



BEACON FEN ENERGY PARK

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Written Summary of Oral Submissions from Issue Specific Hearing 1 and Responses to Action Points

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Quality information

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Glossary

Abbreviation	Description
AADT	Annual Average Daily Traffic
AC	Alternating Current
AIL	Abnormal Indivisible Load
AIS	Air Insulated Switchgear
ALC	Agricultural landscape classification
Applicant	Beacon Fen Energy Park Ltd
BAR	Bespoke Access Road
BBC	Boston Borough Council
BESS	Battery energy storage system
BMV	Best and most versatile
CA Guidance	Government guidance 'Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land'
CCTV	Closed circuit television
CNP	Critical national priority
CSTP	Construction Staff Travel Plan
CTMP	Construction Traffic Management Plan
DC	Direct Current
DCO	Development Consent Order
DMP	Delivery Management Plan
EA	Environment Agency
EIA	Environmental Impact Assessment
EIA Regs	Regulation 14(2)(d) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017
ES	Environmental Statement
ESDAL	Electronic Service Delivery for Abnormal Loads
GIS	Gas Insulated Switchgear
GW	Gigawatt
HGV	Heavy Goods Vehicle
HLA	Host Local Authorities
HV	High Voltage
IAIA	International Association for Impact Assessment's
IDB	Internal Drainage Board
IPs	Interested Parties
LCC	Lincolnshire County Council
Low Carbon	Low Carbon Ltd
LWS	Local Wildlife Sites
MF	LCJ Mountain Farms Limited
MW	Megawatts of alternating current
MW AC	Megawatt
MWh	Megawatt-hour
MWp	Megawatt peak

Abbreviation	Description
NESO	National Energy System Operator
NGR	National Grid Reference
NKDC	North Kesteven District Council
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
OBSMP	Outline Battery Safety Management Plan
Order	The Beacon Fen Energy Park Order
PCU	Power Conversion Unit
PINS	Planning Inspectorate
Proposed Development	The entire development to be constructed and operated within the Site, as set out in Schedule 1 of the draft DCO
PRoW	Public Right of Way
PS	Planning Statement
PV	Photovoltaic
Site	The entire draft Order Limits or red line boundary located approximately 6.5 km northeast of the village of Sleaford and 2.5 km north of Heckington
SoS	Secretary of State
SPV	Special purpose vehicle

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1. Introduction

- 1.1.1 This **Written Summary of Oral Submissions from Issue Specific Hearing 1 and Responses to Action Points (Document Ref. 9.3)** has been prepared on behalf of Beacon Fen Energy Park Ltd (the 'Applicant') in support of an application for a Development Consent Order ('DCO'), that has been submitted to the Secretary of State (the 'SoS') for the Department for Energy Security and Net Zero, under Section 37 of 'The Planning Act 2008' (the '2008 Act').
- 1.1.2 This document summarises the oral submissions made by the Applicant at Issue Specific Hearing 1 (ISH1) held on 24 October 2025 in relation to the application for development consent (Application) for the Beacon Fen Energy Park (the Proposed Development).
- 1.1.3 The structure of this document follows the order of the items listed in the detailed agenda published by the ExA (EV2-001) (the Agenda).
- 1.1.4 This document is structured as follows:
 - 1. Section 2 provides the summary of oral submissions made at ISH1;
 - 2. Section 3 provides the Applicant's responses to Action Points raised in the ISH1.

2. Written Summary of the Applicants Oral Submissions at ISH 1

2.1.1 The table below sets out the written summary of the Applicant's Oral Submissions at ISH1 held on 24 October 2025.

Written summary of the Applicant's Oral Submissions at ISH1 – Table 2.1

AGENDA ITEM	WRITTEN SUMMARY OF APPLICANT'S ORAL SUBMISSION
<p>General Matters</p>	<p>The ExA will ask the Applicant to present the proposed development, explain its main components and reasoning for its location particularly in relation to how the proposal complies, or not, with all relevant legislation and policy.</p> <p>Mr Mack introduced Mr Hartley-Bond to provide some background context to the Applicant and their experience in this sector. Mr Hartley-Bond explained that the project owner and developer, Low Carbon, is a leading global renewable energy company, headquartered in London with around 200 employees. It operates in the UK, Europe, and North America with a pipeline of more than 15 GW in development. It has one of the largest mature pipelines of UK solar and battery storage (over 4 GW), with approximately 1GW currently in operation or under construction.</p> <p>Low Carbon also developed the 500 MW Gate Burton Energy Park Nationally Significant Infrastructure Project (NSIP), which was granted development consent by the Secretary of State in July 2024. Collectively, this makes Low Carbon one of, if not the largest, developer of renewable energy projects in the UK, with capabilities in taking projects all the way through development and into construction and operation.</p> <p>It is also a B-Corp business, certified for meeting high standards of social and environmental performance, accountability, and transparency, balancing purpose with profit. As an operator of numerous sites in the UK and beyond, it is important to Low Carbon to be a good neighbour in the communities it is part of.</p> <p>Mr Hartley-Bond explained that he is a Project Development Director for Beacon Fen Energy Park and has worked on over 1GW of solar and storage projects over the last decade or so, including the aforementioned Gate Burton project.</p>

The ExA then enquired how these projects have been funded and whether specific vehicles have been created.

Mr Hartley-Bond explained that this was the typical model and is also used on Beacon Fen.

The ExA noted this and advised he would ask for further information via formal written questions particularly in relation to assurance that finance is actually in place for the delivery and how that can be secured and guaranteed.

With that context having been established, Mr Mack noted that **ES Chapter 2: Proposed Development (APP-053)** provides a detailed description of the Proposed Development subject to this DCO application. By way of general overview – the proposals seek development consent for a new solar and battery storage park connected by an underground cable route of around 13 km length to the existing National Grid Bicker Fen 400 kV substation ('Bicker Fen substation'). There would be no need to develop a new substation, however, there will be a need to carry out upgrade and extension works to this existing substation. The Proposed Development will also include a new access road from the A17 to the Solar Array Area to facilitate all phases of the Proposed Development. This is termed the Bespoke Access Road. The Site of the Proposed Development is on land approximately 6.5km northeast of Sleaford and 2.5km north of Heckington in Lincolnshire. Section 2.2 of **ES Chapter 2** describes the Site in more detail by reference to its surroundings, including by reference to **ES Figure 1.1 Site Location Plan (APP-192)**. The different components variously lie within the administrative areas of Lincolnshire County Council (LCC) and North Kesteven District Council (NKDC) and, in relation to the southern section of the Cable Route Corridor, Boston Borough Council (BBC).

Mr Mack explained that the Proposed Development comprises three core areas within the DCO Order Limits:

- The Solar Array Area - within which the solar PV and battery energy storage system (BESS) (and their ancillary infrastructure) will be located;
- The Cable Route Corridor - within which the Cable Route will be located; and
- The Bespoke Access Corridor - within which the Bespoke Access Road will be located.

These distinct areas are shown on **ES Figure 1.3 Site Area Plan (APP-194)**.

Mindful of the specific agenda item to follow on the design parameters, Mr Mack did not elaborate on that detail in this part of the agenda; however, he explained by way of general overview that the overall design of the Proposed Development layout emerged as a result of an analysis of opportunities and constraints, detailed environmental assessment and through multi-stage consultation and continued engagement with key stakeholders. He noted **Figure 1.4 Indicative Site Layout Plan (APP-195)** provides an illustration of how the Site could be developed, in accordance with the design parameters in the Outline Design Principles and the Works Plans (both of which are secured through the draft DCO).

He continued by explaining that Sections 2.5 to 2.13 of **ES Chapter 2: Proposed Development (APP-053)** provide additional detail (both written and through figures) on the principal features of the Proposed Development and which are familiar to solar/BESS schemes of this scale and nature. He then highlighted some of the key elements:

Solar Arrays:

- the height of the solar arrays has been informed through iterative design considering flood modelling data resulting in a height of up to 3.9m above ground level in fields to the east and up to 3.5m above ground level in fields towards the west, south and an isolated field to the north as shown on **ES Figure 2.4 Panel Heights (APP-196)**.
- the individual panels are anticipated to be up to 2.5m long and up to 1.5m wide and consist of a series of photovoltaic (PV) cells beneath a layer of toughened glass. The proposal is for a fixed (i.e., static) panel orientation, facing due south which is commonly seen on existing UK solar farms, and angled 10° to 45° from horizontal.
- Each module would have a DC generating capacity of between 600 and 850 watts (W) or more depending upon any advances in solar PV technology at the time of construction. The exact number of PV panels that would be used in the Proposed Development is not yet known. Various factors will help to inform the number and arrangement, and some flexibility is required to accommodate future technological developments.

BESS:

- It includes an associated 600MW BESS. The BESS area is located adjacent to the proposed Onsite Substation as shown on the **Illustrative Layout Plan of Battery Energy Storage System and On-Site Substation (APP-012)**.

- The BESS will be used to store electricity during periods of surplus electricity generation from the solar arrays and to export it to the grid during periods when electricity demand exceeds generation.
- Batteries will be placed within individual enclosures arranged regularly within a compound with vehicular access available to each unit. The precise number will depend upon the level of power capacity and duration of energy storage that the Proposed Development will require. An element of flexibility in approach is, therefore, adopted at this stage as technology, business models and relevant policy all evolve.
- The dimensions of the BESS containers are anticipated to be approximately up to 8m x 3m, with a height of up to 4.5m.

Cable Route Corridor:

- The Proposed Development will be connected to the National Grid at the Bicker Fen substation.
- The Cable Route Corridor extends southwards from the Solar Array Area, crossing Littleworth Drove before turning to the east and then continuing south across the A17 towards Great Hale Fen. The route continues in a broadly south-easterly direction crossing Great Hale Eau and South Forty Foot Drain before reaching the Bicker Fen substation located on Vicarage Drove.

Bespoke Access Road:

- The primary means of access to the Site will be via the Bespoke Access Road from the A17. It will be constructed in advance of material construction commencing on the Solar Array Area and will facilitate construction in that area. Further detail regarding the construction of the Bespoke Access Road is available in **ES Appendix 2.2: Bespoke Access Road Construction Method Statement (APP-075)**.

In relation to these latter two components, Mr Mack noted that subsequent agenda items proposed to discuss these in more detail, including their respective appraisals, and so Mr Mack deferred further information on their identification to that point in the agenda.

Finally, **NGET Substation Connection Works:**

- To accommodate the proposed connection, works to the south-west of the existing Bicker Fen substation are required, which are proposed to be delivered by National Grid.
- The works will include a new generation bay, a new generation bay control room and a perimeter access road.

- National Grid Electricity Transmission plc ('NGET') have requested that there be optionality within the design of the extension to Bicker Fen substation. The two design options that have been assessed in the ES and included in the Application are: Air Insulated Switchgear ('AIS') and Gas Insulated Switchgear ('GIS').
- Additional detail on the proposed extension works and the construction programme are variously set out within **ES Chapter 2: Proposed Development (APP-053)**, and also within the **Electricity Grid Connection Statement (APP-285)** and the **Grid Connection Construction Method Statement (APP-074)**, the latter of which talks about the interface with the extension works also necessitated by the separate Heckington Fen Solar Park DCO scheme.

The ExA asked if co-location of the BESS and the On-Site Substation presents a higher risk of any hazards or if risk is the same with or without co-location. Mr Mack confirmed that the Applicant will take that away and provide further detail on how co-location has been taken into consideration as part of its major accidents and disasters assessment and if the proposed co-location increases any identified risk, including fire.

*[Post-hearing note: The Applicant discusses this point further in response to **Action Point 2** from ISH 1 at Section 3 of this document.]*

The ExA will also expect the Applicant to present the Proposed Development in relation to the ES Design Parameters, as per the Design and Access Approach Document [APP-278], how these have informed the Environmental Statement (ES) and the overall design of the proposal.

The ExA asked about design parameters and how this has impacted the Environmental Impact Assessment.

Mr Turnbull on behalf of the Applicant set out that it is widely understood that solar panels, batteries and associated technologies are constantly advancing in terms of their efficiency and durability. It is therefore necessary, proportionate, and supported by national policy to allow for a degree of flexibility in the design and layout of the Proposed Development, within the parameters of the Application and the Environmental Impact Assessment ('EIA') undertaken for the Application. This approach is entirely in accordance with the Planning Inspectorate's NSIP Advice Note Nine: Rochdale Envelope.

Mr Turnbull on behalf of the Applicant continued:

- The **Design and Access Approach Document (AS-019)** describes the setting of design objectives informed by the context within which the Proposed Development will sit, the opportunities and constraints that exist, along with the National Infrastructure Commission's Design Principles, and national and local planning policy. The design objectives are set out within Table 4.1 of the **Design and Access Approach Document (AS-019)**. An overview of the good design process adopted is provided at paragraph 4.2.5.
- At section 5 the document describes the iterative design process subsequently adopted, which allowed the Applicant to refine and evolve the design during a sequence of internal workshops, options appraisals for the major linear elements, near neighbour engagement, identification of key items of mitigation such as minimum stand offs from certain features, and external consultation on relevant options such as the statutory consultation stage information regarding the Bespoke Access Road routes.
- Section 5.3 identifies several specific features of the design that were informed by external engagement and consultation activities. Throughout this stage appropriate survey information and design and assessment inputs were incorporated.
- As the document title suggests, the document blends the design approach content with the focus on access contained within traditional Design and Access Statements. This is because constructing and maintaining a project of this scale requires appropriate temporary and operational access.
- The process of identifying access requirements and responding to these through appropriate design and routing solutions, including the Bespoke Access Road, is described in section 6.
- The Applicant has described the evolution of the design of the Bespoke Access Road in two other application documents, besides the Design and Access Approach Document. Firstly, the **Consultation Report (APP-046)** at section 6 describes the statutory consultation carried out with local communities under Section 47 of the Act. This included information on Bespoke Access Road options, which can be seen at **ES Appendix 6.9 (APP-048)**. Table 6.14 describes the feedback received from statutory consultation including two specific themes regarding the Bespoke Access Road (a suggestion around routing and a suggestion to retain it during operation and decommissioning) and other transport themes. These have informed the design of the Bespoke Access Road.

- The Applicant's vision for the Proposed Development is set out at paragraph 7.2.1. The Outline Design Principles are included at Appendix 1 of the same document. These Outline Design Principles are based on the Design Objectives set out in Section 4 of the same document, and the operational stage Design Parameters used within the Environmental Statement.
- In order to secure the detailed design of the Proposed Development, the **draft Development Consent Order (AS-008)** includes a number of 'articles' and 'requirements'.

The ExA requested more detail about how those parameters were fed into the Environmental Statement and its assessment, in particular Works 1 and 2.

Mr Turnbull on behalf of the Applicant made reference to section 5 of the Design and Access Approach Document and the iterative design process. Mr Turnbull used set-backs as an example. Seasonal surveys fed in at appropriate points, as did near neighbour engagement which occurred on an ad hoc basis within and outside of the main consultation periods, both of which helped develop the set-backs.

The ExA clarified that it wanted to understand how the Applicant's approach with regards to this specific issue, without going into detail on particular environmental impacts which will be considered separately. The ExA asked how maximum heights in Works 1, 2 and 3, which vary, have been taken into consideration, particularly with regards to visual impacts, and requested assurance that the Applicant has taken into account the varying heights.

Mr Turnbull on behalf of the Applicant set out that in broad terms initial heights were set with a larger height parameter of 4.5 metres due to available flood data at the time and initial assessments were carried out with this height. Flood modelling work was carried out which allowed the Applicant to reduce heights to 3.5 and 3.9 metres which were accounted for in the landscape and visual assessment.

Ms Raine on behalf of the Applicant set out that the maximum heights across the Site are set out in ES Chapter 2: Proposed Development and the relevant parameter plans. The Landscape and Visual Impact Assessment took the relevant maximum heights across the solar area and at points in the BESS/Substation Compound. Assessment of the substation extension at Bicker Fen was similar.

Ms Raine clarified that the maximum BESS/Substation heights were considered and that the assessments assumed worst-case scenarios, i.e., that the maximum height could be at any point within that area.

The Applicant noted that it would provide further information on this in writing.

*[Post-hearing note: The Applicant discusses this point further in response to **Action Point 3** from ISH 1 at Section 3 of this document.]*

The ExA asked about how and where flexibility has been secured within draft DCO.

Mr Hartley-Bond on behalf of the Applicant noted that a key item that needs flexibility relates to panels, as wattage increases.

Mr Turnbull on behalf of the Applicant provided two examples of how flexibility is secured within the Outline Design Principles relating to Work No. 1, 2 and 3. One example was the tilt of the solar panels in Work No. 1 while the other was the substation layout (square or rectangular) in Work No. 3.

Mr Mack continued and noted that the Outline Design Principles include a series of commitments that will control the detailed design and provide guidance on aspects of the intended form and scale of the principal components of the Proposed Development and reflect the design parameters described in Table 2.1 of ES Chapter 2: Proposed Development. Adherence to the Outline Design Principles is secured through Requirement 5 of Schedule 2 of the **draft DCO (AS-008)**. In addition, the **Works Plans (AS-006)** shows the areas in which the various components of the Proposed Development may be constructed in line with the design parameters identified and the descriptions of the relevant works identified in Schedule 1 to the draft DCO. Article 3(2) of the draft DCO provides that each numbered work must be situated within the corresponding numbered area shown on the works plans.

Together, the Works Plan and the Outline Design Principles establish the three-dimensional envelope for the Proposed Development to be built and operated within, secured through the Draft DCO.

The ExA will also ask the Applicant to explain in further detail Chapter 4 Scope and Methodology [APP-055], Appendix 1.1 Scoping Report [APP-071] and Appendix 1.2 Scoping Opinion [APP-072] with a particular focus on the issues that were scoped out of the ES and why these were scoped out.

Ms Raine on behalf of the Applicant set out that **ES Chapter Scope and Methodology (APP-055)** sets out the general approach to, and methodology adopted for, the Environmental Impact Assessment (EIA) undertaken for the Proposed Development, including information on the scoping process.

Ms Raine continued that a **Scoping Report (APP-071)** was prepared setting out the Applicant's proposed scope of the EIA to be undertaken in respect of the Proposed Development. This was submitted to the Planning Inspectorate (PINS) in April 2023, in support of a request for a Scoping Opinion. The Scoping Report was prepared in accordance with the requirements of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. PINS reviewed and consulted on the EIA Scoping Report and adopted a **Scoping Opinion (APP-072)** in May 2023.

Ms Raine confirmed that the following aspects were scoped into the ES: Landscape & Visual; Ecology; Cultural Heritage; Access & Traffic; Noise & Vibration; Water Resources & Flood Risk; Climate Change; Glint & Glare; Soils & Agricultural Land; and Socio-economics. Within the Scoping Report, it was proposed to scope out Air Quality. However, within their Scoping Opinion PINS requested that Air Quality be scoped in and so it was subsequently included in the ES.

Ms Raine confirmed that PINS agreed to scope out a number of aspects, in some instances subject to the provision of further information. Information on these aspects is detailed within **ES Chapter 17 Other Environmental Topics (APP-068)** and is summarised as follows:

- Ground Conditions was scoped out subject to the results of a desk study. **ES Appendix 17.1 Ground Conditions Desk Study (APP-183 – 188)** confirms that the Site is considered to present an overall low risk from past land use, surrounding land use, ground instability and contamination. No potential significant risks / effects were identified that would require assessment through the preparation of an ES chapter.
- Human Health was scoped out further to a health screening exercise which was undertaken in accordance with the Central Lincolnshire Healthy Planning Checklist, and included within the Scoping

	<p>Report. This concluded that the Proposed Development is only anticipated to potentially result in limited impacts on human health during construction and decommissioning. Potential effects of the Proposed Development of relevance to human health have been assessed throughout the relevant technical chapters of the ES. For example, ES Chapter 16 Air Quality (APP-067) considered potential impacts on human health as a result of dust during construction, and traffic emissions during all phases. With mitigation measures such as the Construction Environmental Management Plan and Decommissioning Environmental Management Plan in place, there will be no significant air quality effects on human health.</p> <ul style="list-style-type: none"> • Waste was scoped out as a specific ES chapter, however the Scoping Opinion requested that the ES should consider the likely significant effects of component replacement and decommissioning waste; measures to manage construction and operational waste; and the quantities and types of waste to be considered. This information is included within ES Appendix 17.2 Waste and Recycling Strategy (APP-189). • The topic of Accidents and Disasters was scoped out, subject to potential risks being assessed in the relevant ES chapters and any mitigation being secured through relevant management plans. This is considered within the relevant chapters of the ES and summarised within Table 17.3 of ES Chapter 17 Other Environmental Topics (APP-068) For example, the risks posed from extreme weather events has been considered in ES Chapter 12 Climate Change (APP-063). The design and build of the Proposed Development will be sufficient to withstand extreme weather events in accordance with relevant regulations and building standards. • The aspect of Electromagnetic Fields, or EMF, was scoped out subject to the ES setting out the design measures to be implemented to avoid the potential for likely significant effects in line with the Department of Energy and Climate Change's Voluntary Code of Practice 2012. The UK Health Security Agency also advised that according to the Department of Energy and Climate Change's Voluntary Code of Practice, if the cable exceeds 132 kV, a calculation or measurement of the maximum fields directly above the cable is required to demonstrate compliance with the International Commission on Non-Ionizing Radiation Protection exposure guidelines. This was considered within Section 17.8 of ES Chapter 17 Other Environmental Topics (APP-068), with reference to relevant sources (including National Grid's website 'emfs.info'). Following submission, the UK Health Security Agency submitted a Relevant Representation (RR-016) stating that that they did not consider that the submitted ES provided a detailed EMF assessment. Chapter 17 has been updated to provide further detail on EMF and a measurement of the maximum field directly above the cable. The maximum field directly above the cable would be 96 microteslas, which would not exceed the ICNIRP reference levels for public or occupational
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exposure. In accordance with DECC's Voluntary Code of Practice 2012, as the maximum value is less than the ICNIRP guideline levels, it may be assumed that all fields and exposures from that source will be compliant. Therefore, it is considered that the Proposed Development will not result in significant effects in relation to EMF. Ms Raine confirmed that the updated Chapter 17 will be submitted at Deadline 1.

- The aspect of Telecommunications, Television Reception and Utilities was scoped out subject to the ES setting out the findings of the desk-based assessment and how this was taken into account in the design of the Proposed Development. This information is set out at section 17.6 of **ES Chapter 17 Other Environmental Topics (APP-068)**.
- The Scoping Opinion confirmed that significant effects were not likely in relation to the aspects of Wind Microclimate and Daylight, Sunlight and Overshadowing. Therefore these aspects were scoped out of further consideration within the EIA.

The ExA asked how matters scoped out of the applicant's Waste Assessment have been considered within the ES and secured through the Development Consent Order process.

Ms Raine on behalf of the Applicant stated that aspects related to waste were considered throughout the ES, for example, Chapter 9 Access and Traffic [APP-060] considered the vehicle movements associated with panel replacement during operation. Ms Raine confirmed that further detail would be provided in writing.

[Post-hearing note: The Applicant discusses this point further in response to Action Point 4 from ISH 1 at Section 3 of this document.]

The ExA requested further detail in regards to human health being scoped out, in particular how the EIA has considered the effects of the proposal on stress and anxiety, mental health and community cohesion.

Ms Raine on behalf of the Applicant stated that these aspects are considered within **ES Chapter 15 Socio-economics (APP-066)** and confirmed that further detail would be provided in writing.

[Post-hearing note: The Applicant discusses this point further in response to Action Point 5 from ISH 1 at Section 3 of this document.]

The ExA will then invite any of the Host Local Authorities (HLAs) to comment on any general matters in relation to the proposed development, followed by statutory consultees, then statutory undertakers and then any other Interested Parties (IPs).

Mr Sheikh on behalf of NKDC raised queries about how contamination will be addressed at decommissioning stage and how funding for decommissioning will be secured, and noted that these points will be included within NKDC's Local Impact Report (LIR). Mr Sheikh added that NKDC requests the Outline Decommissioning Environmental Management Plan includes a protocol for the disposal of solar panels.

Mr Mack on behalf of the Applicant confirmed that the Applicant will provide clarification on the intended funding mechanism for the scheme and how it proposes to ensure that funding obligations are in place for all stages of the development, including decommissioning.

[Post-hearing note: The Applicant discusses this point further in response to **Action Point 1** from ISH 1 at Section 3 of this document.]

Miss Hall on behalf of LCC highlighted that the LIR will request further consideration of items scoped out including human health and waste. Miss Hall also added that LCC's LIR will request information on funding for decommissioning.

Miss Hall on behalf of LCC raised a further point in relation to the BESS being considered as associated development, specifically raising a query as to why the capacity of the BESS is larger than that of the solar generation capacity. LCC do not feel the Planning Statement at section 1.6 addresses the 2013 guidance with regards to associated development. This point is not included in LCCs LIR.

The ExA acknowledged the question and confirmed it would raise it during agenda item 4, which discusses the need for the Proposed Development.

Mr Mack on behalf of the Applicant confirmed the Applicant would respond to the points in writing.

[Post-hearing note: The Applicant discusses this point further in response to Action Point 7 from ISH 1 at Section 3 of this document.]

Cllr Chapman on behalf of South Kyme Parish Council queried whether the tallest buildings, which are 13 metres in height, could be on the edge of Proposed Development and whether screening would be provided to this height.

The ExA noted that landscape and visual impacts are not the subject of ISH 1.

Ms Raine on behalf of the Applicant explained that the On-Site Substation, with its maximum height of 13 metres (per the Outline Design Principles), will only be constructed within the area shown for that work (Work No. 3) on the **Works Plan (AS-006)** and therefore will not be constructed on the edge of the Solar Array Area. This is secured by virtue of Article 3(2) of the **Draft DCO (AS-008)**.

Mr Sheikh on behalf of NKDC noted that NKDC also raise the point as to whether or not the BESS constitutes associated development.

Mr Garden on behalf of Fidra Energy raised a point in relation to flexibility of the dimensions for the Cable Route Corridor, specifically how certain parameters in the ES are secured.

Mr Mack on behalf of the Applicant confirmed the Applicant is happy to provide clarification in writing and will update documents to provide the necessary assurance if required.

[Post-hearing note: Mr Garden referenced the parameters for the Cable Route within Table 2.1 in ES Chapter 2: Proposed Development (APP-053), namely the working width during construction of 30m; the open-cut trench excavation dimensions of approximately 2m wide x 2.5m depth excavated for each cable subject to design and ground conditions; and the trenchless techniques maximum depth of up to 25m depth subject to design and ground conditions.]

The dimensions for trenched cabling and the 30m working width were stated in the Outline Construction Environmental Management Plan (APP-077) at paras. 2.8.5 and 6.14.4 respectively. This document is secured by virtue of Requirement 12 (construction environmental management plan) of the DCO. To provide

	<i>additional comfort that the full set of dimensions listed in ES Chapter 2 are secured, the Applicant has amended the Outline Construction Environmental Management Plan (Doc Ref. 6.3.7) at Deadline 1 to include additional specificity in paragraphs 2.8.2 and 2.8.7.]</i>
Need, Site Selection and Alternatives	<p>The ExA will explore, in the context of the proposed development, the alternatives considered by the applicant in relation to site selection and the design iteration process, as set out in ES Chapter 3 Alternatives and Design Evolution [APP-054].</p> <p>The ExA asked the Applicant to set out its approach to site selection and what alternatives were considered.</p> <p>Mr Turnbull on behalf of the Applicant referenced the Site Selection Report as appended to the Planning Statement and the ES. Mr Turnbull spoke through the Site Selection Report including the factors that fed into it and the process, including the available point of connection. Mr Turnbull made the point that the nationally available provisional agricultural land classification (ALC) data produced by the Department for Environment, Food and Rural Affairs and the Environment Agency's (EA) publicly available flood mapping were used, as it would not be proportionate to seek access to and carry out ALC surveys across the entire Search Area, which covers several thousand hectares. The aforementioned ALC and flood risk data can be found in Figures 6 and 7 respectively at Annex D of the Site Selection Report which can be found at Appendix 2 of the Planning Statement (APP-277). Mr Turnbull explained that the areas closer to the point of connection are heavily constrained by areas of high flood risk and best and most versatile (BMV) agricultural land.</p> <p>Mr Turnbull set out that the Proposed Development previously included Beacon Fen South, which was removed once Anglian Water published a short-list of potential reservoir locations which included land required for the Lincolnshire Reservoir which overlapped with the land required for Beacon Fen South.</p> <p>Mr Turnbull made references to the Figures appended to the Site Selection Report, in particular in relation to Flood Zones and ALC.</p> <p>The ExA sought to clarify that the information within the Site Selection Report is the information that the Applicant used for the exercise demonstrating that no better alternative site existed. Mr Turnbull on behalf of the Applicant confirmed this is correct and it would be unusual for the Applicant to carry out intrusive surveys across a Search Area so large given the agreements required with landowners and made reference to further</p>

explanation included within the Site Selection Report and **ES Chapter 3 Alternatives and Design Evolution (APP-054)**.

The ExA will then want to explore the alternatives considered in relation to access and the proposed cable route, as set out in Appendix 3.2 Bespoke Access Road Appraisal [APP-080] and the Design and Access Approach Document [APP-278].

Mr Culot on behalf of the Applicant summarised the Applicant's approach to alternatives for the proposed Cable Route.

Mr Culot explained that **ES Appendix 3.1 Cable Route Corridor Appraisal (APP-079)** details the process undertaken by the Applicant to refine the Cable Route Corridor, an iterative process that has taken place from early 2023. The process undertaken to date has been to identify and refine the Cable Route Corridor, within which the final exact Cable Route will be located once the detailed design process has been undertaken post-consent.

The factors considered by the Applicant are listed in paragraphs 2.1.2 and 2.1.4 of the Cable Route Corridor Appraisal. In summary, the aim was to identify a Cable Route Corridor that would allow the safe and efficient construction of the Cable Route, whilst minimising as far as possible interactions and impacts upon sensitive environmental receptors. The Applicant has submitted a series of figures showing the proximity of such receptors as **Figures 6.6, 6.7, 7.1, 7.2, 7.3, 7.4, 8.1 and 8.2 (APP-208, 209, 239, 240, 241, 242, 244 and 245)**.

The Applicant was also mindful of its obligation in section 122 of the Planning Act 2008 to consider all reasonable alternatives to compulsory acquisition and therefore sought to select a corridor that minimised the number of affected land interests that would be subject to compulsory acquisition under the DCO. The Applicant's general approach in this regard is detailed in the **Statement of Reasons (AS-013)**.

Mr Culot explained that the appraisal process was undertaken as follows:

First an Initial Search Area was identified, being land between the Solar Array Area, the former Beacon Fen South and the Bicker Fen substation (shown on Drawing ST19595-503, within the Cable Route Corridor Appraisal (e-page 32)). Within this area desktop studies and an onsite survey were undertaken to establish a

high-level baseline and identify key environmental constraints. This was undertaken prior to the submission of the Scoping Report.

This area was then refined into the Cable Route Search Area, which was presented in the **Scoping Report (ES Appendix 1.1 (APP-071))** (e-page 241)). This area was defined taking into account statutorily designated sites, residential properties and settlements, existing infrastructure and physical constraints within the Initial Search Area.

The Cable Route Search Area was settled whilst Beacon Fen South remained part of the Proposed Development. Therefore, it concentrated on the area to the west and south of Heckington, to ensure connectivity with Beacon Fen South. Once Beacon Fen South was removed from the Proposed Development, and following receipt of the Scoping Opinion, the Cable Route Search Area was reviewed to ensure that the potential routes to be considered in the next stage of the appraisal remained appropriate. The area to the east of Heckington was brought back into consideration, as this would enable a shorter corridor, reducing the scale and geographic extent of effects.

Potential corridor options within this revised Cable Route Search Area were then identified that were technically feasible and avoided key constraints as far as possible. These constraints included designated and non-designated heritage assets, local wildlife sites (LWSs), settlements and residential receptors, public rights of way, existing planning application boundaries and existing infrastructure.

As a result of this review, three potential Cable Route Corridors were identified – Options 1 to 3. These are shown in **ES Figure 3.1 Alternative Cable Corridors (APP-197)**. At this stage the Applicant also committed to installing the Cable Route underground.

The potential environmental constraints of these options were reviewed in greater detail using a RAG assessment to identify a preferred option. This was undertaken prior to statutory consultation to ensure that selected route could be considered within the PEIR. The assessment considered the respective likely impacts of the three routes across each of the ES chapters – see section 4.3 of the **Cable Route Corridor Appraisal (APP-079)** (e-page 17).

Of the three options, Option 2 and Option 3 each had at least one red rating. Option 2 had no red (or indeed orange) ratings and was therefore identified as the preferred route.

Across a number of environmental aspects, there were no significant constraints for any of the options, or little distinction between them. In such cases, Option 1 was preferred as the shortest route. The following constraints were therefore determinative in concluding that Option 1 was preferred:

- Option 3 passed closer to residential receptors and thus had greater potential resulting effects.
- Option 3 could not be easily adjusted to avoid a group of LWSs and thus had greater likely ecological impacts.
- Options 1 and 2 were similar for many of the environmental aspects, with therefore a preference for Option 1 because it is shorter. However, Option 2 passed closer to a Scheduled Monument and other heritage assets and therefore was discounted in favour of Option 1 due to greater potential for heritage and archaeological impacts.

In response to an oral submission from Matthew Mountain on behalf of LCJ Mountain Farms Limited regarding his concerns about lack of consideration of alternatives for the Solar Array Area and Cable Route Corridor, Mr Culot noted that paragraphs 6.2.36 – 6.2.49 of the **Planning Statement (APP-277)** set out the applicable law and policy on the consideration of alternatives. Without limiting the full explanation in those paragraphs, it was emphasised that the underlying regulatory requirement for the Applicant's ES is to include "*a description of the reasonable alternatives studied by the applicant*" (Reg 14(2)(d) of the EIA Regulations 2017) and that national policy directs that this consideration be undertaken in a "*proportionate manner*" (para. 4.3.22 of NPS EN-1).

In relation to alternatives to the Solar Array Area, the **Site Selection Report at Appendix 2 of the Planning Statement (APP-277)** and **ES Chapter 3: Alternatives & Design Evolution (APP-054)** cover the Applicant's site selection process, as discussed earlier by Mr Turnbull. This concluded that there are no more suitable locations to make use of the capacity at the Bicker Fen substation than the site of the Proposed Development. The figures at **Annex D** of the **Site Selection Report** demonstrate the constraints identified in the area surrounding the Bicker Fen substation that supported that conclusion. That exercise considered the area within which LCJ Mountain Farms Limited's land is located.

Mr Culot further noted that the site previously proposed by LCJ Mountain Farms was divided across multiple non-continuous areas. The difficulties of developing a non-continuous site are discussed in para. 3.4.7 of the

Site Selection Report. Further, the location of the areas proposed by MF was disadvantageous as compared to the Applicant's Solar Array Area from the perspective of, *inter alia*, agricultural land classification and flood risk, as can be seen by reference to the figures at **Annex D of the Site Selection Report** for the wider area.

In response to questioning from the ExA, Mr Hartley-Bond for the Applicant noted there were planning and environmental considerations which should be considered, but in technical terms, explained that having a non-continuous site poses difficulties including the need for additional cable runs (inter-array connections). This requires additional cabling and, likely, the involvement of additional third parties. Additional electrical infrastructure may also be required to link the parcels together, such as additional substations. This all has an impact on the timing for delivery of the scheme and its viability.

In relation to alternatives to the Applicant's Cable Route Corridor, Mr Culot noted that, despite there being no obligation on an Applicant to consider specific proposals suggested by third parties where that applicant has already conducted a lawful and policy-compliant consideration of alternatives, the Applicant here reviewed the alternative cable route proposed by LCJ Mountain Farms Limited and addressed it in paras. 5.1.8 – 5.1.11 of **ES Appendix 3.1 Cable Route Corridor Appraisal (APP-079)**. As per para. 5.1.11, LCJ Mountain Farms' proposed alternative was considered to introduce additional potential impacts to those from the Applicant's Cable Route Corridor, as well as impacting a greater number of land interests. As a result, the Applicant's Cable Route Corridor was concluded to be preferable.

In response to a question from the ExA regarding why cost was a factor in considering alternatives, Mr Mack for the Applicant clarified that to the extent that was inferred from discussion regarding the Cable Route Corridor Appraisal document, that is not the case. To the extent that it was inferred from the discussion regarding the viability considerations of additional infrastructure for non-continuous sites, cost is clearly a consequence of such additional infrastructure but there are also additional potential environmental impacts that follow from additional infrastructure and which needed to be, and were, considered by the Applicant.

[Post-hearing note: The Applicant discusses this point further in response to Action Point 6 from ISH 1 at Section 3 of this document and in its Applicant Responses to Relevant Representations (Document Ref. 9.2) and notes further that question NED.1.6 in ExQ1 is on a similar topic and will be responded to at D2.]

The ExA will also explore how the Applicant seeks to maximise the energy generating potential of the site by questioning the applicant in relation to proposed technology and anticipated solar generation capacity. The ExA will then want to understand how the Applicant, taking into consideration the generating capacity of the Proposed Development, the storage capacity of the BESS and the export capacity of the proposed connection have all been factored in in order to maximise energy generation but minimise land take.

Mr Hartley-Bond on behalf of the Applicant set the context for the Proposed Development by noting the signed grid connection agreement with the National Energy System Operator (NESO) for 600MW import/export with solar photovoltaics and battery energy storage listed as the technologies, and referred to section 4 of the **Electricity Grid Connection Statement (APP-285)**. This represents the maximum import and export amount the project can provide and the key technical considerations. Mr Hartley-Bond then set out that the Proposed Development will have a solar generation capacity of approximately 400 megawatts (MW) and the BESS will have 600MW of capacity.

Mr Hartley-Bond turned to the individual components of the Proposed Development, starting with the solar. Key terms were defined to aid in understanding the calculations:

- Megawatt peak (MWp) is a measurement of the maximum power output of all the panels installed on a solar project. It is also referred to as the Direct Current (or DC) generation capacity.
- Megawatts (MWs) tends to be used for the power figure that can be exported to the grid. This is referred to as the Alternating Current (AC) generation capacity.

Going from DC - AC requires a conversion process, undertaken by using inverters.

The ExA clarified that now the difference between AC and DC has been explained, we should continue to discuss in AC.

Mr Hartley-Bond clarified he is happy to use AC generally, but at times it will be helpful to use both figures to explain the facts behind the numbers.

Mr Hartley-Bond noted there are several reasons as to why DC exceeds AC, referring to National Policy Statement (NPS) EN-3, paragraph 2.10.55, in relation to degradation but also mentioned managing the

variations in generation efficiency over the course of a year. This is dealt with through overplanting. Mr Hartley-Bond went on to explain how generation from the site had been maximised within the land available, whilst staying within the bounds of the ES Design Parameters, contained within the Outline Design Principles in turn, set out within the **Design and Access Approach Document (AS-019)**, along with the **Works Plans (AS-006)**.

Mr Hartley-Bond then explained that overplanting tends to be considered in terms of the DC:AC ratio, identifying a typical ratio of at least 1.2 : 1 DC:AC (or a 20% oversizing) otherwise the inverters would never reach their own maximum stated output and would be under-utilised. Experience was that around 1.3 : 1 to 1.5 : 1 (30% - 50% oversizing) was consistent with the approach of the industry for comparable scale projects and also preceded within recent DCO decisions.

The ExA asked whether the Applicant is proposing overplanting.

Mr Hartley-Bond confirmed the Applicant is overplanting to ensure efficiency and the ratio is likely to be between 1.3 : 1 and 1.5 : 1.

The ExA asked if the Applicant can confirm how the figure of 400 MW was arrived at.

Mr Hartley-Bond explained that the design in Figure 1.4 Indicative Site Layout Plan (APP-195) has determined that around 536 MWp could be installed (based on a fixed-tilt, south-facing system, using 685 watt peak panels). Using the DC:AC ratio of 1.34:1 with the indicative design, around 400 MW results, this being a conservative figure for what could be generated by the inverters and exported to the grid.

Not counting environmental / technical buffers, the land within the fence line is approximately 1,184 acres. NPS EN-3 (paragraph 2.10.17) suggests that a typical solar farm requires around 2 – 4 acres per MW of output. For the Proposed Development that would be around 2.2 acres per MWp or 2.96 acres per MW (AC), both within the range given in EN-3.

The ExA asked the Applicant how it has calculated maximising the use of the 600 MW connection.

Mr Hartley-Bond confirmed that the Applicant would come back in more detail in a written submission.

The ExA asked what the baseline is to which overplanting is considered again.

Mr Hartley-Bond clarified that it is 1.34:1 DC:AC.

The ExA asked for clarity as to what 400 MW refers to.

Mr Hartley-Bond clarified that that is the AC generation capacity which results in land use of 2.96 acres per MW.

The ExA asked how the Applicant arrived at the 600 MW size of the BESS.

Mr Hartley-Bond on behalf of the Applicant clarified that the Applicant is seeking to maximise the use of the connection and therefore designed a scheme that is importing and exporting a maximum of 600 MW.

The ExA asked the Applicant to clarify why 600 MW is proposed when the benefits of the application will be considered based on generation, not storage.

Mr Hartley-Bond clarified a scenario that the solar could be generating near maximum capacity but the storage could also still be exporting thereby maximising the use of the grid connection.

The ExA asked for calculations as to how likely the above scenario is, including comprehensive evidence on how likely it is that the Proposed Development would be able to maximise the 600 MW connection secured, and also how likely it is it would do that and also generate enough electricity to feed the BESS units to be maximised.

Mr Mack on behalf of the Applicant confirmed that the Applicant will respond in writing.

[Post-hearing note: The Applicant discusses this point further in response to **Action Point 7** from ISH 1 at Section 3 of this document.]

The ExA will also ask how future developments in photovoltaic technology could be incorporated or considered as part of the proposed development.

	<p>This question was not asked in sequence but a partial question and answer on this subject was asked under Agenda Item 3 (General Matters), answered by Mr Hartley-Bond stating that there is flexibility relating to panels, as wattage increases and therefore increasing generation from the site.</p> <p>The ExA will give the HLAs an opportunity to comment on any issues raised so far under this point of the agenda, followed by statutory consultees, then statutory undertakers and then any other IPs.</p> <p>Following oral submissions from other IPs, Mr Garden on behalf of Fidra Energy stated that Fidra are proposing the Hammond BESS scheme in the area, with an application currently submitted and due to be determined in November 2025. There is an overlap between the Applicant's Cable Route and Fidra's Proposed Development and the primary concern is the interaction between these.</p> <p>Mr Mack on behalf of the Applicant confirmed that the Applicant will respond to Fidra's relevant representation at Deadline 1 but, by way of interim update, acknowledged that there is an overlap between the proposed Cable Route Corridor for the Proposed Development and the red line boundary for the planning application currently awaiting determination for Fidra's project. The extent of this overlap will be sensitive to the detailed design evolution of each scheme and subject to their respective planning consents; however, this residual uncertainty at present notwithstanding, Mr Mack noted that both parties are participating in collaborative discussions about this potential interface and the Applicant anticipates that a suitable resolution can be reached and documented by the mid-point of the examination.</p> <p>Mr Mack confirmed the Applicant would confirm the approach to Fidra's scheme with regards to cumulative impacts.</p> <p><i>[Post-hearing note: The Applicant discusses this point further in response to Action Point 8 from ISH 1 at Section 3 of this document.]</i></p>
Water Environment and Flood Risk	<p>The ExA will ask the Applicant to provide an overview of ES Chapter 11 Water Resources and Flood Risk [APP-062], particularly focusing on the assessment methodology, the assessment of effects, embedded mitigation proposed and any residual effects. The ExA will ask the applicant to explain and</p>

confirm its consultation and engagement until this date with relevant agencies including with the relevant Internal Drainage Boards.

Anna Saich on behalf of the Applicant set out that the assessment methodology for Chapter 11 Water Resources and Flood Risk is set out in Section 11.4 of the **ES Chapter 11 (APP-062)**. In summary:

- Background surveys and studies were completed to establish the baseline condition and identify hydrological and hydrogeological receptors. These studies included desk-based and field surveys. The sensitivity of the receptors to hydrological and hydrogeological impacts was determined. Potential likely impacts resulting from the Proposed Development were considered.
- Then the scale of potential effects was determined by assessing the degree of sensitivity of the receptors and the potential magnitude of change from the baseline condition. The assessment was undertaken assuming that the embedded mitigation set out in Section 11.7 of the ES Chapter will be implemented as part of the Proposed Development.
- Effects that were determined to be Major or Moderate were considered to be ‘Significant’ in EIA terms. Effects that were identified as Minor or Negligible were considered to be ‘Not Significant.’
- Following the assessment, the need for any specific mitigation measures and residual effects were considered.
- Assessment of cumulative effects was also undertaken. The first step of the cumulative assessment was to consider other developments within the same catchment as the Proposed Development. The second step was to consider if the construction phases were likely to overlap and the potential for cumulative effects on the water environment.
- Supporting assessments included the **Flood Risk Assessment (APP-162)** and the **Water Framework Directive (WFD) Compliance Assessment (APP-167)**, which are both appended to the ES chapter.

Anna Saich on behalf of the Applicant summarised the assessment of effects:

- Desk-based and field-based surveys were undertaken to inform the description of the baseline.
- In summary, regionally, the Order Limits lie within the Environment Agency’s ‘Black Sluice IDB draining to the South Forty Foot Drain Water Body’ surface water catchment and within the Black Sluice Internal Drainage Board (IDB) area. On a local scale, the Order Limits are split between two surface water catchments: the Heckington Eau and the South Forty Foot Drain Catchment.

- Within these catchments there are a number of Main Rivers and Ordinary Watercourses, and IDB drains. There are two Local Wildlife Sites onsite with hydro-ecological significance: the South Forty Foot Drain and the Great Hale Eau.
- With regard to geology and hydrogeology, superficial deposits vary across the Order Limits from those with no groundwater resources (such as the Tidal Flat Deposits) to those considered to be locally important aquifers (the Glaciofluvial Ice Contact Deposits and Sleaford Sand and Gravel). The bedrock geology, which is the Oxford Clay Formation and the West Walton Formation is not considered to be a groundwater resource.
- There are 16 licensed surface water abstraction locations downstream of the Order Limits, which have been considered in the assessment. There are no registered private water supplies within 2km of the Order Limits.
- Once the baseline condition was described, the potential effects on the water environment were then considered. They included potential effects that may change the hydrological and hydrogeological flow regime, and those which may cause pollution and a degradation in water quality. Details are provided in Section 11.7 of the ES Chapter.

Anna Saich on behalf of the Applicant summarised the embedded mitigation proposed:

- The embedded mitigation measures included in **ES Appendix 2.3 Embedded Mitigation (APP-076)** include design mitigation, which will be secured by Requirement 5 in the **Draft DCO (AS-008)**, and the principles of good practice guidance set out in the **Outline Construction Environmental Management Plan (APP-077)** and **Outline Decommissioning Environmental Management Plan (APP-078)**. In addition, the **Outline Battery Safety Management Plan (APP-279)** sets out the embedded mitigation measures relating to the maintenance and management of the BESS.
- Embedded design mitigation measures, such as the avoidance of hydrologically sensitive areas and flood zones, have been incorporated into the design of the Proposed Development, where possible. These include:
- The initial layout (which is shown on **ES Figure 1.4 Indicative Site Layout Plan (APP-195)**) and locations of the access tracks (including the Bespoke Access Road) and auxiliary infrastructure have been designed to avoid hydrologically sensitive areas where possible.
- The access tracks within the Site have been routed to make as much use of existing tracks as possible, upgrading where required, to minimise the requirement for entirely new tracks and watercourse crossings.

- Underground cabling will, wherever possible, aim to follow the same route as the access tracks to reduce ground disturbance.
- A minimum 5 m buffer to all watercourses and waterbodies, within which there will be no development.
- A minimum 9 m buffer to all watercourses and waterbodies, within which there will be no new infrastructure that would impede access to the watercourse or waterbody.
- The Proposed Development has been designed in accordance with Environment Agency guidelines relating to flood risk.

The ExA asked the Applicant to confirm that the Chapter 11 Water Resources and Flood Risk assessment found that there were no significant effects on the water environment and therefore no additional mitigation is required beyond the embedded mitigation. The ExA also asked what consultation was undertaken with IDBs including Black Sluice IDB and whether there had been communication with the South Forty Foot Drain IDB.

Anna Saich on behalf of the Applicant confirmed that the findings of the assessment were that all effects were 'Not Significant'. Anna Saich also responded that the South Forty Foot Drain was within the Black Sluice IDB area.

Anna Saich on behalf of the Applicant noted that Table 11.1 of the ES Chapter Water Resources and Flood Risk provides a summary of the consultation activities undertaken as part of the DCO application process. This included EIA scoping and statutory consultation, as well as direct topic-specific consultation including consultation with the Black Sluice IDB to inform the design of the Proposed Development.

The ExA asked for clarification regarding meetings and engagement with the Black Sluice IDB noting that the ES Chapter only referenced a meeting on 15 August 2023.

Anna Saich on behalf of the Applicant confirmed that there had been further communication and that the Applicant is preparing draft Statements of Common Ground (SoCG) including with the Black Sluice IDB which include details of consultation undertaken.

The ExA will then ask the Applicant to present its approach to flood risk and flood risk assessment and ask if this is in line with the latest Environment Agency (EA) guidance.

Mrs Keegan on behalf of the Applicant confirmed that the Flood Risk Assessment, as submitted, was carried out in line with Environment Agency datasets and guidelines at the time that it was written. Mrs Keegan confirmed that the datasets used in the Flood Risk Assessment, as submitted, were subsequently updated in early 2025 with respect to surface water and fluvial flood risk mapping. Therefore, in accordance with the ExA's Section 51 advice, a **Technical Note (AS-022)** was produced which compared the differences between the datasets and assessed the appropriateness of the mitigation measures proposed within the Flood Risk Assessment. Mrs Keegan clarified that the primary focus of the **Technical Note (AS-022)** was on surface water flooding datasets and, with respect to fluvial flood risk, the flood risk assessment relies upon bespoke fluvial flood modelling undertaken for the proposed development.

The ExA will then ask if the EA (if in attendance) has any further comments to make in light of [RR-006]. The ExA will then give the HLAs an opportunity to comment, followed by other statutory consultees, then statutory undertakers and then any other IPs.

Following an oral submission on behalf of the Environment Agency regarding outstanding fluvial flood modelling and project design concerns, the ExA asked the Applicant to confirm the status of these issues and concerns.

Mr Mack on behalf of the Applicant confirmed the Applicant will be responding to the Environment Agency's **relevant representation (RR-006)** at Deadline 1 and has been discussing these points through the drafting of the SoCG with the EA. Many points relate to, or are consequential upon, the flood modelling which is undergoing its fourth review with the EA and, once agreed, will lead to agreement on a number of the matters in **RR-006**.

The ExA stated that it would welcome a commitment from the Applicant to find resolutions to these concerns, given that flood risk is a key issue.

Mr Mack confirmed the Applicant is committed to making progress and discussions are ongoing.

[Post-hearing note: The Applicant discusses this point further in response to Action Point 9 from ISH 1 at Section 3 of this document.]

	<p>Mr Sale on behalf of the Environment Agency confirmed that the hydraulic modelling submitted by the Applicant has been through a number of rounds of review with the Environment Agency and that there are three outstanding matters that the EA is working with the Applicant to resolve. The key remaining points concern the impact of some of the receiving watercourses on the credible maximum water level; uncertainty around the operating rules for a particular pumping station; and an issue around climate change. Mr Sale communicated that he believes these matters are fairly easy to resolve but that the EA needs further clarity on those matters from the Applicant. They are also reviewing the model regarding the breach event.</p>
Access and Traffic	<p>The ExA will ask the Applicant to provide an overview of ES Chapter 9 Access and Traffic [APP-060], particularly focusing on the assessment methodology, baseline conditions and how and when these were established, the assessment of effects at all stages of the proposed development, embedded mitigation proposed and any residual effects.</p> <p>Mr Cronshaw on behalf of the Applicant stated that the assessment started with data collection to determine baseline conditions as reported in ES Appendix 9.1 Transport Assessment Part 1 (APP-155), sections 3.1 – 3.6.</p> <ul style="list-style-type: none"> • A series of site visits during the first half of 2023, to make initial observations of the highway network. This informed scoping and early route assessment work; • Geometric Audit of the local highway network, including vehicular, pedestrian and cycle network, during July 2023; • 7-day Automatic Traffic Count (ATC) surveys in July 2023, summarised in Table 3.1, • 7-day ATC survey in Asgarby Road in February 2024, • 7-day ATC on Carterplot Road in January 2025, • Review of traffic count data on the A17 from multiple sources, including the Department for Transport (DfT, 2021), Lincolnshire County Council (LCC, 2021), and Heckington Fen Solar Farm ATC (2022), • Collision history within Study Area from crashmap.co.uk for the period 2019 to 2023, • 7-day occupancy survey of the A17 layby to the south-west of Asgarby, <p>A summary of the assessment in ES Chapter 9 Access and Traffic (APP-060) section 9.10, identifies the effects of the Proposed Development and the mitigation proposed to avoid or reduce adverse effects, as follows;</p>

- The document reviews the existing highways and traffic conditions, and predicts future traffic levels during the construction and operation of the Proposed Development;
- The review highlights that the A17 is the principal and busiest road in the vicinity of the Proposed Development, with existing traffic flows on average of approximately 18,000 vehicles a day, of which circa 16% are Heavy Goods Vehicles (HGVs);
- It is estimated that traffic on the A17 will grow to 19,000 vehicles per day by 2028;
- It describes other local roads as being predominantly rural and unclassified with considerably lower traffic use;
- Pedestrians, cyclists or equestrians on local roads are considered as vulnerable and sensitive receptors in the assessment;
- Construction access to the Proposed Development is identified as being primarily from A17 via the dedicated Bespoke Access Road (BAR), with a left-in/left-out arrangement;
- The level of construction traffic generated by the Proposed Development is estimated to be an additional 168 vehicles Annual Average Daily Traffic (AADT), including 36 HGVs on A17 each day (on average) once the BAR is in place. This equates to a 0.9% increase compared to the baseline which is significantly below the IEMA guidance recommended 30% threshold for significance; and
- Additional construction vehicles accessing the Cable Route Corridor compounds and Bicker Fen substation on minor rural roads in the study area, including on Carterplot Road and Great Hale Drove are very low in absolute and percentage terms. The traffic levels are below the IEMA guidance recommended 30% change threshold for significance.

The highway authority submitted a **relevant representation (RR-002)** that states: “The methodology for the assessment was agreed at pre-application discussions with the Applicant. The volumes of traffic estimated for the construction period seem reasonable and it is agreed that there would not be a capacity issue on the highway network resulting from these proposals.”

ES Chapter 9 Access and Traffic (APP-060) Section 9.10 summarises the Access and Traffic effects of the Proposed Development as follows;

- During construction as being negligible, and Not Significant

- Operational phase effects related to on-site employment, estimated at up to six staff at any time. Traffic impact of this is concluded as negligible, and Not Significant.
- Negligible effects in relation to equipment replacement, concluded as Not Significant; and
- Residual and cumulative effects are concluded as Not Significant.

The cumulative assessment in section 9.9.3 and Transport Assessment section 5.4 includes consideration of the Heckington Fen Solar Park (EN-010123) development which also relies on the A17 in the same locality for construction access. Both the Proposed Development and Heckington Fen are estimated to generate a negligible change in traffic in relation to background traffic, when taken in aggregate to account for a situation where the construction periods overlap. Therefore, there are no likely effects resulting from the cumulative impacts of both schemes and no further assessment is required.

Detailed explanation of the potential for cumulative effects is in Appendix J of the Transport Assessment which identifies that there are no overlaps in terms of study area or construction period that are likely to result in significant effects, so no further assessment is required.

ES Chapter 9 Access and Traffic (APP-060) outlines the proposed monitoring and embedded mitigation measures which includes:

- Construction access to the Site from the A17 with a left-in/left-out only arrangement;
- Construction traffic will be managed and monitored through a detailed Construction Traffic Management Plan (CTMP) and Delivery Management Plan (DMP) to be agreed with LCC, BBC and NKDC. This must be substantially in accordance with the **oCTMP (APP-159)** and is secured pursuant to Requirement 13 of Schedule 2 to the **Draft DCO (APP-038)**. Requirement 13 states that the CTMP must be submitted to and approved by the relevant planning authority, such approval to be in consultation with the relevant highway authority. This allows for detailed measures to ensure construction traffic uses the prescribed routes.
- A Detailed Abnormal Loads DMP will confirm detailed Abnormal Indivisible Load (AIL) specifications, movement times and vehicle configurations. This will be subject to agreement with the relevant highway authority and police through the Electronic Service Delivery for Abnormal Loads (ESDAL) system;
- A Construction Staff Travel Plan (CSTP) based on the outline CSTP will minimise impacts of construction staff travel to/from the Site and maximise the use of collective transport, particularly minibuses; and

- The CSTP, DMP and Abnormal Loads DMP will form part of the detailed CTMP.

The ES Chapter concludes that there are no significant residual or cumulative effects in relation to access and traffic.

The ExA will want to explore and understand more fully the rationale behind the proposed access routes, options considered, and how the impact of these on existing traffic has been assessed.

The ExA asked about the rationale for utilising an existing layby for access to the Bespoke Access Road, and whether any works need to be undertaken to allow it to be used by construction traffic.

Mr Cronshaw on behalf of the Applicant confirmed that the assessment work that has been undertaken confirms the suitability of the layby. This assessment work included a geometric audit and an existing usage survey. This identified that it is safe to utilise an existing layby and its junctions with the A17 without modification, keeping the existing left-in, left-out arrangement.

The ExA asked whether any assessment had been undertaken to understand the impact of the closure of the layby on general traffic.

Mr Cronshaw on behalf of the Applicant confirmed that alternative layby locations and capacities had been set out in the Transport Assessment, which concluded that there is suitable alternative provision. Information signage should be installed during the closure to ensure drivers are aware of the distance to the nearest layby.

The ExA queried whether this proposal had been discussed with National Highways or the local highway authority.

Mr Cronshaw on behalf of the Applicant confirmed that the highways team in LCC had agreed this proposal.

The ExA asked whether any assessment had been undertaken to understand the impact of accelerating and decelerating vehicles accessing the layby.

Mr Cronshaw on behalf of the Applicant explained that as it was an existing layby, reasonably intensively used, including by HGVs, and without a material accident record, there was no need to alter the existing geometry to safely accommodate the Proposed Development's construction traffic. A speed limit reduction to 40mph as a complementary safety measure could be introduced and has been discussed with the highway authority, but no modelling of journey time impacts has been undertaken.

[Post-Hearing clarification: Upon further consideration, the Applicant wishes to clarify that, whilst the reduction of the A17 speed limit has been discussed with LCC, it has not been confirmed as being required to enable safe construction access. It remains a potential complementary safety measure if identified as a requirement within the detailed CTMP following contractor risk assessment and a Road Safety Audit as part of detailed access design.]

The ExA queried whether all construction traffic for the solar array would use the Bespoke Access Road.

Mr Cronshaw on behalf of the Applicant confirmed that preliminary works, as outlined in the draft DCO, would use local roads, and could be undertaken concurrently with construction of the BAR. This is because the preliminary works generate relatively low numbers of primarily light vehicles.

The ExA will also want to explore with the Applicant how non-motorised road users have been considered particularly in relation to accessibility to key routes and existing and future Public Rights of Way (PRoW) as well as relevant social, cultural, leisure and economic assets.

Mr Cronshaw on behalf of the Applicant stated that baseline analysis in **ES Chapter 9 Access and Traffic (APP-066)** identifies that there is no dedicated highway infrastructure on the A17 for pedestrians and cyclists in the vicinity of the Order Limits This reflects that there is little non-motorised user activity on the A17, with none observed during site visits. Notwithstanding the absence of material non-motorised user activity on the A17, the development traffic impact on the A17 is negligible. Therefore, even if the A17 was used by non-motorised users, there would be no significant impact on severance, pedestrian delay, pedestrian amenity, fear and intimidation, or accidents and safety.

Any non-motorised user activity on the highway network in the vicinity of the site is likely take place on lightly trafficked unclassified rural roads. The assessment identified that the magnitude of change in traffic on such

roads in Negligible, and Not Significant. Embedded mitigation in the form of the Bespoke Access Road ensures that the majority of construction traffic does not use the unclassified rural road network.

Ms Raine on behalf of the Applicant stated that **ES Chapter 15 Socio-Economics (APP-066)** considered the effects of Proposed Development-related traffic on local communities, potential impacts on non-motorised road users and impacts resulting from restricted access to recreation, including PRow and cycle routes. Baseline surveys of potentially affected PROWs, including site walkovers, and qualitative interviews with landowners identified low usage of the PRow network. A meeting was also held with the chairman of Ewerby and Evedon Parish Council, who reported that walking is quite popular to the north of the Solar Array Area, due to a well-developed network of footpaths, and that cycling is popular in the area.

There will be temporary closures of PRow within the Bespoke Access Corridor and Cable Route Corridor during construction, resulting in short term minor adverse impacts to users. For these temporary closures, signs or posters will be installed on relevant PROWs. Local walking groups, as well as relevant parish councils and district councils will be notified about any temporary closures through the Community Liaison Officer.

The A17 is generally not an attractive cycle or horse-riding route due to existing traffic flows and speeds. It is therefore assumed that the majority of cycling and horse-riding in the vicinity of the DCO Order Limits is on low traffic local roads. The construction phase access strategy requires the majority of development traffic to utilise the A17 and Bespoke Access Road to access the main Solar Array Area and Cable Route compound 1, therefore avoiding local roads. Cable Route compounds 2, 5, and 6 are also accessed via private access roads directly from the A17. Therefore, the only local roads that will be used to access construction sites are Carterplot Road/Great Hale Drove for access to the Cable Route compounds 3 and 4, and Bicker Drove/Vicarage Drove for access to Bicker Fen substation. As set out in **ES Chapter 9 Access & Traffic (APP-066)**, the construction traffic impact on these local roads is not significant, and construction traffic flows will therefore have no significant effect on non-motorised road users amenity or safety.

Appendix 9.3: Outline Construction Traffic Management Plan (APP-159) aims to minimise the impact of construction traffic on local roads, through measures such as providing staff minibuses for travel to/from construction compounds. Additionally, due to a phased construction schedule and construction compounds placed along the Cable Route Corridor, traffic impacts will be dispersed. Changes to traffic flows will therefore be negligible, meaning there will be no perceptible change for non-motorised road users. Finally, traffic marshals

will be responsible, where necessary, for managing interactions between site traffic and vulnerable road users passing the site. Where necessary, marshals will stop site traffic to allow slow moving vulnerable users, such as equestrians, to pass before releasing traffic.

A meeting was held with the Economic Development Manager of NKDC in June 2023 to discuss tourism and recreation. The three key tourist attractions in the vicinity of the Site are the Heckington Windmill, the Heckington Village Show and the Swaton Vintage Show (combined with egg throwing championships). Both shows take place in the summer, usually on the last weekend of July, and are over 2km from the Solar Array Area boundary. Most workers and construction traffic will be concentrated around the Solar Array Area and will not affect local roads south of the A17 road near Heckington, where the two shows take place every year. There will be negligible impact from construction traffic on the Heckington Village Show and Swaton Vintage Show.

The ExA asked about how impacts on KLLT/4/2 and KLLT/6/1 specifically have been assessed in relation to the Bespoke Access Road being used during construction.

Mr Turnbull on behalf of the Applicant confirmed the Applicant has considered LCC's suggested PRowS from statutory consultation which include new and missing link PRowS in and around the Bespoke Access Road and Cable Route Corridor. However the creation of permanent PRowS impacting in perpetuity on third party land was not felt proportionate given the temporary circa 40 year nature of the Solar Array Area and Bespoke Access Road and the short term temporary nature of the Cable Route Corridor. Instead, the Applicant is proposing a permissive path of several kilometres connecting Ewerby and existing but disconnected PRowS near South Kyme.

The ExA asked for clarity with regards to how the impacts on community connectivity at different stages of the development have been considered, particularly with reference to the construction stage.

Mr Mack on behalf of the Applicant confirmed the Applicant will respond following the hearing in writing.

[Post-hearing note: The Applicant discusses this point further in response to Action Point 10 from ISH 1 at Section 3 of this document.]

The ExA will then ask if National Highways (if in attendance) has any further comments to make in light of [RR-014]. The ExA will then give the HLAs an opportunity to comment, followed by other statutory consultees, then statutory undertakers and then any other IPs.

The ExA confirmed that it was aware of National Highway's Relevant Representation and the points contained therein.

3. Responses to action points

3.1.1 Table 3.1 below sets out the written summary of the Applicant's Responses to Action Points raised during the Issue Specific Hearing 1 and the further responses provided by the Applicant post-hearing.

Action Points arising during ISH1 – Table 3.1

ACTION POINT	APPLICANT'S UPDATE
<p>1 Applicant to provide clarification on the intended funding mechanism for the scheme and how it proposes to ensure that funding obligations are in place for all stages of the development, including decommissioning.</p>	<p>If the Secretary of State grants development consent for the Proposed Development, then there are certain different avenues which may eventuate for the ultimate funding of the project. Low Carbon's baseline assumption is that it will fund the development and construction of the Proposed Development through a combination of equity and debt, as explained in section 2.3.4-2.3.5 of the Funding Statement (APP-043). The Proposed Development is set up as a Special Purpose Vehicle, which is the industry standard for an energy project of this nature. Low Carbon has funded the entire development cost to this point and will continue to do so through the current development stage. If granted DCO consent then, equity for the subsequent stages of development and construction is expected to be funded from Low Carbon's balance sheet plus utilisation of a £400 million revolving credit facility that Low Carbon currently has in place with the specific purpose of helping fund Low Carbon's equity contribution to the construction costs on its renewable energy projects.</p> <p>Additionally, Low Carbon has a high level of confidence of securing the required bank debt for the Proposed Development having previously closed a £510 million facility with seven tier 1 lenders for building out a ~800MW portfolio of solar assets in the UK and Netherlands, a process that generated a high level of interest from a deep pool of credible lenders.</p> <p>In addition, Article 46 of the Draft DCO (AS-008) prevents the exercise of the compulsory acquisition powers until the SoS has approved a form of security from the Applicant.</p> <p>In respect of decommissioning, Requirement 18 of the draft DCO provides that decommissioning of Work Nos. 1, 2 and 3 must commence no later than 40 years following the date of final commissioning of the authorised development. This requirement also provides that, unless</p>

	<p>otherwise agreed in writing with the relevant planning authority, no later than 12 months prior to the date the undertaker intends to decommission any part of the authorised development, the undertaker must notify the relevant planning authority of the intended date of decommissioning. Within 12 months of such notification, the undertaker must submit to the relevant planning authority for its approval a decommissioning environmental management plan for that part which must be substantially in accordance with the Outline Decommissioning Environmental Management Plan (APP-078). No decommissioning works may be carried out until the relevant planning authority has approved the plan submitted in relation to such works, and the plan must be implemented as approved. Breach of a requirement of a DCO is a criminal offence pursuant to s161 of the Planning Act 2008.</p>
<p>2 Applicant to provide further detail on how the co-location of the Battery Energy Storage System (BESS) and the on-site substation has been taken into consideration as part of its major accidents and disasters assessment and if the proposed co-location increases any identified risk, including fire.</p>	<p>Within ES Chapter 17 Other Environmental Topics (APP-068) of the Environmental Statement (ES), Section 17.5 sets out the Applicant's consideration of the potential risks of major accidents and / or disasters as relevant to the Proposed Development. In-line with ES Appendix 3.2 Scoping Opinion (APP0-72), which confirmed that 'providing potential risks are assessed in the ES in relevant chapters and any relevant mitigation is secured through relevant management plans, the Inspectorate is content to scope this matter out', Table 17.3 Major Accidents and Disasters Associated with the Proposed Development sets out the types of accidents and disasters of relevance to the Proposed Development based upon the location of the Site and proposed land use and the relating receptor(s). Table 17.3 also includes reference to corresponding technical chapters within the ES, assessments and management plans (where relevant).</p> <p>Fire is identified as a potential risk and paragraph 17.5.6 sets out the Applicant's consideration of the topic and summary conclusion that, along with the safety measures secured through the Outline Battery Safety Management Plan (APP-279), 'Given the robust testing and stringent legislative controls that are in place regarding battery manufacture, significant effects in relation to fire are not considered to be likely and the topic, therefore, does not require further consideration within this ES'.</p> <p>Whilst not expressly highlighted in Section 17.5 of ES Chapter 17 Other Environmental Topics (APP-068), the Applicant can confirm that the co-location of the BESS with the Onsite Substation was considered as part of the assessment (as were all principal features of the Proposed</p>

	Development), drawing upon the fire safety management measures detailed within the Outline Battery Safety Management Plan (OBSMP) (APP-279) .
3 Applicant to confirm that the visual and landscape impacts of the maximum height of the BESS and the Onsite substation have been fully considered as part of the applicant's assessment and to clarify where in the applicant's documents this has been clearly set out.	The Applicant confirms this is the case. The parameters considered within the EIA, including maximum heights, are set out within Table 2.1 of ES Chapter 2 Proposed Development (APP-053) . The specific parameters that have been considered within the Landscape and Visual assessment are also included at 6.3.10 of ES Chapter 6 (APP-057) , confirming that a maximum height of 13m has been considered for the Onsite Substation, and a maximum height of 4.5m for the BESS containers. Paragraph 6.3.28 confirms that the Zone of Theoretical Visibility (ZTV) for the Proposed Development has been modelled on a worst-case scenario with PV Array heights at 3.5m and 3.9m; the tallest elements of the Solar Array Area, the HV transformers, at up to 13m; and the extension to the Bicker Fen substation with a maximum height of 15m. The ZTVs are illustrated at ES Figure 6.1 Bareground Zone of Theoretical Visibility (APP-203) and ES Figure 6.2 Screened Zone of Theoretical Visibility (APP-204) .
4 Applicant to confirm how matters scoped out of the applicant's Waste Assessment have been secured through the Development Consent Order process as to ensure that adequate treatment of waste, particularly in relation to the disposal of used panels during the operational and decommissioning stages, have been addressed.	<p>The Waste and Recycling Strategy (APP-189) demonstrates that site waste arisings can be managed efficiently and effectively, with opportunities to reduce, reuse and recycle waste arisings considered and optimised wherever possible, and to promote best practice and environmental awareness. The purpose of the Waste and Recycling Strategy is to provide an indicative framework to inform the preparation of Site Waste Management Plan(s) (SWMP) during the construction and decommissioning phases of the Proposed Development. SWMPs are committed to in paragraph 5.5.2 of the Outline Construction Environmental Management Plan (APP-077) and paragraph 1.2.1 of the Outline Decommissioning Environmental Management Plan (APP-078) each of which respectively are secured by Requirements 12 and 18 of the draft DCO (AS-008).</p> <p>In relation to the disposal of panels during operational and decommissioning stages, information is set out at Sections 5.2, 7.2 and 7.3 of the Waste and Recycling Strategy.</p> <p>It is not likely that a significant number of solar panels will need to be replaced throughout the development lifetime of 40 years, with only ad-hoc replacements following damage, being</p>

	<p>probable, based on the experience of other solar farms across England. Owing to the nature of the Proposed Development, waste generation during the operational phase is anticipated to be minimal and will not have a significant impact upon the local and regional waste management infrastructure. Paragraph 7.2.4 of the Waste and Recycling Strategy makes clear that during the 40-year operational life of the Proposed Development, there will be a regular review of suitable outlets for reuse and recycling of the panels and associated infrastructure at the end of its viable life to maximise recycling. In summary, the panels would be recycled at the decommissioning stage which is secured by the Outline Decommissioning Environmental Management Plan (APP-078) via Requirement 18. It is typically expected that solar panels have a lifetime of 40 years with a failure rate of 0.2% per year.</p> <p>At decommissioning, as set out within Section 1.12 of the ODEMP, waste segregation will be undertaken where possible to maximise the opportunities for reuse and recycling. All major pieces of equipment and infrastructure (including solar panels) may be recycled or reused.</p> <p>The waste disposal methods will be reviewed and updated in the detailed DEMP(s) with any future changes in the governing legislation.</p>
<p>5 Applicant to provide further detail, since human health has been scoped, on how it has taken into consideration the effects of the proposal on stress and anxiety, mental health and community cohesion within its Environmental Statement.</p>	<p>A health screening exercise was undertaken, in accordance with the Central Lincolnshire Healthy Planning Checklist, and included within the Scoping Report (APP-071). This considered potential impacts on mental health due to stress from construction and decommissioning activities, including increased noise and traffic. The Scoping Report proposed that these impacts can be mitigated through adherence to a Construction Environmental Management Plan and Construction Traffic Management Plan, which are secured via Requirements 12 and 13 of the draft DCO (AS-008).</p> <p>As stated within ES Appendix 1.2 Scoping Opinion (APP-072) it was agreed that, considering the information provided in the Scoping Report, Human Health could be scoped out of the ES provided adequate signposting between aspect chapters is included (ID 3.11.8).</p> <p>The chapters of the ES provide cross-references where required, and a summary of the consideration of Human Health throughout the ES is provided within ES Chapter 17 Other Environmental Topics (APP-068).</p>

	<p>ES Chapter 15 Socio-Economics (APP-066) provides baseline data on community health and wellbeing, and further considers related impacts including restricted access to recreation, and increased exposure to noise and traffic. Table 15.3 confirms that the potential impact on the wellbeing of people has been considered when defining the magnitude of change.</p> <p>The potential socio-economic effects of the Proposed Development in terms of human health are assessed to be minor and Not Significant, with no adverse impacts on human health or wellbeing.</p>
<p>6 Applicant to provide further information on how site alternatives put forward by LCJ Mountain Farms Ltd, in relation to the solar array panel and the cable corridor, have been taken into consideration and why these did not constitute the final preferred options put forward by the applicant.</p>	<p>The Applicant has considered alternatives in accordance with all relevant legal and policy obligations, within ES Chapter 3: Alternatives and Design Evolution (APP-054), the Cable Route Corridor Appraisal (APP-079), and the Bespoke Access Road Appraisal (APP-080), along with the Planning Statement (APP-277) (see paragraphs 6.2.36 – 6.2.49) and the Site Selection Report at Appendix 2 thereto.</p> <p>Alternatives are relevant to the Application in the following principal ways:</p> <ol style="list-style-type: none"> 1. the Applicant must as a matter of law report on the reasonable alternatives to the Proposed Development that it considered, as part of its Environmental Statement ("ES"); 2. the Applicant must demonstrate that it has explored all reasonable alternatives to compulsory acquisition and that its proposed interference with interest-holders' rights is necessary and proportionate; and 3. the Applicant's compliance with relevant policy on alternatives must be weighed by the decision-maker. <p>We therefore set out our response to this question structured under headings numbered 1-3.</p> <p>The question of alternatives is also relevant where a Habitats Regulations Assessment identifies adverse effects on integrity of a protected site but, as the Applicant's Shadow Habitat Regulations Assessment (APP-050) concludes that there are no such effects from the Proposed Development, that consideration does not arise here.</p> <p><u>1. Legal requirement – contents of the ES</u></p>

Regulation 14(2)(d) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ("**EIA Regs**") states that an ES must include (emphasis added):

*"a description of the **reasonable alternatives** studied by the applicant, which are relevant to the proposed development and its specific characteristics, and an **indication of the main reasons** for the option chosen, **taking into account the effects of the development on the environment**"*

This is minorly supplemented in paragraph 2 of Schedule 4 to the EIA Regs.

The Applicant has satisfied this legal obligation. Its application includes **ES Chapter 3: Alternatives and Design Evolution (APP-054)** which explains the reasonable alternatives considered by the Applicant, addressing the matters referenced in the EIA Regs. See in particular paragraphs 3.4.5 - 3.4.7 which reference the main reasons (flood risk and best and most versatile land (BMV)) of relevance to the environment for selecting Beacon Fen North, and then subsequently continuing with and refining Beacon Fen North on the removal of Beacon Fen South and following environmental survey results.

2. Legal requirement – reasonable alternatives to compulsory acquisition

A condition of being granted compulsory acquisition powers in a DCO is that the Secretary of State must be satisfied that *"there is a compelling case in the public interest for the land to be acquired compulsorily"* (section 122 of the Planning Act 2008). Government guidance '*Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land*' (Department for Communities and Government, September 2013) ("**CA Guidance**") supplements this at para. 8, providing that an application must demonstrate to the satisfaction of the Secretary of State that (inter alia):

- *"all reasonable alternatives to compulsory acquisition (including modifications to the scheme) have been explored"; and*

- *"the proposed interference with the rights of those with an interest in the land is for a legitimate purpose, and that it is necessary and proportionate".*

The Applicant has complied with the CA Guidance and thus considers that the Secretary of State can be satisfied that it has established a compelling case for the compulsory acquisition powers sought. Its full case on this matter is set out in the **Statement of Reasons (AS-013)**.

In relation to the Solar Array Area, whilst it is not understood that LCJ Mountain Farms Limited ("**MF**") asserts that the Applicant fails to comply with section 122 of the Planning Act 2008 or the CA Guidance, for completeness it is reiterated that the Applicant has reached voluntary agreement with landowners across the full extent of the Solar Array Area (see para. 1.5.4 of the **Statement of Reasons (AS-013)**). MF's alternative array site would therefore offer no benefit in terms of interference with land rights.

In relation to the Cable Route Corridor, para. 5.1.10 of the **Cable Route Corridor Appraisal (APP-079)** explains that MF's alternative route would impact a greater number of land interests, either 18 or 17 freeholders (depending on whether the current necessary working width is aligned to the north or south of the highway), as compared to the 12 freeholders impacted by the section of the Cable Route Corridor for which MF has proposed an alternative. Furthermore, a number of those 12 freeholders have now entered into voluntary agreements (see the Applicant's most recent **update on land negotiations (PDA-007)** and its **Detailed Land and Rights Negotiation Tracker (PDA-005)**).

Given that more land interests would be affected by MF's alternative route than the Applicant's Cable Route Corridor, MF's alternative route is not a reasonable alternative to the compulsory acquisition proposed by the Applicant, and would be a less proportionate interference with the rights of interest-holders. On this, please see further the Applicant's response to RR-026 in its **Response to Relevant Representations (Doc Ref. 9.2)** and the supporting plans appended thereto.

Policy

Para. 4.3.9 of NPS EN-1 states that the existence (or alleged existence) of alternatives to the proposed development is *"in the first instance, a matter of law"* and goes on to state:

"This NPS does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option from a policy perspective."

EN-1 (4.3.22 – 4.3.23) also states that:

- the consideration of alternatives should be carried out in a *"proportionate manner"*; and
- only alternatives that meet the objectives of the proposed development need be considered (including delivering the same infrastructure capacity in the same timescale).

The following paragraph directs the Secretary of State not to *"refuse an application for development on one site simply because fewer adverse impacts would result from developing similar infrastructure on another suitable site"* (EN-1 4.3.24) and to have regard to the possibility that all suitable sites for energy infrastructure of the type proposed may be needed for future proposals (i.e. it may not entirely be a binary, 'either/or' matter).

Where an alternative is put forward by a third party after an application has been made, the SoS may place the onus on the person proposing the alternative to provide evidence for its suitability and the Secretary of State should not necessarily expect the applicant to have assessed it (EN-1 4.3.29).

Case law has further clarified the scope of the necessary alternatives exercise. In *R (CPRE) v Secretary of State for Transport* [2023] EWHC 2917, by reference to earlier case law, it was reiterated that alternatives are only a mandatory material consideration if expressly or impliedly identified in law or policy as a matter the decision-maker is bound to consider or are 'so obviously material' that it would be irrational to not take it into account. Unless they are a mandatory material consideration, it is not unlawful for the Secretary of State not to take alternatives into account.

Paragraphs 6.2.36 – 6.2.49 of the **Planning Statement (APP-277)** explain how the Applicant has complied with relevant policy in EN-1 and EN-3 in this regard, as well as how the Applicant's refinement of the Proposed Development has met topic-specific policy requirements to consider

	<p>alternative options for siting (e.g. on flood risk, BMV, and preventing significant harm to biodiversity).</p> <p><u>MF's purported alternatives</u></p> <p><i>Solar Array Area</i></p> <p>The Applicant's Site Selection Report at Appendix 2 to the Planning Statement (APP-277) at Section 2 explains the process for selecting the Solar Array Area site. Sections 3 onwards explain the Applicant's assessment of reasonable alternatives using a logical and sequential approach that pays reference to EN-3 siting criteria and EN-1 flood risk policy. This was a desktop appraisal carried out by environmental and planning specialists and confirms the absence of more suitable locations to make use of the capacity at the Bicker Fen Substation. The figures at Annex D of the Site Selection Report demonstrate that several constraints identified in the area surrounding the Bicker Fen Substation informed this conclusion. We note that in the decision letter providing approval of the Mallard Pass Development Consent Order at paragraph 4.71 the Secretary of State writes that the approach taken to site selection was "proportionate in drawing upon existing mapping data as a starting point for site selection purposes" and this is an approach that is established across solar projects at all scales given the access to third party land, cost, and temporary impact of carrying out essentially speculative surveys across multiple potential sites where only one would be taken forward.</p> <p>The areas of land comprising MF's proposed alternative for the solar array fell within the scope of this appraisal in that they are located within 10km of the point of connection to the Grid and thus within the 'Search Area' shown on the figures at Annex D to the Site Selection Report. By virtue of that appraisal process, these areas were not identified as preferable to the Solar Array Area or suitable for inclusion in the Proposed Development. Contributing factors to that conclusion are that:</p>
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- as can be seen from Figure 6 at Annex D to the **Site Selection Report**, based on the Applicant's desktop analysis, more of MF's proposed site was identified to be of higher ALC grade than the Solar Array Area; and
- as can be seen from Figure 7 at Annex D to the **Site Selection Report**, more of MF's proposed site was identified as within a higher flood zone than the Solar Array Area.

Further, per paragraph 2.2.2 of **ES Chapter 2 Proposed Development (APP-053)**, the Applicant's Solar Array Area is approximately 529 hectares (c. 1307 acres) in size. MF's proposed alternative is stated to be 516 acres, circa 209 hectares. Clearly it would not be compatible with delivering the same capacity in the same timescale to adopt MF's alternative *in place of* the Solar Array Area. To the extent that MF asserts that the Applicant should have adopted MF's site *in addition to* the Solar Array Area (e.g. at the time of the removal of Beacon Fen South), such a course of action is not required by any law or policy. Indeed, it would have hindered the achievement of the project objectives – particularly achieving the intended connection date – to try and rework the scheme to incorporate MF's land as a second non-continuous site to the Solar Array Area at that time, a fact that is acknowledged in para. 2.2.7 of the **Site Selection Report**. Per EN-1 at paras. 4.3.22 – 4.3.23, only alternatives that meet the objectives of the proposed development need be considered. Commencing at that time a series of environmental surveys across 209 hectares/516 acres and subsequent design work, then revised electrical arrangements, engagement with statutory environmental bodies and two planning authorities, and statutory consultation, would add significant programme time and materially delay the delivery of this urgent infrastructure.

At the time of the consideration set out in para. 2.2.7 of the **Site Selection Report** the expected connection date was circa 2029/2030, as per the offer held at that time. Our statutory consultation documentation (reported within the **Consultation Report (APP-046-048 and AS-018)**) referenced a timeline of commencing construction in 2026/27 and completing construction 24-36 months later. For the avoidance of doubt the recent NESO reforms do not alter the case set out above.

This course of action (i.e. adopting the MF site *in addition to* the Solar Array Area) would also have required developing a non-continuous site, the difficulties and additional impacts of which are discussed in para. 3.4.7 of the **Site Selection Report (APP-277)** and were elaborated upon by the

Applicant in its **Written Summary of Oral Submissions at ISH 1 (Document Ref. 9.3)**. The proposed Solar Array Area, by contrast, is a single continuous area.

Cable Route Corridor

A similar analysis applies to MF's proposed alternative cable route. **ES Appendix 3.1 Cable Route Corridor Appraisal (APP-079)** details the multi-stage selection process by which the Applicant identified the Cable Route Corridor, evidencing its consideration of reasonable alternatives. Going beyond the requirements of law and policy, the Applicant expressly considered MF's proposed route and explained its shortcomings in paras. 5.1.8 – 5.1.11 of **ES Appendix 3.1 Cable Route Corridor Appraisal (APP-079)**. MF's proposed alternative was considered to introduce additional potential impacts on Local Wildlife Sites ("LWS"), non-designated heritage assets and public rights of way compared to the Applicant's Cable Route Corridor, as well as impacting a greater number of land interests. As a result, the Applicant's Cable Route Corridor was concluded to be preferable. On this, please see further the Applicant's response to RR-026 in its **Response to Relevant Representations (Doc Ref. 9.2)** and the supporting plans appended thereto.

The national policy cited above in this response under the heading 'Policy' does not require an applicant to prove that there are no more suitable sites. In any event, here, in respect of both the Solar Array Area and the Cable Route Corridor, MF's proposals are not suitable alternative sites, and it cannot be concluded from information before the Examination that fewer adverse impacts would occur were they adopted. Therefore, MF's persistence with its proposed alternatives does not undermine the lawfulness of the Applicant's alternatives assessment nor its compliance with EN-1 and EN-3, nor serve as any bar to the Secretary of State granting consent for the Proposed Development.

The urgency of new energy infrastructure is a central theme of the energy NPSs. Paragraphs 3.2.6-3.2.7 of NPS EN-1 state that the Secretary of State should assess all applications for development consent for energy NSIPs on the basis that the government has demonstrated that there is a need for those types of infrastructure which is urgent, and that substantial weight should be given to this need when considering applications for development consent. Paragraph 3.3.58 adds that there is an urgent need for new (and particularly low carbon) electricity NSIPs to be brought forward as soon as possible.

<p>7 Applicant to provide further information, suggested to be submitted in a separate document, clearly setting out the applicant's case for the Proposed Development, including the proposed (BESS) and covering the following:</p> <ul style="list-style-type: none"> • The overall anticipated generating capacity of the proposed development, in AC; • The acres of land required per MWpeak of output in AC; • Confirmation of the maximum capacity of the connection secured to the Bicker Fen Substation; • Confirmation of the BESS capacity; • Clarification of how likely it is that the full capacity of the proposed BESS will be used when it appears that it is unlikely that the proposed solar array will produce, even at peak, energy in excess of that which it can export via the connection to the Bicker Fen Substation. • Why it believes that the proposed 600MW BESS units 	<p>The Applicant has responded to each of the sub-elements to this Action in the sections below; however, by way of general overview, and noting the request for information that clearly sets out the Applicant's case for the Proposed Development, the Applicant first wishes to highlight some key extracts from the Planning Statement (APP-277) submitted as part of the Application. The primary purpose of the PS is to assist the ExA and the SoS in their assessment of the Proposed Development by demonstrating how the Applicant has taken account of relevant planning policy, notably the NPSs for energy infrastructure, and the extent to which the Proposed Development complies with the policies within those NPSs, as well as any other matters that are "important and relevant" to the SoS's determination of the Application, including UK Government energy and climate change policy, the National Planning Policy Framework ('NPPF') and the statutory development plan. The PS therefore sets out the key substantial benefits and likely significant adverse environmental effects of the Proposed Development, including in compliance tables appended. The PS therefore clearly establishes the case for the Proposed Development in the manner requested by the ExA in this Action, in particular to (i) clarify how the Proposed Development is consistent and complies with relevant Energy National Policy Statements which establish the <i>need</i> for development of the type proposed by this Application; and (ii) to set out the key substantial benefits generated by the Proposed Development in this location by reference to those NPSs and other important and relevant matters, and explain how they demonstrably and considerably outweigh the limited adverse impacts caused.</p> <p>The Applicant's summary below in respect of this element of the Action is deliberately succinct because of the detailed nature of the PS, as duplication would not assist the examination, and the clear need already established by NPS EN-1 and EN-3 which have effect for the purposes of this Application pursuant to section 104 of the Planning Act 2008.</p> <p>Section 3.3 of the Planning Statement (PS) (APP-277) sets out the planning policy context which applies to the Proposed Development, including, but not limited to:</p>
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constitutes associated development under the Planning Act 2008.

- Paras 3.3.20-3.3.24 of NPS EN-1 explain that a secure, reliable, affordable, net zero consistent [energy] system in 2050 is likely to be composed predominantly of wind and solar. (Para 3.3.17 of the PS).
- Paras 3.3.25 – 3.3.31 of NPS EN-1 explain that storage has an important role to play in delivering benefits to the electricity system including: maximising the usable output from intermittent low carbon generation; reducing the total amount of generating capacity required to meet peak demand; reducing the need for new network infrastructure; providing a range of balancing services to help operate the electricity system; and reducing constraints on the electricity network. (Para 3.3.18 of the PS).
- Further, government has concluded that there is a critical national priority (CNP) for infrastructure which delivers decarbonisation and energy security benefits, and that for projects which meet the requirements for CNP (which the Proposed Development does) there is a presumption in favour of granting consent and that the need for the project would likely outweigh any residual impacts not capable of being addressed by application of the mitigation hierarchy. (Paras 3.3.20 – 3.3.25 of the PS).
- Therefore, Paras 3.2.6 – 3.2.8 of NPS EN-1 explain that the Secretary of State should assess this application on the basis that Government has demonstrated that there is an urgent need for the development; that substantial weight should be given to this need; and that the specific contribution of this application to satisfying that does not require separate consideration. (Para 3.3.15 of the PS).

Section 4 of the **Planning Statement (APP-277)** goes on to clearly set out the national need case and benefits of the Proposed Development, including contributing to meeting the UK's internationally legally binding target of achieving net zero carbon emissions by 2050 (PS Para 4.2.2).

Government have established a Clean Power target which requires at least 95% of UK electricity generation to be from low carbon sources, and for annual low carbon electricity generation to be higher than annual national electricity demand, under normal weather conditions. Government's aim is to achieve the Clean Power target by 2030, then keep power clean thereafter while

electricity demand grows into other sectors. Solar is expected to play a key role in achieving and maintaining government's Clean Power target. The government has established a capacity range of 45-47GW of large-scale solar generation and 23-27GW of batteries by 2030, rising to 45-69GW of solar and 24-29GW of batteries by 2035, requiring an unprecedented increase in installed capacity over the coming years in both technologies. (PS Section 4.3).

Further policy and sector support for the role of solar in the future electricity system, as well as the benefits arising from large-scale solar developments, are also set out in Chapter 4 of the **Planning Statement (APP-277)**.

Having established that general context, the Applicant now turns to the individual questions/requests for information under this Action:

- **The overall anticipated generating capacity of the proposed development, in AC**

Paragraph 1.1.1 of the **Non-Technical Summary of the Environmental Statement (ES) – (APP-051)**, explains that the Proposed Development will have a solar generation capacity of approximately 400 megawatts (MW). This is an estimate of the power generated by the solar array when operating under the highest expected irradiance levels, measured at the grid connection point, delivered on the land included in the Solar Array Area, measured in MW(AC) at the point of grid connection (MW AC).

There is no policy requirement for projects coming forward to deliver a main generation technology capacity which matches or exceeds its grid connection capacity. The Applicant's objectives for the project are summarised in the Site Selection Report (Appendix 2 to the Planning Statement) at Para 2.1.3 and include maximising contribution to the UK's urgent need for clean, renewable energy (and Critical National Priority infrastructure) and in viable proximity to an available grid connection, incorporating on-site energy storage while minimising impacts on local communities and environments (hence making effective use of land).

- **The acres of land required per MW_{peak} of output in AC;**

. As explained by the Applicant in its **Summary of Oral Submissions at ISH 1 (Doc Ref. 9.3)**, taking the land within the fence-line within the indicative design **Figure 1.4 Indicative Site Layout Plan (APP-195)**, there are ~ 1,184 acres (479 hectares) available to place solar arrays. Therefore, 2.96 acres of land would be required per MW of the maximum output of the scheme measured in MW(AC) at the point of grid connection.

As detailed during submissions at ISH1 - this ratio is fully consistent with the observation in paragraph 2.10.17 of EN-3 which noted that "...a solar farm requires between 2 to 4 acres for each MW of output, being almost exactly at the mid point of this range.

- **Confirmation of the maximum capacity of the connection secured to the Bicker Fen Substation;**

Section 4 of the **Electricity Grid Connection Statement (APP-285)** explains that the Applicant has signed a grid connection agreement with the National Energy System Operator (NESO) for 600MW import/export with Solar PV and Battery Energy Storage listed as the technologies. This represents the maximum import and export capacity respectively of the connection secured to the Bicker Fen Substation.

- **Confirmation of the BESS capacity;**

Paragraph 1.1.1 of the **Non-Technical Summary of the Environmental Statement (ES) – (APP-051)**, explains that the Proposed Development will have a Battery Energy Storage System (BESS) with 600MW of output capacity (a measure of the maximum instantaneous level of power deliverable by the system).

- **Clarification of how likely it is that the full capacity of the proposed BESS will be used when it appears that it is unlikely that the proposed solar array will produce, even at**

peak, energy in excess of that which it can export via the connection to the Bicker Fen Substation.

The energy generated by the main solar development over the course of one day will regularly exceed the energy storage capacity of the BESS. This may happen at all times of the year, however clearly is more likely to happen in months with higher solar irradiation (for example, March to October).

For example, and excluding the impact of electrical losses, on a sunny day when the solar array is exporting close to its maximum MW AC level (estimated at 400MW), over the course of approximately 90 minutes, the solar array would generate a quantity of energy which charge the BESS sufficiently to support one hour of full power output (600MW) when needed.

Market price is an indicator of the balance between supply and demand. When supply is higher than demand, price falls (and can go below zero). When demand is higher than supply, price rises. As capacities of renewable generation have increased in the UK, the number of instances of negative prices (when generation outstrips demand) has increased (e.g. just 5 hours in total from 1st July 2016 to 31st March 2020, versus 111 hours from 1st April 2025 to 30th September 2025, and 36 hours from 1st October 2024 to 31st March 2025). Source: <https://dp.lowcarboncontracts.uk/dataset/imrp-actuals> (accessed 7 October 2025)

Renewable generation capacities must urgently increase to reach the government's clean power target, therefore the frequency of occurrence of negative prices is also expected to increase.

When prices are negative, the solar array (and also other generators) will be incentivised to reduce exports to the grid. At other times, the solar array may be instructed by NESO to reduce its exports. By developing BESS with the proposed solar array, under both of these scenarios, the Proposed Development is able to store energy which otherwise would go to waste, and export it to the grid later, when it is needed, thus reducing the need for

other (generally more polluting and fossil fuelled, or expensive, or both) stand-by generating capacity to be ready to meet peak demand.

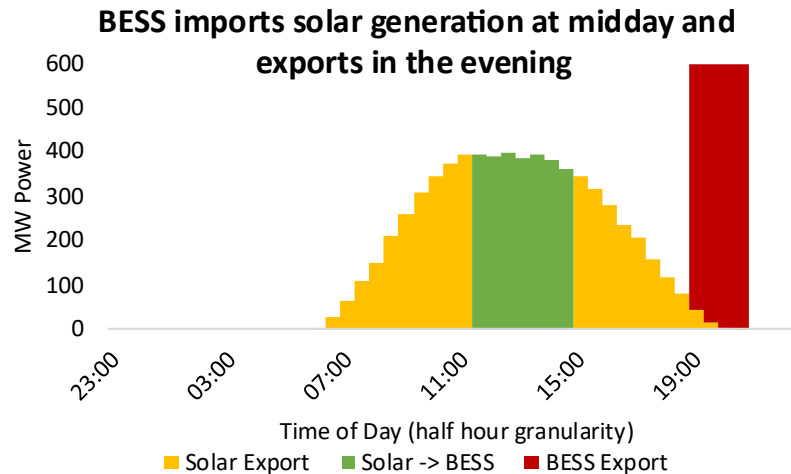
It is therefore very likely that the full capacity of the proposed BESS will regularly be used (i.e. filled with) with energy from the proposed solar array. When, how often and at what times this occurs will depend on many factors including national demand, the weather, and the evolving composition of the future GB generation fleet.

The chart illustrates an example of the solar array holding back energy from the grid during the peak solar hours (for example on a summer's day of low wind but high solar irradiation) and exporting instead in the evening, after the solar peak (for example to meet demand and keep other peaking plant off the grid).

On less sunny days, the solar array may be generating a lower output, and it would therefore take longer to fully charge the BESS. However, days during which the proposed solar array would generate more power than the BESS could store, could regularly occur at all times of the year.

In summary:

1. The energy generated by the main solar development over the course of a day will regularly exceed the energy storage capacity of the BESS
2. The main solar development may regularly send its full power generation to the BESS (400MW less losses)



3. The BESS will regularly send its full power capacity to grid (600MW), in response to market signals to meet demand when supplies are lower

- **Why it believes that the proposed 600MW BESS units constitutes associated development under the Planning Act 2008.**

Need for storage and policy support for storage

Before considering the BESS proposed as part of the Proposed Development and its position as associated development under the DCO, the Applicant considers it helpful to briefly summarise the strong policy support for storage and low carbon development, which has informed the Applicant's approach in this Application. This is set out in Section 3.3 and Chapter 4 of Section 3.3 of the **Planning Statement (APP-277)**. To summarise, the key points are:

EN-1 sets out the need for low carbon and flexible assets, e.g. Para 3.3.6, which explains that storage can provide flexibility, meaning that less of the output of plant is wasted as it can either be stored or exported when there is excess production. Storage can also supply electricity when domestic demand is higher than generation, supporting security of supply. This means that the total amount of generating plant capacity required to meet peak demand is reduced, bringing significant system savings alongside demand side response. Storage can also reduce the need for new network infrastructure.

EN-3 supports co-location of solar and storage assets. Para 2.10.10 explains 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" while para 2.10.16 recognises that associated energy storage infrastructure may be treated on a case by case basis as associated development. Further, para. 2.10.70 recognises that 'whether storage will be installed' with the solar panels is a matter that may or may not be settled in precise detail at the point of the application and clearly envisages co-location.

The Clean Power 2030 Action Plan describes the need for flexibility in the UK's future energy system: "As we build an energy system reliant increasingly on variable renewables, improving the flexibility of the wider electricity system is key... A significant increase in short-duration flexibility of 29-35 GW across battery storage, consumer led flexibility and interconnection capacity from 2023 levels will reduce the amount of more costly generation and associated network infrastructure that needs to be built, whilst maintaining security of supply" (p14).

Flexible assets are needed to balance supply with demand. NESO stated in its 2024 Future Energy Scenarios publication, that security of supply "refers to meeting all electricity demand at any given time" and that "Traditionally, risks to meeting electricity security of supply, have been at times of high demand." However, "as we move to higher volumes of weather-dependent renewable energy, we will also face additional challenges around both the oversupply and undersupply of renewable generation" (p99).

Flexible assets are also able to provide ancillary services which support the operation of solar developments as part of a decarbonised GB electricity system, and help to mitigate the impact arising from an increasing portion of the UK's electricity being supplied from intermittent renewable sources.

Made Solar DCOs with BESS included as Associated Development

This in-principle policy support is also reflected by a raft of decisions for large scale solar DCOs which have incorporated BESS as associated development to main solar arrays. For example, in the following decision letters for recently comparatively consented DCO schemes:

- Cleve Hill, para 4.6 [BEIS letter London 1VS](#)
- Sunnica, para 9.1.1 [EN010106-005902-Sunnica-ExA-Recommendation-Report-28-June-2023-FINAL-with Errata sheet.pdf](#)
- Gate Burton para 4.2 [EN010131-001744-Gate Burton Final Decision Letter.pdf](#)
- West Burton para 4.4 [EN010132-002064-Decision letter.pdf](#)

Whilst it is acknowledged that the prospective import/export capacity of the BESS in these schemes is not obviously greater than their equivalent solar generating capacity as is the case with those respective elements of the Proposed Development - that does not preclude the BESS from being considered 'associated development'. Instead, the BESS must fall to be considered against the legislation and the guidance, and this is considered further below.

Case specific considerations for associated development

As noted above para. 2.10.16 of NPS EN-3 recognises that there is a case by case (i.e. context specific) element to whether energy storage will be considered associated development, which we address here. This expands on the points set out in the Planning Statement at section 1.6 'Details of Associated Development'.

Associated development" is defined in section 115(2) of the Planning Act 2008 as development which is associated with the principal development (i.e. the NSIP) and that has a direct relationship with it. The 2008 Act does not provide any particular definition to what can comprise "associated development". It is a matter of fact and degree for a given project having regard to the guidance on associated development issued by the Government (Department for Communities and Local Government, 'Planning Act 2008: Guidance on associated development applications for infrastructure projects' ("the Guidance").

At para 5 of the Guidance four principles for Associated Development are described. These are:

- (i) *The definition of associated development, as set out above, requires a direct relationship between associated development and the principal development. Associated development should therefore either support the construction or operation of the principal development, or help address its impacts.*
- (ii) *Associated development should not be an aim in itself but should be subordinate to the principal development.*

	<p>(iii) <i>Development should not be treated as associated development if it is only necessary as a source of additional revenue for the applicant, in order to cross-subsidise the cost of the principal development. This does not mean that the applicant cannot cross-subsidise, but if part of a proposal is only necessary as a means of cross-subsidising the principal development then that part should not be treated as associated development.</i></p> <p>(iv) <i>Associated development should be proportionate to the nature and scale of the principal development. However, this core principle should not be read as excluding associated infrastructure development (such as a network connection) that is on a larger scale than is necessary to serve the principal development if that associated infrastructure provides capacity that is likely to be required for another proposed major infrastructure project. When deciding whether it is appropriate for infrastructure which is on a larger scale than is necessary to serve a project to be treated as associated development, each application will have to be assessed on its own merits. For example, the Secretary of State will have regard to all relevant matters including whether a future application is proposed to be made by the same or related developer as the current application, the degree of physical proximity of the proposed application to the current application, and the time period in which a future application is proposed to be submitted.</i></p> <p>Addressing each in turn:</p> <p>(i) Direct relationship: The BESS will store energy generated at the scheme if it is not needed at the time of its generation, and will export it when it is needed. This supports the operation of the Proposed Development by increasing its effectiveness (timings its generation to when there is demand); reducing the potential for wasted MWh (the energy is stored, not wasted); and therefore maximising the level of carbon free MWh sent to the grid (therefore benefit of the Proposed Development). The BESS will also be capable of delivering system services to the grid which are increasingly needed to operate a low-carbon electricity system. These also support</p>
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	<p>the operation of the Proposed Development by increasing the security reliability and flexibility of the system to which it connects.</p> <p>(ii) Subordinacy: It is the generation of renewable energy which is fundamental to achieving Net Zero, and the Proposed Development aims to meet the need for new generation on the grid by developing the principal, solar generation, component of the Proposed Development. A standalone BESS development would not on its own generate low-carbon electricity. Therefore, the associated development is clearly functionally subordinate to the principal development (the NSIP)</p> <p>(iii) Cross subsidisation: Investing in unsubsidised solar is economically rational on a stand-alone basis and requires no cross-subsidisation financially to justify the cost of the principal development. For example, EN-3 Para 2.10.13: “Solar farms are one of the most established renewable electricity technologies in the UK and the cheapest form of electricity generation”</p> <p>(iv) Proportionality: The Applicant directs the ExA to its response to part 5 of this Action, but summarises its points as follows. The power capacity of the associated development matches the grid export capacity available to it. The power generated by the main solar development over the course of a day can regularly exceed the energy storage capacity of the associated development. This can occur at all times of the year, however clearly is more likely to happen in months with higher solar irradiation (especially March to October). The associated development may therefore regularly be fully utilised by the main solar development and is therefore not disproportionate to it. The BESS is considerably smaller in footprint than the solar array and the Outline Design Principles (secured pursuant to Requirement 5 of the draft DCO (AS-008) and Works Plan (AS-006) place a physical envelope within which the BESS development must be contained to this effect. It is also not the tallest part of the development within the Solar Array Area.</p> <p>In light of the above, it is considered that the BESS proposed accords with the principles relating to associated development set out in the Guidance.</p>
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<p>8 Applicant to confirm it has considered Fidra Energy's BESS scheme proposal as part of the applicant's cumulative assessment, particularly the impacts of the proposed cabling routes into Bicker Fen Substation and how it proposes to resolve any potential issues in case both applications are developed.</p>	<p>An application for the construction and operation of a Battery Energy Storage System (BESS) was submitted to Boston Borough Council (BBC) in May 2025. The Applicant is Bicker Drove Limited, a project-specific SPV (special purpose vehicle), a wholly owned subsidiary of Fidra Energy Projects Limited.</p> <p>As stated within ES Chapter 4 Scope and Methodology (APP-055) the cut off date for the cumulative search was 31st December 2024. As the planning application was submitted after this date, the full application was not considered within the Applicant's cumulative assessment. However, the Screening Opinion request for the scheme was submitted in July 2024 (ref. B/24/0266) and this was included within Appendix 4.2 Cumulative Assessment Short List. BBC provided a Screening Opinion which concluded that the BESS scheme is not likely to result in any significant environmental effects and confirmed that an EIA is not required.</p> <p>The scheme was therefore considered at a high level (based on the information available within the Screening Opinion Request) and no likely significant effects in combination with the Proposed Development were identified.</p>
<p>9 Applicant to provide an update on how it has progressed to resolve urgent concerns raised by the Environment Agency in their relevant representation (RR) [RR-006], particularly on floor risk modelling.</p>	<p>The Applicant received the Environment Agency's latest model review comments on 26 September 2025 and is working through any necessary amendments to the baseline fluvial flood model and associated reporting. Furthermore, the Applicant contacted the Environment Agency on 26 September 2025 to arrange a meeting to discuss the unresolved matters raised in RR-006. These meetings are to be held on 7th October and 10th October 2025. A road-map to reaching agreement with the Environment Agency on their Relevant Representations is also being drafted and will be jointly agreed with the Environment Agency.</p>
<p>10 Applicant to clarify its assessment of the impacts of the temporary closure of Public Rights of Way (PRoW) on community connectivity and</p>	<p>ES Chapter 15 Socio-economics (APP-066) considered effects on Public Rights of Way (PRoW) users affected by temporary PRoW closure during construction within and adjacent to the Order Limits. It considers temporary PRoW closures and how this could affect community connectivity.</p>

<p>why alternative PRow are not being proposed.</p>	<p>To inform the baseline study, three separate onsite high-level studies of PRowS were carried out, including meetings with a landowner and the chairman of the Ewerby and Evedon Parish Council to gather data on PRow usage in the area. Potentially affected PRowS showed generally low use of the PRow in the area.</p> <p>Using professional judgement, PRow users were considered to be of low sensitivity based upon the guidance within the International Association for Impact Assessment's (IAIA) 2015 'Social Impact Assessment: Guidance for Assessing and Managing the Social Impacts of Project', which defines receptors of a low sensitivity as being <i>"A receptor with capacity and means to adapt to change and maintain / improve current conditions on its own after a certain time; receptor has a high level of access to resources and has a high capacity to adapt to changes"</i>. Owing to the presence of a robust network of alternative PRow, the receptor has a high level of access to resources (in this case PRow network). As such, PRow users were considered to be of low sensitivity due to the large number of footpaths present within the region and, thus, a network of alternative routes available. The impact of temporary closures of PRow will be local, short-term and reversible. This results in medium magnitude of change (impact) for a receptor of low sensitivity, resulting in a minor adverse effect that is Not Significant. Therefore, community connectivity will not be significantly affected, and the short-term closures will not require alternative PRowS to be created.</p> <p>While not required to address EIA impacts, to further manage connectivity via PRowS, an Outline Public Rights of Way (PRow) Management Plan is being prepared for submission at Deadline 2 (21st October 2025) where PRow diversions are considered.</p> <p>There are substantial measures already secured in the draft DCO in relation to community connectivity which are summarised as follows.</p> <p>For temporary closures of PRowS, signs or posters will be installed on relevant PRowS and local walking groups, as well as relevant parish councils and district councils, will also be notified about any temporary footpath closures through the Community Liaison Officer. This is secured via the Outline Construction Environmental Management Plan (APP-077) and Outline Construction Traffic Management Plan (APP-159).</p>
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	<p>The Proposed Development provides for the extension of PRow Ewer/12/1 via a permissive path of several kilometres length through the Solar Array Area. This has been discussed with the host local authorities at the pre application stage. The permissive path will provide a new route away from highways between South Kyme and Ewerby Thorpe which will remain in place throughout the operational life of the Proposed Development. Thus, community connectivity will be significantly enhanced via this extension connecting South Kyme and Ewerby Thorpe.</p>
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