Canadian Solar Inc., is one of the world's largest and most geographically diversified utility-scale solar and energy storage project development, ownership, and operations platforms. With an industry-leading team of in-house energy experts, Recurrent Energy serves as Canadian Solar's global development and power services business.

1.5.6 To date, Recurrent Energy has successfully developed, built, and connected approximately 12 GWp of solar projects and more than 6 GWh of energy storage projects across six continents. As of the date of this document, its global pipeline includes over 25 GWp of solar and 69 GWh of energy storage capacity.

1.6 Legislative and Planning Policy

Consenting Process

1.6.1 The Proposed Development is defined as an NSIP under Sections 14(1)(a) and 15(2) of the PA 2008 (Ref 1-1) as an onshore generating station in England exceeding 50MW generating capacity. This means that consent to construct the Proposed Development must be sought via a DCO application.

1.6.2 The PA 2008 states that the SoS is responsible for determining the application for a DCO, with the power to appoint a single person or a panel from the Planning Inspectorate to manage and examine the application (referred to as the 'Examining Authority'). In its role, the Examining Authority will examine the DCO application for the Proposed Development and make a recommendation to the SoS, who will then decide whether to grant a DCO for the Proposed Development.

1.6.3 In accordance with Section 104(2) of the PA 2008 (Ref 1-1), the SoS is required to have regard to the relevant NPS (as discussed further below), amongst other matters, when deciding whether or not to grant a DCO for the Proposed Development.

1.6.4 In addition, the SoS must have regard to Local Impact Reports (authored by the host councils), prescribed matters, and any matters which the SoS considers are both '*important and relevant'* to their decision, including other relevant national and local policy as described further below.

1.6.5 A DCO, if granted, has the effect of providing consent for development, in addition to a range of other consents and authorisations, where specified, as well as removing the need for some consents (such as planning permission). Section 115 of the PA 2008 (Ref 1-1) also states that a DCO can include consent for 'associated development', which is development that is not a NSIP in its own right but is functionally related to the NSIP, such as the BESS. This may be development that supports the construction, operation or decommissioning of the NSIP; which helps to address the impacts of the NSIP; or is of a type normally brought forward with the NSIP.

EIA Regulations

1.6.6 The EIA requirement for NSIPs is transposed into law through the EIA Regulations. The EIA Regulations specify development required to undergo EIA, and schemes relevant to the NSIP planning process are listed under either of Schedule 1 or Schedule 2. Development listed under Schedule 1 must be subject to EIA, while development listed under Schedule 2 must only be subjected to EIA if they are considered "*likely to have significant effects on the environment by virtue of factors such as its nature, size or location*". The criteria on which this judgement must be made are set out in Schedule 3.

1.6.7 The Proposed Development does not fall under Schedule 1, but it is considered Schedule 2 development under Schedule 2 Paragraph 3(a) as it constitutes '*Industrial installations for the production of electricity, steam and hot water*'.

1.6.8 The Applicant has confirmed to the Planning Inspectorate under Regulation 8(1)(b) of the EIA Regulations that an ES is being provided with the DCO, as it is considered there is the potential for the Proposed Development to meet the criteria set out in Schedule 2, Paragraph 3(a) of the EIA Regulations. Due to the size, nature and location of the Proposed Development, it is likely to have significant effects on the environment and therefore it is considered to constitute an EIA development.

1.6.9 The issues that the Applicant considers the EIA needs to address were identified in the **EIA Scoping Report** submitted to the Planning Inspectorate on 19 June 2023 (**Appendix 1-A: EIA Scoping Report** of this ES **[EN010154/APP/6.3]**). The EIA Scoping Report was developed following initial consultation with several statutory consultees and was informed by the EIA team's experience, having worked on several other solar farm projects. The Planning Inspectorate reviewed and consulted on the EIA Scoping Report and adopted (on behalf of the SoS) a Scoping Opinion on 25 July 2023 which

included the formal responses received by the Planning Inspectorate from consultees (**Appendix 1-B: EIA Scoping Opinion** of this ES **[EN010154/APP/6.3]**). Key issues raised in the Scoping Opinion have been summarised and responded to in the technical chapters (**Chapters 6** to **14** of this ES **[EN010154/APP/6.1]**). The EIA has been based on all key issues raised in the Scoping Opinion.

National Policy Statements

1.6.10 This ES considers the following NPSs, designated in January 2024, which are relevant national policy statements for the Proposed Development and matters that will be important and relevant to the SoS's decision as whether to grant a DCO for the Proposed Development:

a. Overarching National Policy Statement for Energy (EN-1) (Ref 1-4);

b. National Policy Statement for Renewable Energy Infrastructure (EN-3) (Ref 1-4); and

c. National Policy Statement for Electricity Networks Infrastructure (EN-5) (Ref 1-5).

1.6.11 A summary of the relevant considerations from the above NPSs for each technical assessment is provided for each environmental topic (**Chapters 6** to **14** of this ES **[EN010154/APP/6.1]**) and in the corresponding Policy and Legislation appendix to the technical chapters included within this ES **[EN010154/APP/6.3]**.

1.6.12 As set out in the **Planning Statement [EN010154/APP/7.2]**, it is noted that the Government published revised drafts of the Energy National Policy Statements on 24 April 2025 for consultation, including EN-1 (draft NPS EN-1), EN-3 (draft NPS EN-3) and EN-5 (draft NPS EN-5). The proposed amendments set out in draft NPS EN-1, draft NPS EN-3 and draft NPS EN-5 embed the Government's ambitions and commitments in the Clean Power 2030 Action Plan into the policy statements. Due to the ongoing nature of the revision of the NPSs, the draft NPS EN-1, draft NPS EN-3 and draft NPS EN-5 will have limited weight in decision making.

National Planning Policy Framework

1.6.13 The National Planning Policy Framework (Ref 1-7) (NPPF), last updated in December 2024 (as corrected in February 2025), sets out the Government's planning policies for England and how these are to be applied. It is a material consideration in planning decisions under the Town and Country Planning Act 1990 (Ref 1-16).

1.6.14 Paragraph 5 of the NPPF makes it clear it does not contain specific policies for NSIPs and that applications in relation to NSIPs are to be determined in accordance with the decision making framework set out in the PA 2008 (Ref 1-1) and relevant NPSs, as well as any other matters that are considered both important and relevant. However, Paragraph 5 goes on to confirm that the NPPF may be a matter that is relevant for the purposes of assessing DCO applications. This ES therefore has regard to the relevant policies of the NPPF

as part of the overall framework of national policy relevant to solar development.

Local Planning Policy

1.6.15 Policies in Local Plans may be considered 'important' and 'relevant' matters and can influence the content of local impact reports (prepared by the relevant local authorities pursuant to Section 56A of the PA 2008 following submission of the DCO application) which the SoS must have regard to in its decision making in accordance with Section 104(2) of the PA 2008.

1.6.16 The Proposed Development lies within the administrative area of North Kesteven District Council, and at county level within Lincolnshire County Council.

1.6.17 Whilst the NPSs are the primary consideration in deciding applications for NSIPs, the local Development Plan is also an important and relevant matter. The relevant Development Plan documents for the land in which the DCO Site is located include the following documents:

a. Central Lincolnshire Local Plan, adopted 13 April 2023 (Ref 1-8);
b. Lincolnshire Minerals and Waste Local Plan including the Core Strategy & Development Management Policies Plan adopted in June 2006 (Ref 1-9) and the Site Locations Plan adopted in December 2017 (Ref 1-10);
c. Thorpe on the Hill Neighbourhood Plan, made March 2018 (Ref 1-11);
d. Eagle and Swinethorpe Neighbourhood Plan, preparing draft plan (Ref 1-12);
e. Bassingham Neighbourhood Plan, made November 2017 (Ref 1-13); and
f. Swinderby Neighbourhood Plan, preparing draft plan (Ref 1-14).

Consideration of Planning Policy in EIA

1.6.18 This ES describes the national and local planning policies that are relevant to the assessment of the Proposed Development, with a summary provided as relevant for each environmental topic. It does not assess the accordance of the Proposed Development with planning policy. This is undertaken and set out in the **Planning Statement [EN010154/APP/7.2]**.

1.6.19 The purpose of considering the planning policy in the EIA is twofold:

a. To identify policies that could influence the sensitivity of receptors (and therefore the significance of effects) and any requirements for mitigation; and
b. To identify planning policies that could influence the methodology of the EIA. For example, a planning policy may require the assessment of an impact or the use of a specific methodology.

1.6.20 A summary of national and local planning policy relevant to each technical assessment is provided within the relevant chapters (**Chapters 6** to **14** of this ES **[EN010154/APP/6.1]**) for each environmental topic.

Other Relevant Policy

1.6.21 Other policies which are likely to be important and relevant matters to the SoS's decision and are considerations for the technical assessments include 'A Green Future: Our 25 Year Plan to Improve the Environment' (published in 2018 and updated in 2021), commonly referred to as The 25 Year Environment Plan (Ref 1-17), and the Energy White Paper: Powering our Net Zero Future (2020 (Ref 1-18)).

1.6.22 The 25 Year Environment Plan first published in 2018 and last updated in February 2023 sets out the Government's 25-year plan to improve the environment within a generation. The plan highlights the Government's support for the reduction of the UK's carbon footprint; protection and enhancement of the natural environment; and ensuring land is managed with environmental gains.

1.6.23 The Energy White Paper, published in December 2020, sets out how the UK will reach net zero emissions by 2050. It identifies the Government's aim for a fully decarbonised, reliable, and low-cost power system by 2050. This Paper explains that the Government is not targeting a particular generation mix however commits the Government to maintaining the market conditions which stimulate the cost reductions that have been seen in the renewable energy market over the last five years. It does, however, state that it is possible to determine key characteristics of the future generation mix at this stage identifying that a "*low-cost, net zero consistent system is likely to be composed predominantly of wind and solar*". It highlights that this will need to be complemented by technologies which provide power, or reduce demand, to manage intermittency. Currently this includes "*nuclear, gas with carbon capture and storage and flexibility provided by batteries, demand side response, interconnectors and short-term dispatchable generation providing peaking capacity, which can be flexed as required*". The Energy White Paper therefore highlights the Government's commitment to solar and battery storage to achieve net zero targets and the need to provide this urgently.

1.6.24 In 2023 the UK Government published the Mission Zero Independent Review of Net Zero (Ref 1-19), which aimed to determine how the UK can "*deliver on its net zero commitments by demonstrating how to deliver and implement most effectively and efficiently a plan for our future energy transition*". The review highlights "*the importance of delivering future energy security through the greater use of domestically generated renewable and clean sources of power"* and Objective 11: Accelerating Renewables recommends that a taskforce and deployment roadmaps are set up in 2023 for solar energy generation to reach up to 70 gigawatts (GW) by 2035 (i.e., 70,000MW).

1.6.25 In March 2023, the UK Government published a policy paper on Powering Up Britain (Ref 1-20). It emphasises the importance of energy security and the new Department for Energy Security and Net Zero's aim to replace the reliance on fossil fuels with "*cheaper, cleaner, domestic sources of energy*". The policy states that the goal is "*to quintuple our solar power by 2035".*

1.6.26 In December 2024, the UK Government published the Clean Power 2030 Action Plan (Ref 1-21), which describes the pathway to a clean power system

by 2030. The report addresses the challenges of creating an affordable and secure energy source, creation of new energy industries and reducing harmful emissions which contribute to climate change. Page 28 of the report references how a clean power system will require the mass deployment of offshore wind, onshore wind and solar. Page 73 of the report illustrates how the current installed capacity of solar is at 16.6 GW, and the target is 47 GW by 2030 and 45-69 GW by 2035.

1.7 EIA Project Team

1.7.1 This ES has been co-ordinated by AECOM and presents the environmental information collated by AECOM and a number of other specialist designers and consultants appointed by the Applicant. These designers and consultants are identified in **Table 1-2**, along with their respective disciplines, project roles and contribution to the Proposed Development and EIA.

Table 1-2: Project Team Input into EIA

Organisation	Project Role / EIA Input
Fosse Green Energy Ltd	The Applicant
AECOM Ltd	EIA Project Management and Co-ordination Production of the technical ES Chapters except any listed below. Planning Consultant Land Referencing Designer
Cotswold Archaeology	Cultural Heritage Assessment and ES Technical Chapter Trial Trenching Survey
Iceni Projects	Landscape and Visual Amenity Assessment and ES Technical Chapter
Neo Environmental	Production of the Glint and Glare Assessment
Roberts Environmental	Production of the Agricultural Land Classification Survey, Reporting and Framework Soil Management Plan
Wessex Archaeology	Geophysical Survey
BST&T Consultancy Services Limit	Production of Framework Battery Safety Management Plan and Fire advice
Womble Bond Dickinson UK LLP	Legal Advisor
Camargue	Communications Consultant

1.8 IEMA Quality Mark

1.8.1 AECOM is a Registered Impact Assessor within the Institute of Environmental Management and Assessment (IEMA) and holds the IEMA EIA Quality Mark as recognition of the quality of its EIA product and continuous training of environmental consultants. An EIA Statement of Competence is included within **Appendix 1-C** of this ES **[EN010154/APP/6.3]**, which outlines the relevant expertise or qualifications of the competent experts that prepared the ES.

1.9 The PEI Report

1.9.1 The PEI Report was prepared and published in October 2024 to accompany formal consultation under Sections 42 and 47 of the PA 2008 (Ref 1-1).

1.9.2 The PEI Report was prepared to satisfy the requirement of the EIA Regulations. 'Preliminary environmental information' is defined in the EIA Regulations 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)*".

1.9.3 Planning Inspectorate Advice Note 7 (EIA: Process, Preliminary Environmental Information, and Environmental Statements) (Ref 1-3) notes: "*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*."

1.9.4 In order to enable consultees to understand the likely environmental effects of the Proposed Development, the PEI Report presented preliminary findings of the environmental assessments undertaken up to that point in time. This allowed consultees the opportunity to provide informed comments on the Proposed Development, the assessment process and the preliminary findings prior to the finalisation of the DCO application and this ES.

1.9.5 The Applicant sought the views of consultees on the information contained within the PEI Report, and there was the opportunity within the process up to submission of the DCO for both the EIA and the Proposed Development design to have regard to the comments received. These comments have been incorporated into this ES and were considered when developing the design of the Proposed Development, where appropriate. Further information on how the comments received have been taken into account in relation to design evolution is provided within **Chapter 4: Alternatives and Design Evolution** of this ES **[EN010154/APP/6.1]**, as well as in the **Consultation Report [EN010154/APP/5.1]** and the associated **Consultation Report Appendices [EN010154/APP/5.2]**.

1.10 Environmental Statement

1.10.1 Part 1 of Schedule 4 of the EIA Regulations (Ref 1-14) sets out the information for inclusion in the ES. **Table 1-3** summarises where the requirements of Schedule 4 of the EIA Regulations have been addressed in the ES.

Table 1-3: Requirements of Part 1 of Schedule 4 of the EIA Regulations

Requirement	Location in this ES
A description of the location of the development	**Chapter 1: Introduction** (this chapter) **[EN010154/APP/6.1]** **Chapter 2: The Site and Surroundings [EN010154/APP/6.1]**
A description of the physical characteristics of the whole development including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases.	**Chapter 3: The Proposed Development [EN010154/APP/6.1]**
A description of the main characteristics of the operational phase of the development (in particular any production processes), for instance, energy demand and energy used, nature and quantity of the materials and natural resources used.	**Chapter 3: The Proposed Development [EN010154/APP/6.1]**
An estimate, by type and quantity, of expected residues and emissions (water, air, soil and sub-soil pollution, noise, vibration, light, heat, radiation and types of waste produced.) during the construction and operation phases.	**Chapter 3: The Proposed Development [EN010154/APP/6.1]** **Chapter 6: Climate Change [EN010154/APP/6.1]** **Chapter 9: Water Environment [EN010154/APP/6.1]** **Chapter 11: Noise and Vibration [EN010154/APP/6.1]** **Chapter 13: Traffic and Transport [EN010154/APP/6.1]** **Chapter 14: Other Environmental Topics [EN010154/APP/6.1]**
A description of the reasonable alternatives considered which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.	**Chapter 4: Alternatives and Design Evolution [EN010154/APP/6.1]**
A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the	**Chapters 6–14 [EN010154/APP/6.1]** (technical assessments) Baseline Conditions sections

Requirement	Location in this ES
availability of environmental information and scientific knowledge.	
A description of the factors specified in regulation 5(2) likely to be significantly affected by the development: population, human health, biodiversity, land, soil, water, air, climate, material assets, cultural heritage, and landscape.	**Chapters 6–14 [EN010154/APP/6.1]** (technical assessments) Likely Impacts and Effects sections
A description of the likely significant effects of the development on the environment resulting from, inter alia: The construction and existence of the development; The use of natural resources considering as far as possible the sustainable availability of these resources; The emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste; The risks to human health, cultural heritage or the environment; The cumulation of effects with other existing and/or approved projects; The impact of the project on climate and the vulnerability of the project to climate change; The technologies and the substances used. The description of the likely significant effects on the factors specified in regulation 4(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development.	**Chapters 6–14 [EN010154/APP/6.1]** (technical assessments) Likely Impacts and Effects sections. **Chapter 15: Cumulative Effects and Interactions [EN010154/APP/6.1]**
A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties encountered compiling the required information and the main uncertainties involved.	**Chapters 6–14 [EN010154/APP/6.1]** (technical assessments) Proposed Development Design, Impact Avoidance, Mitigation and Enhancement Measures, and Limitations or Assumptions sections
A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements during both the construction and operational phases.	**Chapters 6–14 [EN010154/APP/6.1]** (technical assessments) Design, Impact Avoidance, Mitigation and Enhancement Measures sections

Requirement	Location in this ES
A description of the likely significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned.	**Chapter 14: Other Environmental Topics, Section 14.6 Major Accidents and Disasters [EN010154/APP/6.1]**
A non-technical summary of the information provided under paragraphs 1 to 5 of this Part.	**Non-Technical Summary [EN010154/APP/6.4]**
A reference list detailing the sources used for the descriptions and assessments	**Chapters 1–16** References section **[EN010154/APP/6.1]**

1.11 References

Ref 1-1 HMSO (2008) The Planning Act 2008, Available at: https://www.legislation.gov.uk/ukpga/2008/29/pdfs/ukpga_20080029_en.pdf.

Ref 1-2 HMSO (2009) Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009. Available at: https://www.legislation.gov.uk/uksi/2009/2264/contents/made.

Ref 1-3 Planning Inspectorate (2020). Advice Note Seven: Environmental Impact Assessment: process, preliminary environmental information and environmental statements (version 7).

Ref 1-4 Department for Energy Security & Net Zero (2023). Overarching National Policy Statement for Energy (EN-1).Available at: https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1 .

Ref 1-5 Department for Energy Security & Net Zero (2023). National Policy Statement for Renewable Energy Infrastructure (EN-3). Available at: https://www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3

Ref 1-6 National Policy Statement for Electricity Networks Infrastructure (EN-5). Available at: https://www.gov.uk/government/publications/national-policy-statement-for-electricity-networks-infrastructure-en-5 .

Ref 1-7 Ministry of Housing, Communities and Local Government (MHCLG) (2024) National Planning Policy Framework, Available at: https://assets.publishing.service.gov.uk/media/67aafe8f3b41f783cca46251/NPPF_December_2024.pdf

Ref 1-8 Lincolnshire County Council, “Central Lincolnshire Local Plan 2023”. Available at: https://www.n-kesteven.gov.uk/sites/default/files/2023-04/Local%20Plan%20for%20adoption%20Approved%20by%20Committee.pdf

Ref 1-9 Lincolnshire Minerals and Waste Local Plan including the Core Strategy & Development Management Policies Plan adopted in June 2006. Available at: https://www.lincolnshire.gov.uk/planning/minerals-waste.

Ref 1-10 Lincolnshire Minerals and Waste Local Plan - Site Locations Policies, strategies and plans adopted in December 2017. Available at: https://www.lincolnshire.gov.uk/directory-record/63740/site-locations

Ref 1-11 Thorpe on the Hill Neighbourhood Plan made March 2018. Available at: Neighbourhood Plan sent to NKDC 5 Jan 2018 (n-kesteven.gov.uk)

Ref 1-12 Eagle and Swinethorpe Neighbourhood Plan, preparing draft plan. Available at: Eagle and Swinethorpe neighbourhood plan | North Kesteven District Council (n-kesteven.gov.uk)

Ref 1-13 Bassingham Neighbourhood Plan made November 2017. Available at: Bassingham Neighbourhood Plan (n-kesteven.gov.uk)

Ref 1-14 Swinderby Neighbourhood Plan, preparing draft plan. Available at: Swinderby neighbourhood plan | North Kesteven District Council (n-kesteven.gov.uk)

Ref 1-15 The Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2017). Available at: https://www.legislation.gov.uk/uksi/2017/571/schedule/4/made.

Ref 1-16 HMSO (1990) The Town and Country Planning Act, Available at: https://www.legislation.gov.uk/ukpga/1990/8/contents

Ref 1-17 Defra (2018) A Green Future: Our 25 Year Plan to Improve the Environment. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

Ref 1-18 HM Government (2020) Energy white paper: Powering our net zero future. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/945899/201216_BEIS_EWP_Command_Paper_Accessible.pdf

Ref 1-19 Rt Hon Chris Skidmore MP, Mission Zero Independent Review of Net Zero (2023). Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128689/mission-zero-independent-review.pdf

Ref 1-20 Department for Energy Security and Net Zero (2023) Powering Up Britain Available at https://www.gov.uk/government/publications/powering-up-britain/powering-up-britain#introduction

Ref 1-21 Department for Energy Security and Net Zero (2024). Clean Power 2030 Action Plan. Available online at: https://www.gov.uk/government/publications/clean-power-2030-action-plan