



The Planning Inspectorate
Yr Arolygiaeth Gynllunio

The Planning Act 2008

SUNNICA ENERGY FARM

Examining Authority's Report
of Findings and Conclusions

and

Recommendation to the Secretary of State for
for Energy Security and Net Zero

Examining Authority

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28 June 2023

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OVERVIEW

File Ref: EN010106

The application, dated 18 November 2021, was made under section 37 of the Planning Act 2008 and was received in full by The Planning Inspectorate on 18 November 2021.

The applicant is Sunnica Limited.

The application was accepted for examination on 16 December 2021.

The examination of the application began on 28 September 2022 and concluded on 28 March 2023.

The development proposed comprises the construction, operation, maintenance and decommissioning of a generating station with a gross electrical output capacity of over 50MW, comprising ground mounted solar photovoltaic ("PV") panel arrays; one or more battery energy storage systems (BESS) with a gross storage capacity of over 50MW; connection to the UK electricity transmission system and other associated and ancillary development.

Summary of Recommendation:

The Examining Authority recommends that the Secretary of State should withhold consent.

If however the Secretary of State decides to give consent, then the Examining Authority recommends that the Order should be in the form attached in Appendix D or in an alternative form as explained in the report subject to further amendments.

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The Planning
Inspectorate **ERRATA SHEET – Sunnica Solar Farm Project - File**
Ref: EN010106

**Examining authority’s Report of Findings and Conclusions and
Recommendation to the Secretary of State for the Department of
Energy Security & Net Zero dated 28 June 2023**

**Corrections agreed by the Examining Authority prior to a decision
being made**

Page No.	Paragraph	Error	Correction
164	4.12.71	States “the Proposed Development fails to include mitigation for the potential adverse socio-economic impacts that could therefore be cause and is therefore in conflict with NPS EN-1.”	Should read “the Proposed Development fails to include mitigation for the potential adverse socio-economic impacts that could therefore be <i>caused</i> and is therefore in conflict with NPS EN-1.”
51	4.6.23	The Proposed Development would be an essential near-term step to meet government and address the climate change emergency.	Should read “... The Proposed Development would be an essential near-term step to meet government <i>policy</i> and address the climate change emergency.”
53	4.6.35	Change to 400kV cabling within the grid connection routes (Cabe Routes A and B) to facilitate grid connection Option 3	Should read “... Change to 400kV cabling within the grid connection routes (<i>Cable</i> Routes A and B) to facilitate grid connection Option 3.”
120	4.10.12	Paragraph 2.48.4of Draft NPS EN-3 recognises	Should read “ <i>Paragraph 2.48.4 of</i> Draft NPS EN-3 recognises...”
299	7.5.124	States “The ExA then asked Mr Richardson for his comments.”	Clarification - sentence added at the end of para 7.5.100 to say “Mr Alan T Richardson (Mr Richardson) and Mr Alan B Smith (Mr Smith), both IPs, attended CAH1 and made oral submissions in respect of funding.”
300	7.5.127	States “Mr Smith, at the invitation of the ExA...”	See above

Page No.	Paragraph	Error	Correction
301	7.5.130	States "The consequent risk of the the guarantee having to be..."	First "the" should be deleted
15	1.5.2	States "(Environmental Impact Assessment) Regulations 2009 (SI 2263)"	Should read "(Environmental Impact Assessment) Regulations 2017 (SI 572)"
31	3.2.24	States "Solar electricity generation is outside the scope of NPS EN-1 and NPS EN-3. Therefore, neither has effect under s104 PA2008 with respect to the Proposed Development save that the proposed electricity networks such as the grid connection routes, substations, converter stations, and associated infrastructure will be covered by NPS EN-1 and NPS EN-5)..."	Closing bracket after "NPS EN-5" should be deleted

1. INTRODUCTION

1.1. INTRODUCTION TO THE EXAMINATION

1.1.1. The application for the Sunnica Energy Farm (the Proposed Development) (EN010106) was submitted by Sunnica Ltd (the Applicant) to the Planning Inspectorate on 18 November 2021 under section(s) 31 of the Planning Act 2008 (PA 2008) and accepted for examination under s55 PA 2008 on 16 December 2021 [PD-001].

1.1.2. The Proposed Development was for a generating station with arrays of ground-mounted solar panels with a generating capacity of more than 50 megawatts (MW). The Proposed Development would comprise:

- Solar photovoltaic (PV) panels;
- PV module mounting structures;
- inverters;
- transformers;
- switchgear;
- cabling (including high and low voltage cabling);
- one or more Battery Energy Storage System (BESS) (expected to be formed of lithium ion batteries storing electrical energy) on Sunnica East Site A, Sunnica East Site B, and Sunnica West Site A;
- an onsite substation comprising a substation and control building (Sunnica East Site A, Sunnica East Site B, and Sunnica West Site A only);
- Burwell National Grid Substation Extension;
- office/warehouse buildings (Sunnica East Site A and Sunnica East Site B only);
- fencing and security measures;
- drainage;
- internal access roads and car parking;
- landscaping including habitat creation areas; and
- construction laydown areas

1.1.3. The location of the Proposed Development is shown in the Environmental Statement (ES) [APP-033] and Land Plans, final updated versions of which were received at Deadline 6 [REP6-004]. The site lies within the administrative counties of Suffolk and Cambridgeshire and is wholly in England. The Order limits are shown in Figure 1.1 below [APP-132].

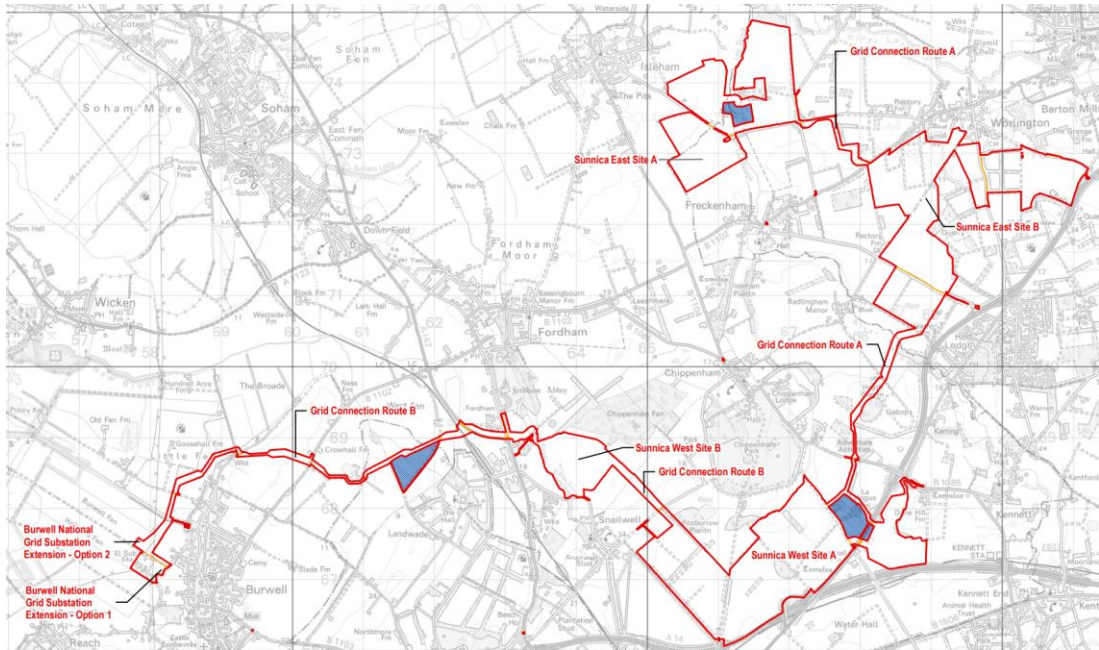


Figure 1.1 Order limits

- 1.1.4. The legislative tests for whether the Proposed Development is a Nationally Significant Infrastructure Project (NSIP) were considered by the Secretary of State (SoS) for the Department of Levelling Up, Housing and Communities (DLUHC) in his decision to accept the application for Examination in accordance with s55 PA2008 [PD-001].
- 1.1.5. The Planning Inspectorate agreed with the Applicant's view on the application form [APP-003] that the Proposed Development fell within s15(2) PA2008 as it is an onshore generating station in England with a capacity exceeding 50MW, and so requires development consent in accordance with s31 PA2008. The Proposed Development therefore meets the definition of an NSIP set out in s14(1)(a) PA2008.

1.2. APPOINTMENT OF THE EXAMINING AUTHORITY

- 1.2.1. On 8 March 2022, Grahame Kean (lead panel member), Guy Rigby and Karin Taylor were appointed as the Examining Authority (ExA) for the application under s61 and s65 PA2008 [PD-004].
- 1.2.2. The lead panel member submitted his resignation from the Panel under s66(3) PA2008 on 19 June 2023. Guy Rigby was appointed as the lead member of the Examining Authority, under s69(2), with effect from 19 June 2023. Karin Taylor remains a member of the Examining Authority. The Examining Authority has engaged with the entirety of the Pre-examination and Examination period and has the necessary knowledge of the proceedings on the application up until the change in the Examining Authority in accordance with s73(2).

1.3. THE PERSONS INVOLVED IN THE EXAMINATION

- 1.3.1. The persons involved in the Examination were:
- Persons who were entitled to be Interested Parties (IPs) because they had made a Relevant Representation (RR) or were a Statutory Party (SP) who requested to become an IP;

- Affected Persons (APs) who were affected by a Compulsory Acquisition (CA) and / or temporary possession (TP) proposal made as part of the Application and objected to it at any stage in the Examination; and
- Other Persons, who were invited to participate in the Examination by the ExA because they were either affected by it in some other relevant way or because they had expertise or evidence that the ExA considered to be necessary to inform the Examination.

1.4. THE EXAMINATION AND PROCEDURAL DECISIONS

1.4.1. The Examination began on 28 September 2022 and concluded on 28 March 2023.

1.4.2. The principal components of and events within the Examination are summarised below. A fuller description, timescales and dates can be found in Appendix A.

THE PRELIMINARY MEETING

1.4.3. On 28 June 2022, the ExA wrote to all IPs, SPs and Other Persons under Rule 6 of the Infrastructure Planning (Examination Procedure) Rules 2010 (EPR) (Rule 6 Letter) [PD-009], inviting them to the Preliminary Meeting (PM) and early hearings, outlining:

- the arrangements and agenda for the PM;
- notification of hearings to be held in the early stage of the Examination;
- agenda(s) for the early hearings;
- an Initial Assessment of the Principal Issues (IAPI);
- the draft Examination Timetable;
- availability of RRs and application documents; and
- the ExA's procedural decisions.

1.4.4. On 22 July 2022, the ExA issued a Rule 9 letter [PD-1010] to inform all parties that it had made a Procedural Decision to postpone the hearings pending a further Procedural Decision about a possible deferment of the start of the Examination due to delays in the Applicant's progression of a change request and a failure to post site notices and place advertisements in relation to the hearings.

1.4.5. The Applicant had provided two letters dated 21 July 2022. The first letter [AS-238] explained proposed further changes to the Proposed Development. The second letter [AS-239] put forward a proposed revised timetable for the Examination.

1.4.6. The ExA considered that the delayed submission of the proposed further changes was unsatisfactory as it was likely to prejudice the ability of the stakeholders in the Examination to make an effective and informed contribution in accordance with the timetable set out in the Rule 6 letter and noted that it intended to raise the matter at the PM. The Rule 9 letter also noted that it wished to hear representations from all parties on the matter, and that it now considered it unlikely that the PM would be concluded on the day.

1.4.7. The PM opened on 26 July 2022 at the Bedford Lodge Hotel in Newmarket. A recording ([EV-005] to [EV-007]) and a note of the meeting ([EV-008] to [EV-010]) were published on the National Infrastructure Planning website¹.

1.4.8. Having heard and considered representations, the ExA decided to adjourn the PM on 26 July 2022 and to delay the start of the Examination. This was confirmed in a

¹ [Sunnica Energy Farm | National Infrastructure Planning \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk)

Rule 9 letter dated 28 July 2022 [PD-011], which also invited all parties to make further written submissions on the procedure by 8 August 2022.

- 1.4.9. On 31 August 2022, the ExA issued a letter [PD-014] to inform all parties that the PM would resume on 28 September 2022 at the Bedford Lodge Hotel. The meeting was duly resumed and completed, and a recording ([EV-014] to [EV-016]) and a transcript of the meeting ([EV-017] to [EV-019]) were published on the Planning Inspectorate National Infrastructure website. A note of the PM is also published [EV-063].
- 1.4.10. The ExA's procedural decisions and the Examination Timetable took full account of matters raised at the PM. They were provided in the Rule 8 Letter [PD-016], dated 4 October 2022.

KEY PROCEDURAL DECISIONS

- 1.4.11. Most of the procedural decisions set out in the Rule 8 Letter related to matters that were confined to the procedure of the Examination and did not bear on the ExA's consideration of the planning merits of the Proposed Development. Further, they were generally complied with by the Applicant and relevant IPs. The decisions can be obtained from the Rule 8 Letter [PD-016] so there is no need to reiterate them here.

SITE INSPECTIONS

- 1.4.12. Site Inspections are held in PA2008 Examinations to ensure that the ExA has an adequate understanding of the Proposed Development within its site and surroundings, and its physical and spatial effects.
- 1.4.13. Where the matters for inspection can be viewed from the public domain and there are no other considerations such as personal safety or the need for the identification of relevant features or processes, an Unaccompanied Site Inspection (USI) is held. Where an inspection must be made on land requiring consent to access, there are safety or other technical considerations and / or there are requests made to accompany an inspection, an Accompanied Site Inspection (ASI) is held.
- 1.4.14. The ExA held the following USIs:
- USI1, 10 and 11 April 2022, by one member of the ExA to gain an overview of the Proposed Development site [EV-001];
 - USI2, 24 and 25 April 2022, for the lead member of the ExA to gain a broad overview of the Proposed Development site [EV-002];
 - USI3, 10 and 11 May 2022, for the full ExA to gain a further appreciation of the Proposed Development site and to look at transport and access locations [EV-003];
 - USI4, 27 July 2022, to examine certain locations in more detail [EV-011];
 - USI5, 28 July 2022, to examine the character of part of the Chippenham Park Registered Park and Garden in more detail [EV-012]; and
 - USI6, 25 and 26 January 2023, to gain a further appreciation of the site for the Proposed Development, including to inspect views in winter conditions [EV-064].
- 1.4.15. Site notes providing a procedural record of these USIs can be found in the Examination Library under the above references
- 1.4.16. The ExA held the following ASIs:

- ASI1, 29 September 2022, to view locations associated with the Sunnica West Site B and Sunnica West Site A (morning and afternoon respectively) [EV-013];
- ASI2, 2 November 2022, to view locations associated with the Sunnica East A and Sunnica West B (morning and afternoon respectively) [EV-021];
- ASI3, 3 November 2022, to view certain locations around Sunnica West A in more detail [EV-021]; and
- ASI4, 15 February 2023, to view features including the Chippenham Park Avenue, the proposed sites for BESS, public rights of way and some viewpoints [EV-065].

1.4.17. The itinerary for each ASI can be found in the Examination Library under the above references.

1.4.18. The ExA has had regard to the information and impressions obtained during its site inspections in all relevant sections of this Report.

HEARING PROCESSES

1.4.19. Hearings are held in PA2008 Examinations in two main circumstances:

- To respond to specific requests from persons who have a right to be heard - in summary where:
 - persons affected by CA and/or TP proposals (APs) object and request to be heard at a Compulsory Acquisition Hearing (CAH); or
 - IPs request to be heard at an Open Floor Hearing (OFH).
- To address matters where the ExA considers that a hearing is necessary to inquire orally into matters under examination, typically because they are complex, there is an element of contention or disagreement, or the application of relevant law or policy is unclear.

1.4.20. The ExA held several hearings to ensure a thorough examination of the issues raised by the application.

1.4.21. Issue Specific Hearings (ISHs) under s91 PA2008 were held at the Best Western Heath Court Hotel (ISH1) and the King Edward VII Memorial Hall (ISH2, ISH3 and ISH4). The ExA considered that these locations were reasonably close to the application site and residences of most IPs.

1.4.22. ISHs were held on Environmental Matters and the draft Development Consent Order (dDCO) on:

- ISH1, 1 November 2022 (EV-022] to [EV-025]);
- ISH2, 7 December 2022 ([EV-042] to [EV-045]);
- ISH3, 8 December 2022 ([EV-051] to [EV-054]); and
- ISH4, 16 and 17 February 2023 ([EV-076] to [EV-079] and [EV-084 to [EV-085]).

1.4.23. These ISHs addressed the following subject matters:

- ISH1 – the draft DCO (dDCO);
- ISH2 - ecology and biodiversity, historic environment, landscape and visual impact, and in-combination impacts;
- ISH3 - socio-economic and land use, air quality and human health, the water environment, and public rights of way; and
- ISH4 - landscape, historic environment, visual and cumulative impacts, traffic and transport and the dDCO.

- 1.4.24. CAHs were held under s92 PA2008 at the King Edward VII Memorial Hall and the Bedford Lodge Hotel on:
- CAH1, 6 December 2022 and 14 February 2023 ([EV-036] to [EV-037] and [EV-068] to [EV-069]); and
 - CAH2, 14 February 2023 ([EV-072] and [EV-073]).
- 1.4.25. All persons affected by CA or TP proposals (APs) were provided with an opportunity to be heard. The ExA also used these hearings to examine the Applicant's case for CA and TP.
- 1.4.26. OFHs were held under s93 PA2008 at King Edward VII Memorial Hall on the evening of 6 December 2022 [EV-040] and on the morning of 9 December 2022 [EV-060]. All IPs were provided with an opportunity to be heard on any important and relevant matter they wished to raise.

WRITTEN PROCESSES

- 1.4.27. Examination under PA2008 is primarily a written process, in which the ExA has regard to written material forming the application and arising from the Examination. All of this material is recorded in the Examination Library (Appendix B) and published online. Individual document references to the Examination Library in this report are enclosed in square brackets [] and refer to the original document in the Examination Library held online and at Appendix B. For this reason, this Report does not contain extensive summaries of all documents and representations, although full regard has been had to them in the ExA's conclusions. The ExA has considered all important and relevant matters arising from them.
- 1.4.28. Key written sources are set out further below.

Relevant Representations (RRs)

- 1.4.29. 1,360 RRs were received by the Planning Inspectorate [RR-001 to RR-1360]. All makers of RRs received the Rule 6 Letter and were provided with an opportunity to become involved in the Examination as IPs. All RRs have been fully considered by the ExA. The issues that they raise are considered in Chapter 4 of this Report.

Written Representations and Other Examination Documents

- 1.4.30. The Applicant, IPs and Other Persons were provided with opportunities to:
- make written representations (WRs) (Deadline (D) 2);
 - comment on WRs made by the Applicant and other IPs (D3A);
 - summarise their oral submissions at hearings in writing (D2, D4 and D7);
 - make other written submissions requested or accepted by the ExA; and
 - comment on documents issued for consultation by the ExA including:
 - A Report on Implications for European Sites (RIES) [PD-027] published on 13 February 2023 by D8; and
 - A commentary on the dDCO [PD-029] published on 10 March 2023 by D9.
- 1.4.31. All WRs and other Examination documents have been fully considered by the ExA. The issues that they raise are considered in Chapter 4 of this Report.

Local Impact Report

- 1.4.32. A Local Impact Report (LIR) is a report made by a relevant local authority giving details of the likely impact of the Proposed Development on the authority's area (or

any part of that area) that has been invited and submitted to the ExA under s60 PA2008.

- 1.4.33. One joint LIR was received by the ExA from the four host local authorities, namely East Cambridgeshire District Council, Cambridgeshire County Council, Suffolk County Council and West Suffolk Council ([REP1-024] to [REP1-024s]). Throughout this Report, these councils are collectively referred to as the host local authorities, which term does not for these purposes include the parish councils whose areas include areas of the Application Site.
- 1.4.34. The LIR has been taken fully into account by the ExA in all relevant Chapters of this Report.

Statements of Common Ground

- 1.4.35. A Statement of Common Ground (SoCG) is a statement agreed between the Applicant and one or more IPs, recording matters that are agreed between them.
- 1.4.36. By the end of the Examination, the following bodies had concluded SoCGs with the Applicant (the parish councils mentioned having combined to agree a joint SoCG with the Applicant):
- Host local planning authorities [REP8-029];
 - Environment Agency [REP8-030];
 - Natural England [REP10-027];
 - Historic England [REP11-007];
 - National Highways [REP8-033];
 - Suffolk Wildlife Trust [REP8-034];
 - National Grid Electricity Transmission plc [REP11-008];
 - National Gas Transmission plc [REP11-010];
 - Chippenham Parish Council [REP8-042];
 - Burwell Parish Council [REP7-068];
 - Red Lodge Parish Council [REP8-042];
 - Fordham Parish Council [REP8-042];
 - Moulton Parish Council [REP7-069];
 - Freckenham Parish Council [REP8-042];
 - Mildenhall High Town Council [REP8-042];
 - Worlington Parish Council [REP8-042];
 - Snailwell Parish Council [REP8-042];
 - Isleham Parish Council [REP8-042];
 - Reach Parish Council [REP8-042];
 - Ministry of Defence [REP8-037];
 - National Air Traffic Services [REP8-038];
 - East of England Ambulance Service [REP8-039];
 - Say No To Sunnica and Newmarket Horsemen [REP8-040];
 - Anglian Water [REP8-041];
 - Barton Mills Parish Council [REP7-070];
 - West Row Parish Council [REP8-042];
 - Newmarket Town Council [REP8-042];
 - Exning Parish Council [REP8-042]; and
 - Town and Parish Council Alliance [REP8-042].
- 1.4.37. The Applicant submitted at D10 an update note related to the SoCG with the host local authorities who responded in its D11 Submission - Comments on submissions received by Deadline 10 [REP11-025] that the updates were an accurate summary,

save in table 1-2 the last column is incorrectly labelled and should read 'Details of Matters Not Agreed'.

1.4.38. The SoCGs have been taken fully into account by the ExA in all relevant Chapters of this Report.

Written Questions

1.4.39. In response to the Applicant's written request of 19 April 2022 [AS-017] advising of its intention to seek changes to the application, and to request a delay to the start of the Examination, on 4 May 2022 the ExA wrote to all IPs, APs, Category 3 persons, SPs, Other Persons and the Applicant for comments on whether the PM should be delayed until mid-July 2022 [PD-006].

1.4.40. The ExA asked three rounds of written questions:

- the first written questions (ExQ1) [PD-017] were issued on 4 October 2022;
- the second written questions (ExQ2) [PD-021] were issued on 5 January 2023; and
- the third written questions (ExQ3) [PD-025] were issued on 3 February 2023.

1.4.41. The following requests for further information and comments under Rule 17 of the EPR were issued on:

- 8 September 2022 [PD-015], requesting further information from the Applicant about the change request;
- 17 January 2023 [PD-022], requesting information from the Applicant about confidential submissions;
- 1 February 2023 [PD-024], requesting an update from the Applicant about delayed submissions;
- 7 February 2023 [PD-026], requesting a further update from the Applicant about delayed submissions;
- 10 March 2023 [PD-030], addressed to all IPs, SPs and Other Persons, requesting comments on the draft DCO, the Landscape and Ecology Management Plan ([REP7-015]), tree preservation orders and surface and foul water drainage; and
- 22 March 2023 [PD-031], requesting information on interpretation of policy in relation to Hazardous Substances Consent from the Applicant and Dr Fordham.

1.4.42. All responses to the ExA's written questions were fully considered in relevant Chapters of this Report.

REQUESTS TO JOIN AND LEAVE THE EXAMINATION

1.4.43. The following persons who were not already IPs requested that the ExA should enable them to join the Examination at or after the PM:

- Drug Development Solutions Limited requested to become an IP under s102A PA2008 as having an interest in relation to plots 16-04, 16-05 and 16-06. It was notified by the ExA on 29 July 2022 [PD-012] that it became an IP under section 102(1)(ab); and
- Travellers Community Elms Farm requested to become an Interested Party under s102A PA2008. It was notified by the ExA on 24 August 2022 [PD-013] that it became an Interested Party under section 102(1)(ab).

1.4.44. During the Examination the following persons wrote to the ExA to inform it that their issues were settled. In each case their representations were withdrawn at the discretion of the ExA:

- Shakespeare Martineau on behalf of South Staffordshire Water PLC withdrew its objection on 8 March 2023 [AS-327] as protective provisions had been agreed with the Applicant to be included within the DCO;
- Cadent Gas Limited withdrew its objection on 22 March 2023 [AS-328] as protective provisions had been agreed to include in the DCO;
- Womble Bond Dickinson (UK) LLP on behalf of Drug Development Solutions Limited, LGC Limited and LGC Bioresearch Limited withdrew the objections of those bodies on 27 March 2023 [AS-329]. As a result of amendments to the Book of Reference (BoR) [APP-024] forming part of the Application, DDS and LGC no longer had an interest in land affected by the application;
- The Environment Agency [EA] withdrew its objection on 23 March 2023 [AS-330] having agreed protective provisions with the Applicant to include in the DC;
- National Grid Electricity Transmission (NGET) withdrew its objection on 28 March 2023 [AS-332] having agreed protective provisions to be included in the DCO; and
- National Gas Transmission (NGT) withdrew its objection on 28 March 2023 [AS-333] having agreed protective provisions to be included in the DCO.

1.5. ENVIRONMENTAL IMPACT ASSESSMENT

1.5.1. The Proposed Development is development for which an Environmental Impact Assessment (EIA) is required (EIA development).

1.5.2. On 13 March 2019, the Applicant submitted a Scoping Report [APP-051] to the SoS under Regulation 8 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (SI 2263) (as amended) (the EIA Regulations) in order to request an opinion about the scope of the ES to be prepared (a Scoping Opinion). Therefore, the Applicant was deemed to have notified the SoS under Regulation 6(1)(b) of the EIA Regulations that it proposed to provide an ES for the Proposed Development.

1.5.3. A scoping opinion was adopted by the SoS on 23 April 2019 (Consultation report [APP-026], paragraph 3.1.3) and is annexed to the ES as Appendix 1B [APP-052]. Therefore, in accordance with Regulation 6(2)(a) of the EIA Regulations, the Proposed Development was determined to be EIA development, and the application submitted on 18 November 2022 was accompanied by an ES.

1.5.4. On 30 March 2022 the Applicant provided the Planning Inspectorate with certificates confirming that s56 and s59 of PA2008 and Regulation 16 of the EIA Regulations had been complied with ([OD-004] to [OD-006]).

1.5.5. Consideration is given to the adequacy of the ES and matters arising from it in the relevant Chapters of this report.

1.6. HABITATS REGULATIONS ASSESSMENT

1.6.1. A report to inform an assessment under the Habitats Assessment Regulations has been provided [APP-092]. Consideration is given to its adequacy, associated information and evidence and the matters arising from it in Chapter 5 of this Report.

1.7. UNDERTAKINGS, OBLIGATIONS AND AGREEMENTS

- 1.7.1. By the end of the Examination, the following bodies had entered into formal undertakings, obligations and / or agreements with the Applicant that are important and relevant considerations for the SoS.
- 1.7.2. Firstly, a commercial Bilateral Connection Agreement was made between the Applicant who will supply electricity to the System Operator (National Grid Electricity System Operator (NGESO)) via the infrastructure owned by the Transmission Owner (NGET), referred to in the Grid Connection Statement [APP-265].
- 1.7.3. NGESO and NGET are both owned and operated by National Grid plc (NG) as two distinct legal entities (from April 2019). The agreement was completed on 13 February 2019 and an Agreement to Vary was entered into on 23 August 2021 as referred to in the final version of the Consents and Agreements Position Statement [REP2-016]. The connection to the National Electricity Transmission System (NETS) would be an import and export connection to facilitate export of electricity from the solar PV and the BESS and the charging of the BESS from external sources.
- 1.7.4. Secondly, the Applicant and the local highway authorities recognised that negotiations on the protective provisions and side agreements would continue with a view to reaching agreement. The Applicant provided an update on progress of this matter (Summary of Agreed Position with Local Highway Authorities in relation to Protective Provisions and Side Agreements [REP11-013]) which stated:
- “The Applicant and the Local Highways Authorities are not in a position at the end of the Examination to confirm to the Examining Authority that agreement has been reached. Therefore, negotiations on the protective provisions and side agreements will continue over the coming weeks, with a view to reaching agreement as soon as possible. The Applicant will provide an update to the Secretary of State at an appropriate time on the progress of this matter.”*
- 1.7.5. A Deed of Obligation purported to be dated 28 March 2023 has been submitted to the Examination [REP11-011] between Sunnica Limited, Cambridgeshire County Council (CCC) and Suffolk County Council (SCC). The nature of the obligation that was negotiated was payment of a Public Right of Way (PRoW) contribution to be administered by CCC and SCC, and payment of a contribution to fund Stone Curlew Research likely to be administered by The Royal Society for the Protection of Birds (RSPB) or the Applicant with the county council as enforcing authority. The Deed of Obligation is referred to in the relevant sections of Chapter 4, Chapter 6, and the summary of findings in Chapter 9 of this Report.
- 1.7.6. These undertakings, obligations and agreements, where completed, have been taken fully into account by the ExA in all relevant Chapters of this Report. Where not completed due weight has been given to the parties' respective position statements and all relevant considerations are addressed in this Report as bearing on the DCO.

1.8. OTHER CONSENTS

- 1.8.1. The application documentation, e.g., the Consents and Agreements Position Statement [REP2-016] and questions during this Examination, identified consents from which the Proposed Development would or would have to benefit from, in addition to Development Consent under the PA2008. The latest position on these is recorded below.

- Electricity Generation Licence, granted 11 November 2020;

- Water Abstraction or Impoundment Licence, contractor to apply if necessary;
- Water discharge Environmental Permit, contractor to apply if necessary;
- Abnormal Load Transport Permit, contractor to apply;
- Control of noise on construction sites under s61 consent (Control of Pollution Act, 1974), contractor to apply;
- Protected Species Licence (Protection of Badgers Act 1992), application prior to commencement of construction; and
- Hazardous Substances Consent, if required, would be applied for after detailed design of the BESS.

1.8.2. The Applicant cannot presently determine whether a consent will be required under the Health and Safety Regulations for the BESS, and to reach a conclusive view on whether the BESS would fall under one of the three categories in Schedule 1 of the regulations, details regarding the design of the BESS, what they are made of, and how they are to be arranged, must first be known. A similar position was reached in the case of battery storage facilities in the Cleve Hill and Little Crow development consent orders.

1.8.3. In relation to the other outstanding consents recorded above, the ExA has considered the available information bearing on these. Without prejudice to the exercise of discretion by future decision-makers, the ExA has concluded that there are no apparent impediments to the implementation of the Proposed Development, should the SoS be minded to grant consent for the Application, save the matter of compliance with the Habitats Regulations set out in Chapter 5 of this Report.

1.8.4. The Applicant committed to seek and obtain a licence from the Joint Casualty and Compassionate Centre (JCCC) that would confirm the extent of the exclusion zone around the "Isleham Plane Crash Site". This matter is considered in more detail in this Report at Chapter 4 when discussing cultural heritage and historic environment matters. However, a licence from the JCCC was still outstanding at the close of the Examination.

1.8.5. By the end of the Examination, there were no matters subject to any other consents. All relevant considerations are addressed in this Report as bearing on the DCO.

1.9. STRUCTURE OF THIS REPORT

1.9.1. The structure of this report is as follows:

- **Chapter 1** introduces the reader to the application, the legal framework, policy, and processes used to carry out the Examination and prepare this Report.
- **Chapter 2** describes the site and its surrounds, the Proposed Development, its planning history and that of related projects.
- **Chapter 3** sets out the legal and policy context.
- **Chapter 4** sets out the planning issues, subdivided into multiple chapters responding to individual planning issues and conclusions arising therefrom.
- **Chapter 5** sets out the findings and conclusions in relation to Habitats Regulation Assessment.
- **Chapter 6** sets out the ExA's conclusions on the case for development consent.
- **Chapter 7** sets out the Examination of Compulsory Acquisition (CA) and Temporary Possession (TP) proposals and the ExA's conclusions.
- **Chapter 8** considers the implications of the matters arising from the preceding chapters for the Development Consent Order (DCO).
- **Chapter 9** summarises the ExA's findings and conclusions and sets out the recommendation.

1.9.2.

This report is supported by the following Appendices:

- **Appendix A** – Examination Method, Procedure and Events.
- **Appendix B** – the Examination Library.
- **Appendix C** – List of Abbreviations.
- **Appendix D** – The Recommended Order.

2. THE PROPOSAL AND THE SITE

2.1. THE APPLICATION AS MADE

THE SITE

- 2.1.1. The Proposed Development is situated across four sites within the administrative areas of Cambridgeshire County Council (CCC); Suffolk County Council (SCC); East Cambridgeshire District Council (E CDC); and West Suffolk Council (WSC). The sites are Sunnica East Site A; Sunnica East Site B, Sunnica West Site A and Sunnica West Site B, having areas of approximately 223 hectares (ha), 319ha, 373ha and 66ha respectively. The Proposed Development included a cable route corridor and extension to the Burwell National Grid Substation.

THE SURROUNDINGS

- 2.1.2. Sunnica East Site A has an agricultural land use, with a mix of pig and arable farming based around Lee Farm. The surrounding area comprises several small rural villages including Isleham to the north-west and West Row to the north-east. There are also some industrial/commercial land uses within the immediate vicinity and agricultural uses to the south and east.
- 2.1.3. Land use across Sunnica East Site B is predominantly agricultural with a mix of pig and arable farming. The surrounding area comprises several small villages including Worlington, Barton Mills, Red Lodge and Freckenham, with the A11 to the east. Industrial land uses adjoin the A11 to the south of the Site and a 7.5 megawatt (MW) peak capacity solar farm is situated 400 metres (m) to the south-east. The Bay Farm Power Ltd Anaerobic Digestion plant is also located to the south. The operational area of Worlington Quarry is also adjacent to the south-east and a kennels and cattery is located to the west, north of Elms Road.
- 2.1.4. The land use across Sunnica West Site A is agricultural, consisting of arable farming. The surrounding area includes the A11 east of the majority of the Site and the A14 south of the Site. Chippenham village is 1 kilometre (km) to the north with Snailwell 300m west. Leisure and retail uses nearby include The Wild Tracks Outdoor Activity Park, which is immediately west of the A11 350m north of Sunnica West Site A, and the La Hogue Farm Shop is approximately 330m to the north of Sunnica West Site A. Chippenham Hall Registered Park and Garden (RPG) is located to the north with a former carriageway for the RPG bisecting Sunnica West Site A.
- 2.1.5. A horse training ground, the Gallops, extends from the north of the A14 to border Snailwell and is adjacent to the southern boundary of Sunnica West Site A. Other equestrian uses include the Limekilns, a triangular parcel of land between the A1304 and Well Bottom Road, approximately 450m south of Sunnica West Site A.
- 2.1.6. Land use across Sunnica West Site B is agricultural, consisting of arable farming. The River Snail adjoins this site to the west. To the west of Sunnica West Site B there are also commercial and industrial land uses along the A142 (Newmarket Road and Fordham Road) and to the south of Snailwell Road. Snailwell village is located approximately 0.5m south of this part of the Site.
- 2.1.7. The application as submitted includes two grid connection routes. Grid Connection Route A is mainly agricultural land. The cable corridor crosses the B1102 between Sunnica East Site A and Sunnica East Site B, the River Kennett and Haveacre

Meadows and Deal Nook County Wildlife Site (CWS) to the south of Sunnica East Site B. The northern section of the Grid Connection Route A is surrounded by agricultural land. The southern section of this corridor is 250m west of the A11 at its closest point and 300m west of Red Lodge village. The Wild Tracks Outdoor Activity Park is adjacent to the east of Grid Connection Route A.

- 2.1.8. Grid Connection Route B is mainly agricultural, but it crosses Chippenham Road, B1102 and A142 and various Public Rights of Way (PRoW). South of Fordham it crosses employment developments and, west of Fordham, the national rail network. The villages of Snailwell and Fordham are close to Grid Connection Route B. Burwell Waste Water Treatment Works is to the south of the cable corridor where it passes under Broads Road and First Drove. Goosehall Solar Farm is northwest of the village of Burwell and Grid Connection Route B would pass to the east of this settlement.
- 2.1.9. The application as submitted included two options to connect to the Burwell National Grid Substation by means of a Burwell National Grid Substation Extension. The land use within the two proposed sites is agricultural. The existing Burwell National Grid Substation is south of Newnham Drove and the village of Burwell is located to the west. Option 1 was located 200m to the east in the village of Burwell, whilst Option 2 was 350m to the east in the village of Burwell.

MAIN FEATURES OF THE PROPOSED DEVELOPMENT AND THE SCOPE OF THE APPLICATION

- 2.1.10. The Proposed Development comprises the construction, operation, maintenance and decommissioning of a generating station with a gross electrical output capacity of over 50 MW, comprising ground mounted solar photovoltaic (PV) panel arrays; a Battery Energy Storage System (BESS) with a gross storage capacity of over 50 MW; connection to the UK electricity transmission system and other associated and ancillary development.

Solar arrays

- 2.1.11. The components of the Scheme which form the generating station are to be located at Sunnica East Site A, Sunnica East Site B, Sunnica West Site A and Sunnica West Site B. This is the solar PV infrastructure which includes: a. Solar PV modules and mounting structures; b. Solar stations; c. Solar PV control rooms; d. Onsite cabling; and e. Associated ancillary works.

Battery energy storage systems

- 2.1.12. The Applicant proposes to install ground mounted solar photovoltaic (PV) panel arrays to generate electrical energy from the sun and combine these with a BESS. There would be three BESS compounds, one at Sunnica East Site A; one at Sunnica East Site B; and one at Sunnica West Site A, as shown in Works Nos. 2A, 2B and 2C of the Works Plans [APP-007].
- 2.1.13. The batteries would be provided in containers which may be modular and joined depending on equipment choice to be determined at detailed design stage. They would be supported by battery stations which would comprise transformer, switchgear, power conversion system (PCS) or inverter, and other ancillary equipment located within compounds. The equipment will be located outside or housed together within a container.

Connecting Cabling

- 2.1.14. Low voltage onsite electrical cabling is required to connect the PV modules and BESS to inverters, and the inverters to the transformers onsite. Cables for the earthing system and cables for the auxiliary supplies would also form part of the onsite cabling system. High voltage cables, 33 kilovolt (kV), are required between the transformers and the switchgears and from switchgears to the onsite substation. Cabling between PV modules and the inverters would typically be above ground level along a row of racks, fixed to the mounting structure, and then underground between racks and inverters. Other onsite cabling would be underground wherever possible.

Grid Connection

- 2.1.15. High voltage 132 kV cables would be required to export electricity produced by the Proposed Development to the Burwell National Grid Substation Extension. The location of the grid connection works is shown as Works No. 4 of the Works Plans [APP-007]. Joint bays would be required to join sections of cable together, with two circuits each with up to three sets of three cables.
- 2.1.16. Along the Grid Connection Route A and Grid Connection Route B there are points where the cable corridors would be located near the local highway network and existing farm tracks. Grid Connection Route A crosses the B1102 (Freckenham Road), Elms Road and the B1085. Grid Connection Route B crosses Chippenham Road between Sunnica West Site A and Sunnica West Site B; Fordham Road and A142 and the railway line; B1102/Ness Road and Broads Road.

Construction and Access Arrangements

- 2.1.17. The Scheme would have two main access points, north of Elms Road at Sunnica East Site B and south of La Hogue Road at Sunnica West Site A. The main access route to Sunnica West Site A would be via the Chippenham junction of the A11, to the north of junction 38 of the A14. Sunnica East Site B would be accessed via the A11 and B1085. Several secondary access points would give access to individual land parcels throughout the construction, operation, and decommissioning phases.
- 2.1.18. Solar PV and BESS are evolving infrastructure. To allow the latest technology to be used at the time of construction, design parameters are proposed, and further work would be required to develop the detailed design. For Sunnica East Site A and Sunnica East Site B the primary construction compound, BESS and substation would be sited in land parcel E33 (see for example Sheet 1 of Land Plan and Parameter Plan Overlay [REP7-059] adjacent to reservoirs and Lee Farm. For Sunnica West Site A and Sunnica West Site B the primary construction compound, BESS and substation would be sited within parcel W17 at Sunnica West Site A.
- 2.1.19. Access points are shown on the Access and Right of Way (ARoW) Plans [APP-008] submitted with the application. They comprise access points required during construction, operation and decommissioning phases; construction and decommissioning phases only; operation phase only; construction and decommissioning phases only, but retained for emergency vehicles only during operation; and during construction and operation only.
- 2.1.20. Three permissive routes for non-motorised users (NMU) were proposed subject to final landowner agreement to increase public access in the following locations:
- adjacent to Beck Road at Sunnica East Site A connecting Freckenham and the southern edge of Isleham;

- across Sunnica East Site B, to provide access from the existing unclassified road (U6006) across the north of Sunnica East Site B to connect with Golf Links Road; and
- adjacent to Elms Road and around the perimeter of Sunnica East Site B, to connect U6006 with PRoW W-257/003/0 which runs to Red Lodge.

Operational Period and Decommissioning

- 2.1.21. The Proposed Development as a whole would generate and store electricity over an operational lifetime of 40 years.
- 2.1.22. After 40 years of operation, the Proposed Development would be decommissioned, expected to take between 12 and 24 months in phases. All installed infrastructure equipment would be removed and recycled or disposed of in accordance with good practice and market conditions at that time. The 132kV cables along the Grid Connection Route A and Grid Connection Route B would remain following decommissioning.

2.2. THE APPLICATION AS EXAMINED

- 2.2.1. Following submission of the application, two change requests were made by the Applicant to alter the Proposed Development.

CHANGE REQUEST ONE (CR1)

- 2.2.2. The Applicant formally submitted Change Request One (CR1) on 30 August 2022. The CR1 document [AS-243] contained an environmental appraisal of each of the identified changes, namely:
- Proposed Change 1: Removal of Option 1 National Grid Substation Extension;
 - Proposed Change 2: Option 3 400kV cabling within Grid Connection Routes A and B; and
 - Proposed Change 3: 33kV to 400kV transformers.
- 2.2.3. To decide whether or not CR1 might be accepted into the Examination and to assess its materiality, the ExA required further information and clarification in relation to the matters set out in its letter of 8 September 2022 [PD-015] to which the Applicant responded by letter on 14 September 2022 [PDC-002].
- 2.2.4. The ExA reviewed the information provided and assessed the Applicant's request against the criteria set out in paragraphs 109 to 115 of the DCLG Guidance 'Planning Act 2008: Examination of Applications for Development Consent' and the Planning Inspectorate's Advice Note 16: "How to request a change which may be material". Proposed Change 3 would lead to a minor increase to the Order limits but overall modestly reduce the CA powers sought by the Applicant. The proposed changes were subject to environmental appraisal as set out in [AS-243] and the Applicant has determined that they would not generate new or different likely significant effects. The conclusions of the Habitats Regulations Assessment [APP-092] were not altered.
- 2.2.5. The ExA was satisfied that the information provided was of a satisfactory standard for Examination and there was sufficient time for the proposed changes to be properly and fairly examined. Therefore, the proposed changes were accepted into the Examination as non-material changes and on 4 October 2022 the ExA wrote to all Interested Parties (IPs), Statutory Parties (SPs) and any Other Person invited to the Preliminary Meeting (PM), notifying them of its Procedural Decision ([PD-016]

Item B, Annex 5) to accept CR1.

CHANGE REQUEST TWO (CR2)

- 2.2.6. The Applicant gave notice in its Deadline 3 submission 'Update by the Applicant on Heritage Matters and Substation Connection' [REP3A-037] of its intention to make further changes to the application. The proposed changes were referred to by the Applicant at the first Compulsory Acquisition Hearing (CAH1) and at the second and third Issue Specific Hearings (ISH2 and ISH3), held on 6, 7 and 8 December 2022.
- 2.2.7. The Examining Authority (ExA) wrote to the Applicant on 12 December 2022 [PD-020], confirming that no extra statutory consultation was required for these proposed changes and that the Applicant should proceed with submitting CR2 at D5, and provided that occurred, all IPs would be able to make submissions in respect of the consequences of the proposed changes in the Examination process.
- 2.2.8. The Applicant formally submitted CR2 at D5 [REP5-059]) on 13 January 2023. The Applicant proposed four changes to the Proposed Development:
- Change 1 – Removal of the Burwell National Grid Substation Extension Option 2 from the Proposed Development;
 - Change 2 – Removal of Sunnica West Site B;
 - Change 3 – Inclusion of two new archaeological offset areas, at parcel E05 to remove the crash crater and in parcel W04, an area of concentrated archaeological features; and
 - Change 4 – Removal of Cable Route Access L and use of the campus access road to Hermes Property Unit Trust's (HPUT) premises, being an access option for the cable route corridor between what was West Site B and Burwell Substation (following negotiations with HPUT and its tenants).
- 2.2.9. In relation to the Option 2 land (Change 1) the Applicant sought to retain CA powers for rights to enable cabling to pass through that land to connect to Burwell substation; in relation to Sunnica West B it would still require a cable corridor to connect to the substation, and there would still be a need for the cable route corridor to traverse along the northern boundary of parcel W04 to the north of the additional area of protection.
- 2.2.10. The document [REP5-059] identified that the changes proposed were due to feedback the Applicant received in the Examination. They involved removing land (including the extent of CA) and elements of the Proposed Development, thereby reducing impacts rather than changing or expanding them.
- 2.2.11. The CR2 contained a statement fully describing and setting out the need for the proposed changes, a schedule of application documents and plans, including those related to the CA and temporary possession (TP) use of land, listing consequential revisions. The Applicant confirmed that the Infrastructure Planning (Compulsory Acquisition) Regulations 2010 (CA Regulations) did not apply. The conclusions of the Habitats Regulations Assessment [APP-092] were not altered. The findings of the environmental appraisal of each requested change confirmed that the likely significant environment effects had been adequately assessed in the Environmental Statement (ES) submitted with the application and that the environmental information contained in the ES met the publicity requirements of Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.

- 2.2.12. The ExA concluded that the changes proposed in CR2 considered individually or collectively, separately or cumulatively, would not result in any material changes to the underlying Proposed Development to which the application related. Therefore, the ExA issued a Procedural Decision in its letter of 25 January 2023 [PD-020] accepting the proposed changes into the Examination of the Application as non-material changes. The Proposed Development referred to subsequently takes into account CR1 and CR2 unless specifically stated otherwise in a section.

SUFFOLK COUNTY COUNCIL ALTERNATIVE PROPOSAL

- 2.2.13. Several IPs, including the host local authorities, as referred to by the Applicant in its D10 submission, End of Examination Summary Position Paper [REP10-032], requested removal from the Proposed Development of parcels E05, E12, E13, W1-W12 and W17. The local authorities set out their reasoning for this in the LIR [REP1-024] and in Suffolk County Council's Post-hearing submission after ISH4 [REP7-086]. Deletion of these parcels would potentially remove development consent for significant quantities of renewable energy generation, which was sought mainly for reasons related to landscape and visual impact, ecology, and heritage. The particular planning issues giving rise to the requests are dealt with in Chapter 4 this Report and the implications of such requests are considered in Chapters 8 and 9, in the context of guidance in NPS EN-1. However, it should be noted that such requests did not emanate from the Applicant who considered that any such removal would be "*illogical, unjust, and manifestly contrary to planning policy*" paragraph 1.4.1 of [REP10-032]. It also considered that the "mechanics" of removal would be unfeasibly complex. The Applicant's submissions as to deletion of these parcels are found in its responses to:

- SCC's suggested amendments to the DCO [REP7-064];
- the 'general' theme of the ExA's Third Written Questions (ExQ3) [REP7-055]; and
- the ExA's Rule 17 Request [REP9-0045].

- 2.2.14. The ExA considered all submissions made by the Applicant and IPs and published its Schedule of Changes to the Applicant's dDCO [PD-029]. The schedule included alternative provisions should the Secretary of State (SoS) decide that consent should be granted for the application subject to one or more of the requested deletions. The Schedule of Changes [PD-029] was responded to by the Applicant at D9 [REP9-006] and by the local authorities and IPs variously at D9 [REP9-007] to [REP9-011].

- 2.2.15. This matter is dealt with in more detail in the conclusions and recommendations set out in this Report at Chapters 8 and 9. As to whether one or more deletions of parcels of land from the Proposed Development would constitute a materially different application from the Application, the ExA focussed on key implications of such changes. Despite its strong objection to any deletion of parcels (other than its voluntary deletion of the Sunnica West B land consequent upon CR1), the ExA notes that the Applicant did not in terms assert that removal of further parcels would be vague, inchoate, commercially unviable or physically unsuitable. The ExA is satisfied that given the level and urgency of need for new energy infrastructure, there was merit in examining the requests for deletion of parcels and the ExA's response, in so far as that was possible in compliance with the principles set out in NPS EN-1 paragraph 4.4.3, concerning alternatives. This is now referred to as the SCC Alternative Proposal.

POSITION AT THE END OF THE EXAMINATION

- 2.2.16. During the Examination, before and after CR1 and CR2 were accepted into the Examination, several amendments were made to the originally submitted application documents. Where relevant to specific planning issues these are dealt with in this Report at Chapter 4. In overall terms, the ExA has given to consideration to these amended documents and concludes they do not amount to a change to the application sufficient to require it to be considered as a new application.

2.3. RELEVANT PLANNING HISTORY

- 2.3.1. Within the Order limits there are limited planning approvals due to the agricultural nature of most of the current land use, particularly for the Proposed Development. They include extant and proposed energy, mixed use, employment, and mineral planning permissions approved in the past 20 years. The approximate location of these permissions and proposals are set out in the Applicant's Planning Statement [APP-261] [APP-262] and [APP-263], Figures 2-10.1 and 2-10.2. Other relevant planning history is outlined in Appendix A of this Planning Statement. The following provides a summary of the key developments and proposals affecting the Proposed Development.
- 2.3.2. A small area of land within Order Limits at the eastern edge of Sunnica East Site B overlaps with the planning permission boundary for Worlington Quarry as shown on the Restoration Overlap Plan [APP-018]. The Quarry was originally consented under planning permission reference F/04/227 (9 August 2004), which is for the extraction of sand and gravel and the importation of material for restoration. Various amendments have been approved since that original planning permission was granted. These comprise: F/06/0300 (26 May 2006) which permitted the import of materials for use in concrete batching and amended phasing to enable this; F/09/0389 (27 August 2009) which reduced the safeguarded margin from the national gas transmission pipeline; F/09/0752/CC (10 March 2010), which amended extraction and restoration phasing to bring Phase 7 forward; and F/15/1386 (2 October 2015), which made further amendments to the phasing of the quarry.
- 2.3.3. The application Site and the Worlington Quarry planning permission boundary overlap within 'phase 5' of the quarry. In its Planning Statement dated June 2015 that forms part of Planning Permission F/15/1386, the quarry owner and operator, Frimstone Ltd, states that: "Recent geological investigations in phase 5 of the operation have concluded that the majority of the phase is either barren or contains mineral not of sufficient quality or quantity to be economically viable. A small triangular area of phase 5 adjoining phase 4 is currently being worked but it is intended to move working to phase 6 in September of this year as identified on the enclosed phasing plan."
- 2.3.4. The small triangular section that the quarry owner intended to work is located outside the application Site, on the opposite (eastern) corner of phase 5. Therefore, although the western part of phase 5 of the quarry is within the application site, there is little prospect of mineral being extracted there as it was not of sufficient quantity and quality. This was confirmed by Frimstone in a meeting held with the Applicant in July 2019.
- 2.3.5. The Proposed Development would be unlikely to lead to loss of any mineral that would otherwise be extracted from the quarry or affect the restoration of the quarry. However, as the overlap area is still subject to the restoration conditions in the Worlington Quarry planning permission, there is a need to disapply those conditions in respect of the overlap area only. This would be achieved via Article 6 of the DCO.

- 2.3.6. An Anaerobic Digestion (AD) plant at Bay Farm to the south and east of Sunnica East Site B was granted planning permission by WSC in March 2016 (Ref: DC/15/2109). Condition 2 requires the sugar beet and maize feedstock for the plant to be sourced from the surrounding feedstock plan area, which includes all the land within Sunnica East Site B, Sunnica West Site A and Sunnica West Site B. WSC approved an amendment to the approved scheme on 11 July 2019 to allow the use of other types of feedstock to sugar beet and maize, sourced from outside the feedstock plan area.
- 2.3.7. With regard to Grid Connection Route A, Grid Connection Route B and the Burwell National Grid Substation, Table 2-1 identifies approved and emerging development proposals that intersect and/or overlap with applicable land. Figures 2-10.1 and 2-10.2 [APP-261] [APP-262] and [APP-263], illustrate the approximate location of these permissions and proposals.

3. LEGAL AND POLICY CONTEXT

3.1. THE PLANNING ACT 2008

- 3.1.1. The Planning Act 2008 (PA2008) is the principal legislation governing the Examination of an application for a Nationally Significant Infrastructure Project (NSIP) and the decision whether to grant development consent. The Proposed Development comprises a NSIP to which s14(1)(a) and s15(2) PA2008 apply.
- 3.1.2. Section 104(1) of the PA2008 applies if, ‘a NPS has effect in relation to development of the description to which the application relates’ (a ‘relevant National Policy Statement’ (NPS)). In such a case, the Secretary of State (SoS) would have to determine an application in accordance with the relevant NPS, subject to where specific exceptions apply (s104(3)).
- 3.1.3. Where s104 does not apply, an application falls to be decided under s105 of the PA2008. Section 105(2) requires the SoS to have regard to:
- any Local Impact Report (LIR) (within the meaning given by the PA2008 s60(3)) submitted to the SoS before the specified deadline (D) for submission;
 - any matters prescribed in relation to development of the description to which the application relates; and
 - any other matters which the SoS thinks are both important and relevant to the decision.
- 3.1.4. Section 10 of the PA2008 also places statutory duties on the SoS, with specific reference to having regard to the desirability of:
- mitigating and adapting to climate change; and
 - achieving good design.
- 3.1.5. The ExA’s conclusions regarding s104 and s105 of the PA2008 are set out in paragraph 3.2.26 below.

3.2. NATIONAL POLICY STATEMENTS

Background

- 3.2.1. The Proposed Development’s energy generating solar photovoltaic technology is not currently specifically referenced by a NPS. However, the following NPSs are considered to be matters that are important and relevant to the SoS’s decision as to whether to grant a Development Consent Order (DCO).

NPS EN-1 Overarching National Policy Statement for Energy (NPS EN-1)

- 3.2.2. NPS EN-1 sets out the United Kingdom (UK) Government's commitment to increasing renewable generation capacity. It sets out overarching policy and has effect for decision making for energy “... *developments that fall within the scope of the NPSs*” (paragraph 1.1.1). By s104(2)(a) PA2008 the SoS must have regard to any NPS which has effect in relation to the development to which an application relates.

Paragraph 1.4.5 of NPS EN-1 states “*The generation of electricity from renewable sources other than wind, biomass or waste is not within the scope of this NPS*”. The Proposed Development, as a solar generating station, is therefore excluded from NPS EN-1’s scope. However, where relevant, NPS EN-1 is capable of being

considered as an important and relevant policy to consider for the purposes of determining this application under s105 PA2008.

NPS EN-3 National Policy Statement for Renewable Energy Infrastructure (NPS EN-3)

- 3.2.3. NPS EN-3 specifically addresses renewable energy generation. However, paragraph 1.8.1 explains that NPS EN-3 only covers energy from: biomass; offshore wind; and onshore wind. Paragraph 1.8.2 of NPS EN-3 goes onto state “*This NPS does not cover other types of renewable energy generation that are not at present technically viable over 50 megawatts (MW) onshore ...*”. Therefore, solar energy generation is expressly excluded from NPS EN-3’s scope.

NPS EN-5 National Policy Statement for Electricity Networks (NPS EN-5)

- 3.2.4. This NPS, together with EN-1, is the primary decision-making guidance document when considering development consent applications for NSIPs for electricity networks infrastructure in England. It covers:
- the long-distance transmission system (400 kilovolts (kV) and 275kV lines) and the lower voltage distribution system (132kV to 230 volt (V) lines from transmission substations to the end-user); and
 - associated infrastructure, for example substations and converter stations that facilitate the conversion between direct current (DC) and alternating current (AC).
- 3.2.5. The effect of paragraph 1.8.2 of NPS EN-5 is that electricity infrastructure including underground cables at any voltage, and associated infrastructure, will be covered by this NPS if it is in England and it constitutes “associated development” for which consent is sought along with an NSIP such as a generating station. This is relevant to the Grid Connection Routes proposed and the substations that are a part of the Proposed Development.
- 3.2.6. NPS EN-5 states at paragraph 2.5.1 that proposals for electricity networks infrastructure should demonstrate good design in their approach to mitigating potential adverse impacts. Paragraph 2.2.5 states there will usually be some flexibility around the location of the associated substations and applicants will give consideration to how they are placed in the local landscape taking account of such things as local topography and the possibility of screening.
- 3.2.7. Paragraph 2.3.5 states that the decision maker should take into account that National Grid, as the owner of the electricity transmission system in England and Wales, as well as Distribution Network Operators (DNOs), are required under s9 Electricity Act 1989 to bring forward efficient and economical network design proposals, taking into account current and reasonably anticipated future generation demand. National Grid is required to facilitate competition in the supply and generation of electricity and so has a statutory duty to provide a connection whenever or wherever one is required.
- 3.2.8. Paragraph 2.4.1 and 2.4.2 of NPS EN-5 advise that regarding electricity infrastructure the resilience of electricity infrastructure to climate change, for example how it would be resilient to flooding should be demonstrated. Paragraph 2.9.7 states that audible noise effects can arise from substation equipment such as transformers, quadrature boosters and mechanically switched capacitors. Transformers are installed at many substations and generate low frequency hum.

Whether the noise can be heard outside a substation depends on several factors, including transformer type and the level of noise attenuation.

Draft National Policy Statements

3.2.9. The Government is currently reviewing and updating the Energy NPSs to reflect its policies and strategy for the energy system and to ensure that the planning policy framework enables the delivery of the infrastructure required for the country's transition to net zero carbon emissions. The Government published a suite of Draft Energy NPSs for consultation on 6 September 2021. The draft NPSs were revised to take account of consultation responses and Parliamentary scrutiny and re-consulted on in March 2023. The end of the consultation period is set to expire on 25 May 2023.

3.2.10. Unless replaced by designated NPSs, the following Draft NPSs which are subject to consultation as noted above, will be important and relevant to the SoS's decision.

Draft Overarching National Policy Statement for Energy (EN-1) (dNPS EN-1)

3.2.11. On 6 September 2021 the Government consulted on revised versions of the energy NPSs and issued draft revisions to NPS EN-1 to NPS EN-5 inclusive. These draft NPSs have not been designated and do not have effect for decision making under s104 of the PA2008. However draft NPS EN-1 (dNPS EN-1) states:

3.2.12. *"... any emerging draft NPSs (or those designated but not having effect) are potentially capable of being important and relevant considerations in the decision-making process. The extent to which they are relevant is a matter for the relevant Secretary of State to consider within the framework of the Planning Act and with regard to the specific circumstances of each development consent order application."*

3.2.13. The ExA considers that the dNPSs provide a good indication of the Government's preferred approach to ensuring that we continue to have a planning policy framework that supports the infrastructure required for the transition to net zero. As such it considers them an important and relevant consideration in the determination of the application under s105 PA2008 and should be afforded considerable weight. Given their scope and coverage, the dNPSs relevant to the consideration of this application are dNPS EN-1 (Overarching Policy), dNPS EN-3 (Renewable Energy Infrastructure) and dNPS EN-5 (Electricity Network Infrastructure).

Draft National Policy Statement for Renewable Energy (EN-3) (dNPS EN-3)

3.2.14. NPS EN-3 has been revised in dNPS EN-3 among other things to apply to solar energy generation. It clarifies when a utility scale solar farm will be considered an NSIP for which a DCO is required. Previously it was unclear whether the generation capacity threshold should be measured in DC or AC – solar panels generate in DC, but the power exported to the grid after inversion is AC. For the purposes of interpreting the threshold, the solar project should be measured using the combined capacity of the installed inverters in AC.

3.2.15. Section 2.4 focuses on the use of good design to mitigate impacts as far as possible, as set out in NPS EN-1. dNPS EN-3 would clarify that site selection is a matter for the promoter – grid connection capacity and access will be a significant factor in site selection.

- 3.2.16. Paragraph 2.48.13 states that ground mounted solar projects should make use of previously developed land where possible, contaminated land, industrial land or agricultural land of classification 3b, 4 and 5 – i.e., not best and most versatile (BMV) land. However, land type should not be a predominating factor in determining the suitability of selection of a site.
- 3.2.17. Section 2.50 recognises the biodiversity benefits of solar farms where agricultural land is no longer managed intensively, and refers to the aim for solar projects to achieve environmental and biodiversity net gain in line with the ambition set out in the 25 year environment plan.
- 3.2.18. Paragraphs 2.48.5 to 2.48.9 include that proposed generation capacity should not be used to constrain impacts of the solar farm, whereas other parameters such as the total area or percentage of ground under solar panel are more appropriate to set the maximum extent of development when considering planning impacts.
- 3.2.19. Paragraphs 2.49.14 to 2.49.17 include that different types of panel layout and technology may be used, and the final design may not be known before a decision is made on consent. Provision is made for the potential use of energy storage in addition to panels, if viable. The worst-case effects must be assessed to have flexibility over the final design consented by the DCO.
- 3.2.20. Paragraph 3.10.138 states that where consent for a solar farm is to be time-limited, the time limit should commence once the solar farm starts to generate electricity. An upper limit of 40 years is typical, however applicants should consider the design life of solar panel efficiency over time when determining the period for which consent is required. The time-limited nature of the solar farm, where a time limit is sought as a condition of consent, is likely to be an important consideration for the SoS.

Draft National Policy Statement for Electricity Networks Infrastructure (dNPS EN-5)

- 3.2.21. The scope of this NPS has been revised from the existing designated statement. It covers above ground electricity lines in circumstances that do not impinge on the Proposed Development, and other kinds of electricity infrastructure only in circumstances where: either it constitutes Associated Development for which consent is sought along with an NSIP “*such as an offshore wind generating station or relevant overhead line*”; or if the SoS gives a direction under s35 PA2008 that it should be treated as an NSIP and requires a DCO.

Conclusions on NPSs

- 3.2.22. The Applicant’s consideration of the NPSs is set out in its Planning Statement [APP-261], [APP-262], and [APP-263]. Matters agreed between the Applicant and East Cambridgeshire District Council (ECDC), Cambridgeshire County Council (CCC), Suffolk County Council (SCC) and West Suffolk Council (WSC), as noted in the final Statement of Common Ground (SoCG) supplied to the Examination at D8 [REP8-029] included that:
- The scheme should be considered under s105 PA2008;
 - NPS EN-1, NPS EN-3, NPS EN-5, and in light of the Government's pronouncements in respect of transitional effects of the draft NPSs, dNPS EN-1, dNPS EN-3, and dNPS EN-5 are important and relevant matters for the purposes of s105(2) PA2008; and

- 3.2.23. dNPS EN-3 contains technology specific policy relating to large-scale solar development. It is more relevant in this case than the currently designated NPS EN-3 notwithstanding that it is yet to be designated.
- 3.2.24. Solar electricity generation is outside the scope of NPS EN-1 and NPS EN-3. Therefore, neither has effect under s104 PA2008 with respect to the Proposed Development save that the proposed electricity networks such as the grid connection routes, substations, converter stations, and associated infrastructure will be covered by NPS EN-1 and NPS EN-5) as they constitute Associated Development for which consent is sought for an NSIP in the form of a generating station.
- 3.2.25. However, NPS EN-1 is important and relevant to the determination of all aspects of the application under s105 insofar as the Proposed Development is a generating station with a capacity of more than 50MW and the policies in NPS EN-1 have been formulated specifically for generating stations and energy infrastructure of this scale. NPS EN-1 contains paragraphs that emphasise the general national need for electricity and associated infrastructure, including electricity storage, and provides guidance for considering a range of impacts for energy NSIPs.
- 3.2.26. Solar generation is excluded from infrastructure covered by NPS EN-3, therefore this NPS is not important and relevant to the SoS's decision making.
- 3.2.27. The Examining Authority (ExA) therefore considers that the application falls to be decided under s105 of the PA2008. Under s105 the SoS must have regard to the joint LIR (s105(2)(a)) and "*any other matters which the Secretary of State thinks are both important and relevant*" (s105(2)(c)) to their decision.
- 3.2.28. Chapter 4 below identifies NPS policies that are important and relevant to the decision to be made by the SoS. On each of the planning issues in Chapter 4 the ExA has reached conclusions on conformity with those policies in NPS EN-1 and NPS EN-5 that are important and relevant.
- 3.2.29. An emerging NPS can carry some weight for decision takers in the development consent process. The amount of weight given will depend on how far along the process the NPS is at and how much consultation has taken place. Section 105 PA2008 Act gives the SoS the power to take the decision on a DCO in the absence of an applicable NPS in which case decisions will be taken in accordance with s105.
- 3.2.30. Should the government designate as NPSs the dNPS EN-1 and dNPS EN-3 or do so substantially to like effect prior to the SoS's determination, the ExA has also considered the application on that basis, namely that it falls to be decided under s104 PA2008. Under s104 the SoS must have regard to the joint LIR (s104(2)(b)) and "*any other matters which the Secretary of State thinks are both important and relevant*" (s104(2)(c)) to their decision.
- 3.2.31. Should a relevant NPS contain a biodiversity gain statement in relation to development of the description to which the application relates, there would be an additional requirement (s104(3A)) that the SoS may not grant the application unless satisfied that the biodiversity gain objective contained in the statement is met in relation to the development to which the application relates.
- 3.2.32. In addition, under s104 the SoS would have a positive duty to decide the application in accordance with any relevant NPS, except to the extent that one or more of subsections (4) to (8) of s104 applies, namely unless the SoS is satisfied that:

- deciding the application in accordance with any relevant NPS would lead to the UK being in breach of any of its international obligations;
- deciding the application in accordance with any relevant NPS would lead to the SoS being in breach of any duty imposed on them by or under any enactment;
- deciding the application in accordance with any relevant NPS would be unlawful by virtue of any enactment;
- the adverse impact of the proposed development would outweigh its benefits; or
- any condition prescribed for deciding an application otherwise than in accordance with a NPS is met (ie be contrary to legislation about how the decisions are to be taken).

3.3. EUROPEAN LAW AND RELATED UK REGULATIONS

Leaving The European Union

- 3.3.1. The UK left the European Union (EU) on 31 January 2020. The European Union (Withdrawal Agreement) Act of January 2020 gave effect to the transition arrangements until 31 December 2020. This provided for EU law to be retained as UK law unless excepted, and to bring into effect obligations which may come into force during the transition period which has now ended. This Report has been prepared on the basis of retained law. The position on retained law, obligations and equivalent terms at the point of decision will be a matter for the SoS.

Relevant Retained European Legislation

- 3.3.2. Directive 2000/60/EC (the Water Framework Directive) establishes a framework for action in the field of water policy and sets objectives to prevent and reduce pollution, improve aquatic ecosystems and mitigate the effects of floods. The Water Framework Directive is transposed into law in England and Wales by The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017. Among other matters, these Regulations require the 'appropriate agency' to prepare river basin management plans for each River Basin District.
- 3.3.3. Council Directive 2008/50/EC on ambient air quality and cleaner air for Europe (the Air Quality Directive) requires Member States to assess ambient air quality with respect to sulphur dioxide (SO₂), nitrogen dioxide (NO₂), oxides of nitrogen (NO_x), particulate matter (PM₁₀ and PM_{2.5}), lead, benzene, carbon monoxide and ozone. It sets legally binding concentration-based limit values as well as target values to be achieved for the main air pollutants and establishes control actions where these are exceeded. The Air Quality Directive is transposed into UK law through the Air Quality Standards Regulations 2010 made under the Environment Act 1995.

Retained EU Law (Revocation and Reform) Bill

- 3.3.4. The Retained EU Law (Revocation and Reform) Bill was not enacted by the close of the Examination. If enacted, the implications for the Proposed Development will be a matter for the SoS.

3.4. OTHER LEGAL PROVISIONS

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations)

- 3.4.1. The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) provide the legislative framework for the environmental impact assessment (EIA) of the Proposed Development. They define the procedure by

which information about the environmental effects of projects are collated and evaluated as part of the consent application and decision-making process.

- 3.4.2. The Proposed Development falls within Schedule 2 paragraph 3(a) of the EIA Regulations. The location, scale and nature of the Proposed Development has the potential to give rise to significant effects on the environment. It is therefore considered to be EIA development and an Environmental Statement (ES) was submitted as part of the application ([APP-032] to [APP-259]).

The Conservation of Habitats and Species Regulations 2017

- 3.4.3. In England and Wales, the Conservation of Habitats and Species Regulations 2017, as amended, (the Habitats Regulations) govern the assessment processes that must be undertaken in relation to any effects of the Proposed Development on European sites and sites classified under the Ramsar Convention. The process is referred to as Habitats Regulations Assessment (HRA). The SoS as the decision maker is the competent authority for the HRA.
- 3.4.4. The protected sites relevant to this process are Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Sites of Community Importance (SCIs) and candidate Special Areas of Conservation (cSACs), and those given equivalent status by national planning policy (possible SACs (pSACs), potential SPAs (pSPAs), listed Ramsar sites and proposed Ramsar sites for which the UK is responsible). Areas secured under previous consents to compensate for damage to a European site also require a HRA under Government policy.
- 3.4.5. Chapter 4 of this Report sets out details of the HRA that would be required for the Proposed Development if the Competent Authority is minded to grant consent.

Climate Change Act 2008, the Climate Change Act 2008 (2050 Target Amendment) Order 2019, and the Carbon Budget Order 2021

- 3.4.6. The Climate Change Act 2008, as amended by the Climate Change Act 2008 (2050 Target Amendment) Order 2019, established the world's first long-term, legally binding framework to tackle the dangers of climate change. It sets statutory climate change projections and carbon budgets. A key provision is the setting of legally binding targets for greenhouse gas emission reductions in the UK of at least 100% by 2050 ('Net Zero'). This was increased from 80% by the 2019 amendment order.
- 3.4.7. The Act also created the Committee on Climate Change, which has responsibility for setting five-year Carbon Budgets covering successive periods of emissions reductions to 2050, advising and scrutinising the UK Government's associated climate change adaptation programmes, and producing a National Adaptation Plan for the UK Government to implement.
- 3.4.8. The Paris Agreement 2015 provides a framework for constraining greenhouse gas emissions, keeping global warming well below 2°C. It was ratified by the UK Government in November 2016.
- 3.4.9. The Sixth Carbon Budget report 'The UK's path to Net Zero' was published in December 2020 and entered UK Law on 24 June 2021. The Carbon Budget Order 2021 sets the UK carbon cap for the five-year period 2033-2037 at 965 million tonnes of carbon dioxide equivalent (78% reduction on 1990 levels), which is in line with the 2050 target in section 1 of the Climate Change Act 2008. The report recommends that the target can be met through four key steps which include the phasing out of high carbon options for transport.

- 3.4.10. The PA2008 s10(3)(a) requires the SoS to have regard to the desirability of mitigating, and adapting to, climate change in designating an NPS. The ExA had regard to the above objectives throughout this Report.

Environmental Protection Act 1990

- 3.4.11. Section 79(1) Environmental Protection Act 1990 identifies matters related to statutory nuisances. In relation to noise and vibration such matters are set out in Section 4.11 of this Report.

Environmental Permitting Regulations 2016

- 3.4.12. Development proposals that could pollute air, water or land, increase flood risk or adversely affect land drainage may need an Environmental Permit from the Environment Agency under the Environmental Permitting (England and Wales) Regulations 2016.

Water Resources Act 1991, Flood and Water Management Act 2010, Water Act 2003 and 2014, Land Drainage Act 1991

- 3.4.13. These Acts set out the relevant regulatory controls that provide protection to waterbodies and water resources from abstraction pressures, discharge and pollution, and for drainage management related to non-main rivers. The application is considered against such matters in section 4.19 of this Report.

Control of Pollution Act 1974

- 3.4.14. The Control of Pollution Act 1974 provides the main legislation regarding construction site noise and vibration. If noise complaints are received, notices can be issued by local authorities under s60 with instructions to cease work until specific conditions to reduce noise have been adopted. S61 provides a means for applying to local authorities for prior consent to carry out noise generating construction activities. Once prior consent has been agreed under s61, s60 notices cannot be served if s61 consent conditions are being adhered to. This legislation requires Best Practicable Means (BPM) to be applied to the control of construction noise.

Infrastructure Planning (Decisions) Regulations 2010

- 3.4.15. The "Decisions Regulations" include provisions in respect of the treatment of listed buildings, conservation areas and scheduled monuments and of biodiversity. Regulation 3 of the Decisions Regulations provides among other things that:

- When deciding an application which affects a listed building or its setting, the decision-maker must have regard to the desirability of preserving the listed building or its setting or any features of special architectural or historic interest that it possesses; and
- When deciding an application for development consent which affects or is likely to affect a scheduled monument or its setting, the decision-maker must have regard to the desirability of preserving the scheduled monument or its setting.

- 3.4.16. The duty "to have regard" in Regulation 3 does not include the higher duty found in s66 Planning (Listed Buildings and Conservation Areas) Act 1990 to treat a finding of harm to a listed building as a consideration to which the decision-maker had to give "considerable importance and weight" when assessing the planning balance. It does not equate to the National Planning Policy Framework (NPPF) policy on heritage assets. However, paragraph 5.9.26 of dNPS EN-1 March 2023 states that

the SoS should give considerable importance and weight to the desirability of preserving all heritage assets

- 3.4.17. Regulation 6 states that when deciding an application in respect of development that would involve the presence of a hazardous substance on, over or under land to which section 12(2B) of the Planning (Hazardous Substances) Act 1990 applies (deemed hazardous substances consent), the decision-maker must have regard to:
- any current or contemplated use of the land to which the application relates;
 - the way in which other land in the vicinity is being used or is likely to be used; and
 - any planning permission or development consent that has been granted for development of that other land in the vicinity.
- 3.4.18. Whether the Proposed Development would in fact involve the presence of a hazardous substance in these statutory terms, is discussed in this Report at Section 4.12.
- 3.4.19. Regulation 7 requires regard to be had to the United Nations Environmental Programme Convention on Biological Diversity of 1992.

Wildlife and Countryside Act 1981

- 3.4.20. The Wildlife and Countryside Act 1981 provides for the protection of wildlife, nature conservation, countryside protection, National Parks and public rights of way (PRoW), including the notification, confirmation, protection and management of Sites of Special Scientific Interest (SSSIs). If a species protected under the Act is likely to be affected by a development, a protected species licence will be required from Natural England.

Natural Environment and Rural Communities Act 2006

- 3.4.21. The Natural Environment and Rural Communities Act 2006 makes provisions for bodies concerned with the natural environment and rural communities. It includes a duty that every public body must have regard to the conservation of biodiversity in exercising its functions, so far as is consistent with the proper exercising of those functions. The ExA has had regard to this duty in preparing this Report.

Countryside and Rights of Way Act 2000 (as amended)

- 3.4.22. The Countryside and Rights of Way Act 2000 (as amended) includes provisions concerning PRoW and access to land.

Ancient Monuments and Archaeological Areas Act 1979

- 3.4.23. The Ancient Monuments and Archaeological Areas Act 1979 provides for the listing and protection of scheduled monuments. It also imposes a requirement to obtain Scheduled Monument Consent for any works of demolition, repair, and alteration that might affect a designated scheduled monument. For non-designated archaeological assets, protection is afforded through the development management process as established both by the Town and Country Planning Act 1990 and the NPPF.

Equality Act 2010 (Public Sector Equality Duty)

- 3.4.24. The Equality Act 2010 established the Public Sector Equality Duty (PSED) to eliminate discrimination, advance equality of opportunity and foster good relations between persons who share a protected characteristic and persons who do not. The PSED is applicable to the ExA in the conduct of this Examination and reporting, and to the SoS in decision-making.

Other relevant legislation

- Human Rights Act 1998;
- The Town and Country Planning Act 1990;
- The Electricity Act 1989;
- The Highways Act 1980, the Road Vehicles (Authorisation of Special Types) (General) Order 2003, Road Traffic Regulation Act 1984, and the Road Traffic Act 1984;
- Air Quality Standards Regulations 2010;
- The Energy Act 2004;
- The Environment Act 1995;
- The Environment Act 2021;
- National Parks and Access to the Countryside Act 1981;
- Protection of Badgers Act 1992;
- Hedgerow Regulations 1997;
- Weeds Act 1959;
- The Construction (Design and Management) Regulations 2015; and
- The Building Regulations 2010.

3.5. MADE DEVELOPMENT CONSENT ORDERS

Referred to or relied on by the Applicant

- 3.5.1. The following made Orders were referred to by the Applicant in its Explanatory Memorandum (EM) as submitted at D10 [REP10-005] and elsewhere as noted in this Report. The relevant paragraphs of the EM where the made Order is first mentioned appears alongside the title of the Order as follows:

- Cleve Hill Solar Park Order 2020 (2.4.7)
- Riverside Energy Park Order 2020 (5.2.2)
- Great Yarmouth Third River Crossing Order 2020 (5.2.11)
- Drax Power (Generating Stations) Order 2019 (5.2.12)
- Millbrook Gas Fired Generating Station Order 2019 (5.2.12)
- Immingham Open Cycle Gas Turbine Order 2020 (5.3.1)
- Hinkley Point C (Nuclear Generating Station) Order 2013 (5.3.3)
- Wrexham Gas Fired Generating Station Order 2017 (5.3.5)
- Meaford Gas Fired Generating Station Order 2016 (5.3.5)
- Riverside Energy Park Order 2020 (5.3.5)
- Lake Lothing (Lowestoft) Third Crossing Order 2020 (5.4.10)
- East Anglia Three Offshore Wind Farm Order 2017 (5.5.7)
- Silvertown Tunnel Order 2018 (5.5.13)
- High Speed Rail (London - West Midlands) Act 2017 (5.5.14)
- A47 Wansford to Sutton Order 2023 (5.5.21)
- A417 Missing Link Order 2022 (5.5.21)
- A47/A11 Thickthorn Junction Order 2022 (5.5.21)
- Sizewell C (Nuclear Generating Station) Order 2022 (5.6.9)
- Network Rail (Norton Bridge Area Improvements) Order 2014 (5.6.22)
- National Grid (Hinkley Point C Connection Project) Order 2016 (5.6.22)
- Hornsea Three Offshore Wind Farm Order 2020 (5.6.23)

3.6. OTHER RELEVANT POLICY STATEMENTS

Powering up Britain 2023

- 3.6.1. This plan sets out how the Government intends to enhance energy security, deliver net zero commitments, and seize the economic opportunities of the transition to low carbon energy sources. It was published on 30 March 2023, two days after the close of the Examination.

British Energy Security Strategy 2022

- 3.6.2. The British Energy Security Strategy 2022 builds on the former Prime Minister's Ten Point Plan for a Green Industrial Revolution, 2020 and the Net Zero Strategy, Build Back Greener, 2021. The strategy reflects the global rise in energy prices that was provoked by surging demand after the COVID-19 pandemic and then Russia's invasion of Ukraine. The strategy aims to wean Britain off expensive fossil fuels, which are subject to volatile gas prices, and to boost diverse sources of home-grown energy for greater energy security in the long-term.
- 3.6.3. The strategy emphasises that solar photovoltaic (PV) generation has an important role in delivering the government's goals for greater energy independence and states that government expects a five-fold increase in solar deployment by 2035 (up to 70GW).

Energy White Paper, Powering our Net Zero Future 2020

- 3.6.4. The Energy White Paper replaced the UK's Integrated National Energy and Climate Plan 2018 and sets out how the UK will decarbonise its energy system and reach net zero emissions by 2050. It builds on the former Prime Minister's Ten Point Plan for a Green Industrial Revolution, addressing the transformation of Britain's energy system, the promotion of high-skilled jobs, and clean, resilient economic growth.

National Infrastructure Strategy: Fairer, faster, greener 2020

- 3.6.5. The National Infrastructure Strategy sets out the Government's plans to transform UK infrastructure. It has three central objectives: economic recovery; levelling up and strengthening the Union; and meeting the UK's net zero emissions target by 2050. This will be enabled by clear support for private investment and through a comprehensive set of reforms to the way infrastructure is delivered.

UK Biodiversity Action Plan 1994

- 3.6.6. The UK Biodiversity Action Plan lists priority habitats and species. The plan is relevant to this Application in view of the biodiversity matters covered in Chapter 4 of this Report.

Noise Policy Statement for England 2010

- 3.6.7. The Noise Policy Statement for England (NPSE) clarifies the underlying principles and aims in policy, legislation and guidance that relate to noise. The NPSE applies to all forms of noise, including environmental noise, neighbour noise and neighbourhood noise. The Statement sets out the long-term vision of the Government's noise policy, which is to, '*promote good health and a good quality of life through the effective management of noise within the context of policy on sustainable development*'. The Explanatory Note within the NPSE provides further guidance on defining adverse effects.

Committee on Climate Change reports

- 3.6.8. The Committee on Climate Change (CoCC) report dated May 2019 recommended a revised emissions target for the UK of net-zero greenhouse gases (GHG) by 2050. A net-zero GHG target for 2050 will deliver on the commitment that the UK made by signing the Paris Agreement.
- 3.6.9. The CoCC report dated October 2021 on the UK's net zero strategy set out key issues needing to be resolved. These included the urgent need for a combined decarbonisation strategy for agriculture and land, and plans for a Net Zero Test to ensure all policy and planning decisions are consistent with the path to Net Zero.
- 3.6.10. The CoCC's 2022 Progress Report to Parliament noted the UK had a solid Net Zero Strategy in place but stated that with an emissions path set for the UK and the Net Zero Strategy published, greater emphasis and focus must be placed on delivery.

Intergovernmental Panel on Climate Change reports

- 3.6.11. The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change. The March 2023 Synthesis Report for the Sixth Assessment Report highlighted the urgency of near-term integrated climate action and a rapidly closing window of opportunity to secure a liveable and sustainable future for all and that the choices and actions implemented in this decade will have impacts now and for thousands of years.

Other Policy References

- 3.6.12. Other policies referred to include:
- UK Renewable Energy Strategy 2009;
 - Energy Security Strategy 2012;
 - UK Solar PV Strategy 2013;
 - Clean Growth Strategy 2017;
 - Leading on Clean Growth 2017 (as updated);
 - A Green Future 2018;
 - UK Climate Change Risk Assessment 2022; and
 - UK Air Quality Strategy 2007

3.7. THE NATIONAL PLANNING POLICY FRAMEWORK

- 3.7.1. The National Planning Policy Framework (NPPF) provides the framework against which Local Plans are adopted and planning applications decided. It was last revised in July 2021. The NPPF encourages the promotion of renewable energy development and the identification of appropriate sites. It further states that in meeting the challenge of climate change, flooding and coastal change, the planning system should support the transition to a low carbon future.
- 3.7.2. Paragraph 7 of the NPPF explains that the purpose of the planning system is to contribute to the achievement of sustainable development. Paragraph 8 goes onto indicate that in achieving sustainable development the planning system has three overarching objectives, economic, social and environmental, "*... which are interdependent and need to be pursued in mutually supportive ways ...*". Paragraph 10 states "*So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development*".

3.7.3. Other paragraphs in the NPPF are considered important and relevant, and the ExA refers to them and assesses the Proposed Development's conformity with them in the planning issue sections in this Report at Chapter 4.

3.7.4. The more detailed Planning Practice Guidance (PPG) supports the NPPF. On renewable and low carbon energy it notes (paragraph: 013 Reference ID: 5-013-20150327) that large scale solar farms "*can have a negative impact on the rural environment, particularly in undulating landscapes*", but "*the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively*". The PPG says that large scale solar farms should be focussed on previously developed and non-agricultural land, if it is not of high environmental value.

3.8. LOCAL IMPACT REPORTS

3.8.1. ECDC, CCC, SCC and WSC submitted a joint Local Impact Report (LIR) at D1 [REP1-024]. It included appendices as follows:

- [REP1-024a] Index of Appendices
- [REP1-024b] Emerging Local Plan - Part One: Strategic Policies
- [REP1-024c] Emerging Local Plan - Part Two: Non-Strategic Policies
- [REP1-024d] Emerging Local Plan - Part Three: Site Allocations
- [REP1-024e] East Cambridgeshire Local Plan
- [REP1-024f] Suffolk County Council Minerals and Waste Local Plan
- [REP1-024g] Suffolk County Council Green Access Strategy (Rights of Way Improvement Plan) Document Index
- [REP1-024h] Cambridgeshire County Council Rights of Way Improvement Plan
- [REP1-024i] Suffolk County Council Travel Plan Guidance
- [REP1-024j] Suffolk Guidance for Parking
- [REP1-024k] East Cambridgeshire Natural Environment Supplementary Planning Document
- [REP1-024l] Cambridgeshire Local Transport Plan 3
- [REP1-024m] Cambridgeshire Health & Well-being Strategy
- [REP1-024n] Cambridgeshire County Council's General Principles for Development (GPD)
- [REP1-024o] Cambridgeshire County Council's Housing Estate Road Construction Specifications (HERCS)
- [REP1-024p] DEFRA Rights of Way Circular Guidance
- [REP1-024q] West Suffolk Council Local Development Scheme
- [REP1-024r] Fens Biodiversity Audit; and
- [REP1-024s] West Suffolk Landscape Character Assessment.

3.8.2. The substance of the LIR is discussed in Chapter 4 of this Report.

3.9. THE DEVELOPMENT PLAN

3.9.1. Local planning policies may be important and relevant in the SoS's decision-making on DCO applications. Paragraph 4.1.5 of NPS EN-1 states that matters both important and relevant to the decision making may include Development Plan Documents or other documents in the Local Development Framework and that:

"... in the event of a conflict between these or any other documents and an NPS, the NPS prevails for purposes of...decision making given the national significance of the infrastructure".

- 3.9.2. The local planning policies relevant to the Proposed Development are identified in the relevant sections of Chapter 4 in discussing the planning issues. Insofar as a Development Plan includes a made Neighbourhood Plan of importance and relevance, this is noted in the relevant parts of Chapter 4.
- 3.9.3. On 10 March 2023 at D8, the final SoCG between the Applicant and ECDC, CCC, SCC and WSC was submitted [REP8-029]. The application of local policy within the Environmental Impact Assessment (EIA) has not been agreed for the following assessments:
- Ecology and Nature Conservation [APP-0401];
 - Landscape and Visual Amenity [APP-042]; and
 - Socio-economics and Land use [APP-0441].
- 3.9.4. The application of local policy with regard to PRowS was not agreed between the Applicant and the four Local Authorities in respect of Ecology and Nature Conservation, Landscape and Visual Amenity and Socio-economics and Land use (Table 4, Joint LIR [REP1-024]).

Local authority strategies and reports

- 3.9.5. All four Councils have declared a climate change emergency. All Councils have targets and objectives in relation to this. Other key strategies include:
- Suffolk Local Transport Plan;
 - Cambridgeshire and Peterborough Local Transport Plan (January 2020);
 - Suffolk Green Access Strategy (Rights of Way Improvement Plan) 2020-2030;
 - Cambridgeshire County Council Rights of Way Improvement Plan;
 - New Anglia Local Enterprise Partnership (NALEP) Economic Strategy for Norfolk and Suffolk 2017; and
 - Suffolk County Council Energy Infrastructure Policy.
- 3.9.6. Other policies, strategies and reference documents are referred to in the LIR [REP1-024] and appendices, and as necessary in this Report in Chapter 4.

4. THE PLANNING ISSUES

4.1. MAIN ISSUES IN THE EXAMINATION

4.1.1. As required by s88 Planning Act 2008 (PA2008) and Rule 5 of The Infrastructure Planning (Examination Procedure) Rules 2010 (EPR) the Examining Authority (ExA) made an Initial Assessment of the Principal Issues (IAPI) arising from a review of the application and the Relevant Representations (RRs) received from Interested Parties (IPs). The IAPI formed Appendix C to the Rule 6 letter [PD-009] which were:

- Principle and nature of the development;
- Air quality and human health;
- Biodiversity and nature conservation (including Habitats Regulations Assessment);
- Compulsory Acquisition;
- Cultural heritage and historic environment;
- Draft Development Consent Order (DCO);
- Environmental Statement - general matters;
- Landscape and visual effects;
- Noise and vibration;
- Socio-Economics and land use;
- Traffic, transport and highway safety; and
- Water resources, flood risk and drainage.

4.1.2. The IAPI was discussed at the Preliminary Meeting (PM). No matters were raised at the PM that required amendment to the IAPI. In this Report the issues arising from the IAPI have been subject to some reordering compared with the above list as set out in the Rule 6 letter [PD-009], in response to how the various issues related with one another and their perceived importance to the ExA's recommendation.

4.2. ISSUES ARISING IN WRITTEN SUBMISSIONS

4.2.1. The application generated much community comment, and the representations raised many objections to the Proposed Development. Foremost among the objectors was Say No to Sunnica (SNTS). Its views were generally reflective of the wider community who also participated in the Examination as individuals.

4.2.2. SNTS fundamentally objected to the Proposed Development on several grounds as harmful and inappropriate, including the size of the scheme. It stated however that, if the ExA and SoS did not agree that the entire scheme should be refused, it supported the approach of the four host local authorities to seek removal of parcels W03-W12, E05, E12-E13 as "*the appropriate secondary position*" (Deadline 8 Submission - Comments on D7 Submissions, Comments on RIES, and Summary of Position [REP8-050]).

4.2.3. SNTS objected to the Proposed Development on the following issues:

- The cumulative impact of the scheme which unlike other solar farm projects set this scheme apart by industrialising the landscape and cutting enmeshed relationships between communities;
- Concerns articulated by its expert representative on landscape and visual matters, mirroring those advanced by the Councils. For SNTS the site selection stage ignored landscape and visual impact matters leading to harmful and

unmitigable impacts, not made acceptable by anything in NPS EN-1 in light of submissions made by SNTS on the interpretation of that policy;

- The Applicant had significantly underestimated the heritage harm of the scheme, including by failing to engage with the significance of the Limekilns in landscape, heritage, and horse racing industry (HRI) terms. SNTS remained in support of the removal of W03-W12, albeit its primary case was that the entire scheme should be refused consent;
- On agriculture, there was a significant dispute between SNTS and the Applicant on the assessment of soils and best and most versatile (BMV) land, whereas SNTS's evidence should be preferred, but in fallback accepted (as the Councils recommended) that a reasonable worst-case assessment of BMV might be undertaken [REP7-095];
- On ecology and biodiversity net gain there has been some agreement in the Statement of Common Ground (SoCG), and the Applicant made changes to its approach in light of SNTS's concerns. However, its concerns about the scheme closely mirror those advanced by the Councils;
- The scheme was a threat to Newmarket's premier place in the horse racing industry considering how the industry functions and the threats facing it. The Applicant failed to engage with the significance of the industry, and the significance of the Limekilns for which the scheme was particularly harmful;
- On the impact of the scheme on local communities, individual residents made submissions including at Open Floor Hearings expressing the harm that individual residents reported to stem from the design of the scheme, being one which surrounded settlements and severed ties between communities. These harms would remain for generations, whether or not the scheme should be technically understood as temporary or permanent. SNTS maintained that the harms identified by residents, including to their sense of place, links to other communities, and the enjoyment of their homes were significant and weighed heavily in the planning balance. A better designed and a better located scheme would have avoided these harms;
- The benefit to the area was minimal at best as significant portions of the skills, supply chain, and employment must come from outside of the local area. It would be transient in the construction and decommissioning periods or minimal in the operational period. The loss of agricultural jobs, jobs related to the HRI, and other ancillary roles would be considerable;
- Use of public rights of way (PROW), enjoyment of the countryside, and enjoyment of nature were all key to enjoyment of this area but the scheme significantly threatened this. The landscape would be changed to an industrialised one focused on energy generation, degrading local views and enjoyment of the countryside. The Applicant failed to properly assess this harm including in respect of green space use of the Limekilns;
- The scheme would be harmful to individually identified tourism assets, and also tourism generally in the area. Ultimately, many of the harms to recreation, local communities, the HRI, landscape and heritage directly translate through to harms to those features which are valuable to tourism in Newmarket;

- The Applicant had not disclosed relevant information or engaged with the significant greenhouse gas and carbon emissions of the proposed battery energy storage system (BESS);
- On a Rochdale envelope assessment of the reasonable worst-case use for the batteries, the BESS could not be seen as associated development without limits imposed in the Development Consent Order (DCO), as the BESS is disproportionate to the energy generating aspect of the scheme (in the solar photovoltaic (PV) cells) and indicative of the primary purpose of the batteries which is not connected to generation, but for arbitrage and ancillary services for the National Grid not connected to the scheme;
- BESS and fire safety remained a significant concern which could not be swept away with insufficiently evidenced assertions, a lack of information about BESS, and an insubstantial outline battery fire safety management plan. SNTS associated itself with the position of other experts who objected on matters of hazardous substances consents and control of major accident hazards (COMAH) regulations;
- As to decommissioning SNTS maintained a range of concerns, such as how it would be secured (including in funding terms, the security of a bond, and a contingency approach in case of failure), and the actual process of decommissioning and recycling the scheme;
- There were significant flaws in the site selection process and the assessment of alternative available sites and an undue focus on land ownership considerations, the source of the planning harm in this case;
- A poor approach to consultation deprived the scheme of quality local community input which exacerbated the harms that would be caused if built. The matter was presented as a fait accompli.
- There was a particular impact on local amenity as to the access to Sunnica West A (at access point B) along Snailwell Short Road, and the use of La Hogue Road. Use of these routes by heavy goods vehicles (HGVs) would significantly impact all users in safety and amenity value terms;
- The policy test was not made to justify compulsory purchase and the compliance of the Applicant's funding statement remained a considerable issue.
- Noise and light remained a significant concern for nearby residences (e.g. in Red Lodge), as was a failure to assess glint and glare across the whole scheme, and winter filling of reservoirs remained an important issue in flooding and hydrology.

4.3. ISSUES ARISING IN LOCAL IMPACT REPORT

4.3.1. Overall, the position of the local authorities in the Local Impact Report (LIR) [REP1-024] was that there were several issues that should prevent the Proposed Development from being consented in its current form despite the desirability of low carbon sources of energy generation. These issues were viewed as:

- resolvable if impacts were clarified with more information from the Applicant;

- requiring more work on mitigation before impacts were reduced to an acceptable level some, such as most impacts on ecology and biodiversity, transport and public rights of way (PRoW); or
- fundamental to the nature and geography of the scheme, unlikely to be resolvable with without removing parts of the Proposed Development, such as certain impacts on landscape and visual amenity and some ecological impacts.

4.4. CONFORMITY WITH NATIONAL POLICY STATEMENTS

4.4.1. The Examining Authority's (ExA's) assessment of National Policy Statement (NPS) policy compliance in Chapter 3 of this Report was undertaken with respect to the policy detail and tests applicable to the individual planning issues, as set out in relevant NPS paragraphs. That assessment is reported on in the issue specific sections in Chapter 4 of this Report.

4.4.2. In terms of the Government's high-level policies for providing replacement and/or additional energy generating capacity and the transition away from greenhouse gas emissions (GHG), the ExA considers that there is no inconsistency between the Proposed Development and the thrust of the policy expressed in NPS EN-1 and NPS EN-5, as is the case in respect of dNPS EN-1 and dNPS EN-3.

4.5. ENVIRONMENTAL IMPACT ASSESSMENT

4.5.1. The Applicant submitted an Environmental Statement (ES) consisting of a glossary and 18 chapters [APP-032 to APP-050] accompanied by technical appendices [APP-051 to APP- 128], figures [APP-129 to APP-255] a non-technical summary [APP-256] and other reports and statements [APP-257 to APP-259]. The appendices included environmental management plans which were updated during the Examination as follows:

- Outline Landscape and Ecology Management Plan (OLEMP) [APP-108]
 - updated at Deadline (D)3 [REP3-011], at D5 [REP5-011] and late submission [REP5-013], at D7 [REP7-015], at D10 [REP10-012]
- Framework Construction Traffic Management Plan and Travel Plan (CTMP) [APP-118]
 - updated at D3 [REP3-013], at D3a [REP3A-004], at D5 [REP5-015], at D7 [REP7-017]
- Framework Construction Environmental Management Plan (CEMP) [APP-123]
 - updated at D2, [REP2-026], at D3 [REP3-015], at D5 [REP5-043], at D8 [REP8-010], at D10 [REP10-014]
- Framework Decommissioning Environmental Management Plan (DEMP) [APP-125]
 - updated at D2 [REP2-028], updated at D5 [REP5-008], at D7 [REP7-034], at D8 [REP8-012]
- Framework Operation Environmental Management Plan (OEMP) [APP-126]
 - updated at D2 [REP2-030], updated at D5 REP5-010 (tracked only), at D7 [REP7-036], at D8 [REP8-014], at D10 [REP10-016]
- Schedule of Changes to OLEMP and Environmental Masterplans - Accepted at the discretion of the Examining Authority [AS-324]

- Schedule of Changes to Framework CTMP and Travel Plan - Accepted at the discretion of the Examining Authority [AS-325]
- Outline Battery Fire Safety Management Plan [REP2-032]
 - updated at D5 [REP5-050], at D8 [REP8-016], at D10 [REP10-022]
- Outline Skills, Supply Chain and Employment Plan [REP2-034]
 - updated at D3 [REP3-017], at D7 [REP7-043], at D10 [REP10-024] and
- Environmental Masterplan [REP3-022]
 - At D5 further versions were submitted: (Zoomed Out) [REP5-054], updated at D10 [REP10-041], and (Zoomed In) [REP5-061] to [REP-064], updated at D7 [REP7-054], D10 [REP10-050] and [REP10-051].

4.5.2. Documents included in the ES that are “certifiable”, are referenced in Article 38 of the Development Consent Order (DCO) (Applicant’s final preferred version [REP10-005]) and listed in Schedule10. Requirement 5 in Schedule 2 requires any amendments applied for to demonstrate that they would be unlikely to result in “*any materially new or materially different environmental effects from those assessed in the environmental statement.*”

4.5.3. The environmental management plans, secured by Requirements included in the DCO are intended to ensure that the construction, operation and decommissioning phases for the Proposed Development would meet the parameters assessed in the ES and provide mitigation that the Applicant has relied on when undertaking the EIA. The environmental management plans listed above would be documents that would need to be certified by the Secretary of State (SoS) under the provisions of any made DCO. The management plans currently in outline or framework form would be part of the list of documents to be certified as described above, providing a legally secure base from which the final and full plans would be produced and approved.

4.5.4. During the Examination the Applicant made two requests to change the Application, Change Request One (CR1) and Change Request Two (CR2). Both changes were accepted into the Examination as non-material changes, as detailed below.

Change Request One (CR1)

4.5.5. In additional submissions under cover of letter of 30 August 2022 [AS-242], the Applicant formally requested changes to the Application (CR1) [AS-243]. The appendices together with updated submission documents [AS-244 to AS312] are recorded in a separate library available here [Applicant's Change Request 30 August 2022](#).

4.5.6. The Applicant stated that National Grid Electricity Transmission (NGET) now considered Substation Option 1 was not technically feasible, therefore it had identified an additional Option 3 which would transform the 33 kilovolts (kV) received from the solar stations within the PV Sites directly to 400 kV within the onsite substations at Sunnica West Site A, Sunnica East Site A and Sunnica East Site B for export to the Burwell National Grid Substation.

4.5.7. In summary, the three proposed changes to the Application were:

- Change 1 – Removal of Option 1

- removal of the Burwell National Grid Substation Extension Option 1 from the Scheme;
 - Change 2 – 400kV cabling
 - change to 400kV cabling within the grid connection routes (Cabe Routes A and B) to facilitate grid connection Option 3; and
 - Change 3 – 33/400kV Transformers
 - the onsite substations at Sunnica East A, Sunnica East B and Sunnica West A would require a change to the electrical configuration and therefore their general arrangement and layout due to the introduction of a 33kV/400kV transformer in place of the 33kV/132kV transformers, with a shunt reactor introduced at Sunnica East Site B.
- 4.5.8. Change 3 was required to facilitate grid connection Option 3 and included the transportation of the 33kV/400kV transformer and shunt reactor (Sunnica East Site B only) from the Strategic Road Network (SRN) to each of the onsite substations.
- 4.5.9. The proposed changes were subject to environmental appraisal as set out in [AS-243]. The ExA required further information and clarification in relation to these matters, by letter of 8 September 2022 [PD-015] to which the Applicant responded by letter on 14 September 2022 [PD-002].
- 4.5.10. The ExA, in its letter of 4 October 2022 [PD-016] made a PD accepting these changes to the Application as part of the Examination. The ExA agreed with the Applicant's conclusion that the proposals would not generate new or different likely significant effects or constitute a material change. Although Change 3 would lead to a minor increase to the Order limits, overall the compulsory acquisition powers sought by the Applicant would be reduced.

Change Request Two (CR2)

- 4.5.11. In its Deadline 3A submissions, the Applicant made a submission which gave notice to the ExA of its intention to submit further changes to the application (CR2) in respect of Changes 1-3 [REP3A-037]. Further discussions with NGET on the Grid Connection Agreement had secured the Applicant's potential grid connection at Burwell, therefore Option 2 in the Application, being a substation extension on third party land, could be discontinued.
- 4.5.12. In summary, the changes to the Application comprised within CR2 were:
- Change 1 – Removal of the Burwell National Grid Substation Extension Option 2 from the Scheme;
 - Change 2 – Removal of Sunnica West Site B;
 - Change 3 – Inclusion of additional archaeological offset areas. Two new archaeological offset areas were proposed to be incorporated, the first at E05 to remove the crash crater and the second an area of concentrated archaeological features within W04; and
 - Change 4 – Removal of Cable Route Access L (HPUT Campus Access Road).
- 4.5.13. Change 4 was a localised change at the request of a landowner and not considered to lead to any changes to the results of the Environmental Statement (ES) or Habitats Regulations Assessment (HRA). Changes 1,2 and 3 were assessed by the Applicant to identify any likely significant effects that would be new or materially different from those reported in the technical chapters of the Scheme's Environmental Statement (ES) [APP-036 and APP-038 to APP-048].

- 4.5.14. The Applicant concluded that none of the changes proposed in this report are material in nature whether considered individually or collectively, separately or cumulatively, as they did not result in material changes to the underlying Proposed Development to which the Application relates. None of the changes required additional land not already included in the Order Limits and in fact reduced the land in the Order Limits, therefore the Infrastructure Planning (Compulsory Acquisition) Regulations 2010 were not engaged. The Applicant also noted that the changes did not change the conclusions of the report to inform an HRA [APP-092], nor require a new European Protected Species licence, nor reflect an impediment to the grant of any other consent or licence required outside the DCO.
- 4.5.15. The ExA concluded that the changes proposed in CR2 considered individually or collectively, separately or cumulatively, would not result in any material changes to the underlying proposed development to which the application related. Therefore the ExA issued a Procedural Decision (PD) within its letter of 25 January 2023 [PD-020] accepting the proposed changes into the Examination of the Application as non-material changes
- 4.5.16. Removal of Option 2 would mean that rights through the Option 2 land would still be required for underground cabling, however the need for the transformer compound at this location would be removed by changing the electrical configuration of the Proposed Development as set out in CR2 [AS-243] and reliance on Option 3 under which three onsite substations would transform the 33kV electricity generated by the solar modules to 400kV to facilitate connection with the existing Burwell substation.
- 4.5.17. The onsite substations would be located within the limits of deviation of Work Nos. 3A, 3B and 3C as shown on the Works Plans. The proposed changes would not affect the point of connection to the national grid, the reasons for selecting the site, or the reasons for selecting the proposed technology.
- 4.5.18. The proposed changes would not affect the reasons for selecting Sunnica West Site A or Sunnica East Sites A and B, or the reasons for selecting the proposed technology. It also does not affect the need to connect the Scheme to Burwell National Grid Substation. The outcome of routing options for the grid connection route also would not have been affected by the change as a more southerly grid connection route from Sunnica West Site A to Burwell Nation Grid Substation than is proposed would be constrained by horseracing industry sites (in particular the Godolphin Stables and Gallops), the urban area of Newmarket, Snailwell Village and Snailwell Meadows Site of Special Scientific Interest (SSSI).
- 4.5.19. To maintain a similar generation capacity from a smaller land area, the reduction in developable area would be mitigated by adopting 575 watt (W) panels across the Application Site such that the overall output would remain relatively unchanged ([REP3A-037]). Therefore, there was no predicted material change to the carbon benefit of the Proposed Development as a result of the changes as the carbon benefit is relative to the level of electricity produced.

Summary

- 4.5.20. Regulation 5 of the EIA Regulations explains that EIA is a process that includes preparation of an ES or updated ES, as appropriate, by the Applicant. At each Deadline (D1 through D11) the Applicant updated its Guide to the Application, the most recent being that submitted at Deadline 11: Guide to the Application – Appendix A DCO Examination Document Schedule (Clean) [REP11-002]. This details several iterations of parts of the ES, providing references to updated

chapters, appendices, and figures. The Applicant updated framework plans where appropriate to secure advance information of likely environment effects in relevant areas, together with the environmental controls required to ensure such environmental effects are not materially worse than those assessed in the Environmental Statement.

- 4.5.21. The Applicant has explained which elements of the proposal have yet to be finalised, and the reason why. Where flexibility is sought in the consent the ExA is satisfied that the Applicants has reasonably assessed the likely worst-case environmental and socio-economic effects of the Proposed Development.
- 4.5.22. The Proposed Development was designed through an iterative process, taking account of environmental assessments and consultation with stakeholders. Design amendments were made, and mitigation incorporated, in order to minimise and mitigate the impacts of the Proposed Development. The Proposed Development has remained materially the same as applied for and the ExA is satisfied that the ES has identified all applicable legislation and national policy relevant to the assessments undertaken as part of the EIA of the Proposed Development.

OTHER ENVIRONMENTAL ISSUES

- 4.5.23. Glint and glare effects potentially arising from the Proposed Development were assessed by the Applicant. The issue is a cross-cutting one, related to effects on human health, visual amenity, motorised users, and non-motorised users (NMU) including equestrian users. Specific concerns arising have been examined in the relevant parts of Chapter 4 of this Report and some overall conclusions drawn in Chapters 6 and 8.

4.6. THE PRINCIPLE AND NATURE OF THE DEVELOPMENT

INTRODUCTION

- 4.6.1. This Chapter addresses the principle of the development, need, design and consideration of alternative sites, together with intended generating capacity and the relationship between generating capacity and BESS.
- 4.6.2. The application falls to be determined within the criteria set out in s105 PA2008. NPS EN-1 and NPS EN-5 and their intended application to large scale energy projects are important and relevant matters in the consideration of the principle of development. For similar reasons, dNPS EN-1, dNPS EN-3 and dNPS EN-5 are also important and relevant considerations in deciding whether the Proposed Development is acceptable in principle.
- 4.6.3. Other relevant decision making polices that are important and relevant to the principle of development include the NPPF, the PPG and the applicable policies of development plans of the host local authorities.

POLICY CONSIDERATIONS

NPS EN-1

- 4.6.4. NPS EN-1 sets out the case for the need and the urgency for new energy infrastructure to be consented and built as soon as possible. Although solar energy generation is excluded from its scope, it makes clear that applications for development consent for the types of infrastructure covered should be assessed on the presumption that there is a need for those types of infrastructure. It advises that

substantial weight be given to the contribution that development proposals would make towards meeting this need when considering applications under PA2008.

- 4.6.5. NPS EN-1 also notes that it is for industry to propose new energy infrastructure projects within the strategic framework set by Government, and planning policy should not set targets for, or limits on, different technologies. It recognises that electricity storage can be used to compensate for the intermittency of renewable generation and that storage will play an important role in a low carbon electricity system, with back up capacity to ensure security of supply.
- 4.6.6. It further advises that consideration of applications for development consent should start with a presumption in favour of granting consent unless more specific and relevant policies in the related NPSs or matters that the decision maker considers are important and relevant to the decision, clearly indicate that consent should be refused. Guidance is given on the importance of a grid connection and whilst the Applicant must ensure that there will be the necessary infrastructure and capacity within a network to accommodate the electricity generated, and the SoS must be satisfied there is no obvious reason why a grid connection would not be possible.
- 4.6.7. NPS EN-1 does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option. However, applicants are required to include in their ES, information about the main alternatives studied and the main reasons for the choice made, taking into account the environmental, social and economic effects, including technical and commercial feasibility. Paragraph 4.4.3 advises that given the need for new energy infrastructure, alternatives should be considered in a proportionate manner.

NPS EN-5

- 4.6.8. NPS EN-5 is mainly concerned with electricity network infrastructure comprising transmission systems and associated infrastructure. Following acceptance of CR2 into the Examination ([REP5-059]) detailed below in this section of this Report, the electrical configuration of the scheme would be as set out in the Change Application [AS-243], namely three onsite substations capable of transforming the 33kV electricity generated by the solar modules to 400kV to facilitate connection by underground cabling to the existing Burwell substation. This would provide the electrical connection point to the National Grid and facilitate the import and export of electricity to and from the Proposed Development Site. These elements of the Proposed Development, as associated development forming part of the Proposed Development, would come within the scope of NPS EN-5. Similar provisions can be found in dNPS EN-5.

Draft NPS EN-1

- 4.6.9. The general principles set out in NPS EN-1 are relevant to all energy infrastructure and are carried forward into dNPS EN-1 which notes that there is an urgent need for new electricity generating capacity and that:
- “...a secure, reliable, affordable, Net Zero consistent system in 2050 is likely to be composed predominantly of wind and solar”* (paragraph 3.3.21 dNPS EN-1).
- 4.6.10. The strategic importance of solar generation for the UK’s energy generation is recognised, as is the requirement for sustained growth in the capacity of solar generation in the next decade. Unlike NPS EN-1, it recognises solar generation as within its scope, the urgent need for such technology and the contribution it can make to achieving net zero, security of supply and an affordable, reliable system.

- 4.6.11. dNPS EN-1 recognises the increased flexibility provided by new electricity storage, in particular in maximising the useable output from intermittent low carbon generation, including solar, and in providing balancing services to the grid.
- 4.6.12. Unlike NPS EN-3, dNPS EN-3 covers solar PV generation above 50MW and includes a new section setting out detailed policy considerations for this type of generating technology. It recognises the Government's commitment to sustained growth in this area as well as the benefits of solar generation including in terms of cost and speed of delivery.
- 4.6.13. Whilst acknowledging the scale of development involved will inevitably have impacts, particularly if sited in rural areas, it lists the key considerations involved in the siting of solar farms including irradiance and site topography, proximity to dwellings, capacity and the importance of a grid connection on the commercial feasibility of a development proposal. It advises on the key technical considerations including in terms of land use, biodiversity and nature conservation, water management, residential amenity, cultural heritage and traffic and transport impacts. These matters are considered further in the individual planning issues set out below.
- 4.6.14. dNPS EN-1 includes advice that the SoS should only consider those alternatives that can meet the objective need for the proposed development and have a realistic prospect of delivering the same capacity in the same timescale.
- 4.6.15. Paragraph 4.4.3 also states that alternatives not among the main alternatives studied by the applicant (as reflected in the ES) should only be considered to the extent that they are both important and relevant to the decision to be made. Alternatives that mean the necessary development could not proceed, for example because they would not be commercially viable or proposals for alternative sites would not be physically suitable, can be excluded on the grounds that they are not important and relevant to the decision. Vague or inchoate alternative proposals can also be excluded on these grounds. Where an alternative is first put forward by a third party after an application has been made, the onus should be on the proposer to provide the evidence for its suitability and the ExA should not necessarily expect applicants to have assessed it.
- 4.6.16. dNPS EN1 also advises the SoS not to refuse an application because there would be fewer adverse impacts from developing similar infrastructure on another suitable site.

National Planning Policy Framework (NPPF)

- 4.6.17. Chapter 14 of the NPPF sets out that the planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. Paragraph 158 advises that in determining planning applications for renewable and low carbon development, applicants should not be required to demonstrate the overall need for renewable or low carbon energy; and the application should be approved if its impacts are, or can be made, acceptable.
- 4.6.18. The PPG states that whilst there are planning considerations that relate to large scale solar farms, increasing the amount of energy from renewable sources, including solar, will help ensure the UK has a secure energy supply, reduce greenhouse gas emissions, slow down climate change and stimulate investment in new jobs and businesses.

Local Development Plans

- 4.6.19. Up to date and relevant local planning policies are considered important and relevant to the SoS's decision. These national and local planning policies are set out in the ES Chapter 6.2 Appendix 4A: Alternative Sites Assessment, Annex C [APP-036]. So far as concerns any conflict between development plan policies and a policy in NPS EN-1 or NPS EN-5 the latter national statements will prevail.

THE APPLICANT'S CASE

- 4.6.20. The Applicant's case for the need for the Proposed Development is set out in its Statement of Need [APP-260]. It recognises that solar generation is not specifically referred to in NPS EN-1 but acknowledges that it is an important and relevant matter to which the SoS should have regard when determining the application.
- 4.6.21. The case for need is built on the contribution of the Proposed Development to the three important national policy aims:
- the importance of deployment at scale zero-carbon generation assets;
 - security of supply; and
 - affordability.
- 4.6.22. The Proposed Development was in line with the NPS policy framework in supporting the need for significant new low-carbon electricity generation infrastructure to meet the UK's legal decarbonisation targets. There is an increased need and urgency for decarbonisation in order to meet the UK's obligations under the Paris Agreement (2015). Several schemes as foreseen in previous carbon plans and for which the NPSs were largely written, have lagged behind in terms of deployment. The case for need specifically included a section on the effect of the 2020 COVID-19 pandemic on the domestic energy market and infrastructure investment, and the importance of energy infrastructure projects in fiscal recovery plans. Future electricity demand will grow significantly through the decarbonisation-through-electrification of other industry sectors, requiring significant new low-carbon electricity schemes.
- 4.6.23. The importance of scale in solar generation and storage to security of supply was emphasised, and the very strong reasons for connecting large-scale solar generation and/or storage facilities at the proposed location, analysing the economic viability of large-scale solar generation as a future contributor to a low-carbon GB electricity supply system in comparison to alternate technologies. The importance of integrating low-carbon generation at scale was also emphasised, with Energy Balancing Infrastructure (EBI) technologies, such as hydrogen and BESS. Significant capacities of low-carbon solar generation were urgently needed in the UK, and integration technologies would be essential in delivering net zero for the UK. The Proposed Development would be an essential near-term step to meet government and address the climate change emergency.
- 4.6.24. The Applicant's case on need was reinforced through its End of Examination Summary Position Paper [REP10-032].

Alternatives

- 4.6.25. The Applicant's consideration of alternatives is set out in ES Chapter 4 (Alternatives and Design Evolution) [APP-036]. The Applicant considered alternative sites, technologies, layouts, cable route corridors and points of connection to the National Grid. It also considered alternative layouts for the Burwell Substation Extension. A "no development" scenario was not considered to be a reasonable alternative to the Proposed Development as it would not deliver the additional electricity generation and electricity storage proposed in line with NPS EN-1 at paragraph 4.4.3.

- 4.6.26. ES Chapter 4 [APP-036] set out a systematic, staged approach to the selection of the Proposed Development Site. This was supplemented by Appendix 4A: Alternative Sites Assessment [APP-054].
- 4.6.27. Stage 1 identified an area of search for a suitable site, focussing on East Anglia due to high levels of irradiation and a generally suitable topography for a utility scale solar farm. A point of connection to the National Grid was considered appropriate. Several such points were considered but Burwell was identified as having capacity with appropriate reinforcement. A 15km search area from Burwell was identified
- 4.6.28. Stage 2 applied a planning and environmental constraints mapping process, which included planning policy set out for DCOs in NPSs. This included designated and proposed international and national ecological and geological sites, agricultural land classification, urban areas, green belt and nationally designated landscapes. Stage 3 led to the identification of potential solar development areas which were further assessed in Stage 4. The consideration of the seven PDAs is set out in the application documentation and shown in Figure 4.1 below:

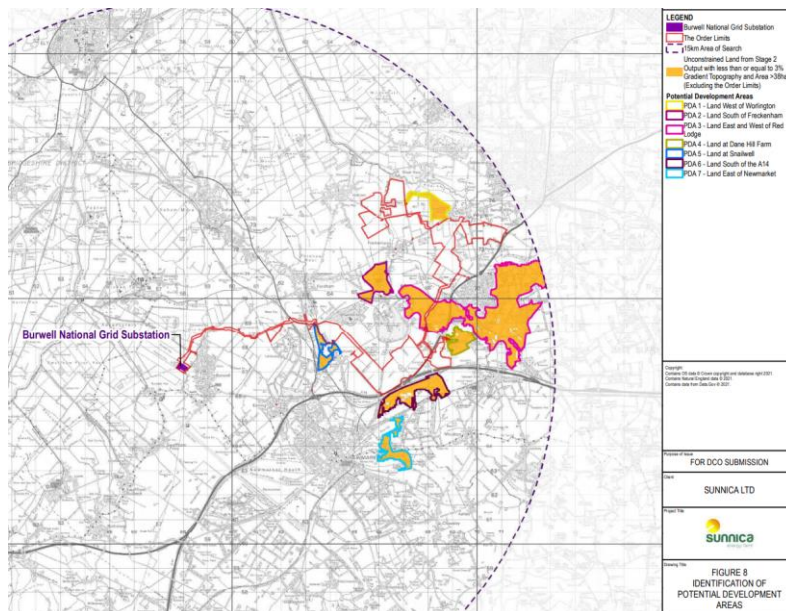


Figure 4.1 Potential Development Areas Considered

- 4.6.29. The evaluation showed that the PDAs had several potential operational, land use and environmental constraints, making it difficult to develop solar of the scale required at these locations. The location of the Proposed Development was considered suitable for large scale solar development due to:
- the region's high levels of solar irradiation compared to other parts of the UK and predominantly large flat open land, near high demand centres for electricity;
 - available capacity to connect to the national electricity transmission system within a reasonable timeframe and cost;
 - maximisation of use of low grade, non-best and most versatile (BMV) agricultural land;
 - land not being in internationally or nationally designated biodiversity sites and no direct impact on locally designated biodiversity sites;
 - land not being located in or close to Areas of Outstanding Natural Beauty (AONB) or designated areas of local landscape value;
 - land not being located in designated green belt;
 - ability to avoid direct physical impact on designated heritage assets;

- land being mainly in Environment Agency flood zone 1 and at low risk of flooding;
- good transport access for construction and operational maintenance; and
- limited land use conflicts with local development plan allocations or displacement of existing businesses.

4.6.30. Further alternative locations for the Proposed Development were identified through consultation feedback. These were analysed by the Applicant in Table 3-1 of ES Chapter 4, Appendix 4A: Alternative Sites Assessment [APP-054] and rejected for the reasons there given.

Alternative substation locations and cable route corridors

4.6.31. The Application as submitted referred to three alternative sites considered for a substation extension necessary to transform the 132kV export voltage from the Application Sites to the National Grid 400kV connection voltage:

- Option 1: 0.31ha of land to the east of the existing substation compound adjacent to Weirs Drove, approximately 200m west of Burwell.
- Option 2: 1.58ha of land approximately 50m north of the existing substation, north of Newnham Drove, 650m west of Burwell.
- Option 3: 2.52ha of land adjacent to the north west of the existing substation, south of Newnham Drove, 450m west of Burwell.

4.6.32. Planning permission had been granted for another solar development on the Option 3 land, therefore Options 1 and 2 were submitted as part of the Application. It was then discovered via communication with National Grid that Option 1 was no longer available, so the Applicant made a change request to the Application described below (CR1) and later, a second change request (CR2) to remove land and works powers for above ground solar elements of Sunnica West B.

CR1

4.6.33. In additional submissions under cover of letter of 30 August 2022 [AS-242] the Applicant formally requested changes to the application (CR1) [AS-243]. The appendices together with updated submission documents [AS-244 to AS312] are recorded in a separate Examination Library available here [Applicant's Change Request 30 August 2022](#).

4.6.34. The Applicant stated that NGET now considered Substation Option 1 was not technically feasible, therefore it had identified an additional Option 3 which would transform the 33 kV received from the solar stations within the PV Sites directly to 400 kV within the onsite substations at Sunnica West Site A, Sunnica East Site A and Sunnica East Site B for export to the Burwell National Grid Substation.

4.6.35. In summary, the three proposed changes to the application were:

- Change 1 – Removal of Option 1. Removal of the Burwell National Grid Substation Extension Option 1 from the Scheme;
- Change 2 – 400kV cabling. Change to 400kV cabling within the grid connection routes (Cable Routes A and B) to facilitate grid connection Option 3; and
- Change 3 – 33/400kV Transformers. The onsite substations at Sunnica East A, Sunnica East B and Sunnica West A would require a change to the electrical configuration and therefore their general arrangement and layout due to the introduction of a 33kV/400kV transformer in place of the 33kV/132kV transformers, with a shunt reactor introduced at Sunnica East Site B. This

change was required to facilitate grid connection Option 3. The change also included the transportation of the 33kV/400kV transformer and shunt reactor (Sunnica East Site B only) from the Strategic Road Network (SRN) to each of the onsite substations.

4.6.36. The ExA required further information and clarification in relation to the matters set out in its letter of 8 September 2022 [PD-015] to which the Applicant responded by letter on 14 September 2022 [PD-002]. The ExA in its letter of 4 October 2022 [PD-016] made a PD accepting these changes to the Application as part of the Examination. The proposed changes were subject to environmental appraisal as set out in [AS-243]. The ExA agreed with the Applicant's conclusion that the proposals would not generate new or different likely significant effects or constitute a material change, since although Change 3 would lead to a minor increase to the Order limits, they would overall reduce the compulsory acquisition powers sought by the Applicant.

CR2

4.6.37. In its Deadline 3A, submissions, the Applicant made a submission which gave notice to the ExA of its intention to submit further changes to the application (CR2) in respect of Changes 1-3 [REP3A-037]. Further discussions with NGET on the Grid Connection Agreement had secured the Applicant's potential grid connection at Burwell, therefore Option 2 in the Application, being a substation extension on third party land, could be discontinued.

4.6.38. In summary, the changes to the application comprised within CR2 were:

- Change 1 – Removal of the Burwell National Grid Substation Extension Option 2 from the Scheme;
- Change 2 – Removal of Sunnica West Site B;
- Change 3 – Inclusion of additional archaeological offset areas. Two new archaeological offset areas were proposed to be incorporated, the first at E05 to remove the crash crater and the second an area of concentrated archaeological features within W04; and
- Change 4 – Removal of Cable Route Access L (HPUT Campus Access Road).

4.6.39. Change 4 was a localised change at the request of a landowner and not considered to lead to any changes to the results of the ES or HRA. Changes 1,2 and 3 were assessed by the Applicant to identify any likely significant effects that would be new or materially different from those reported in the technical chapters of the Scheme's Environmental Statement (ES) [APP-036 and APP-038 to APP-048].

4.6.40. The Applicant concluded that none of the changes proposed in this report were material in nature whether considered individually or collectively, separately or cumulatively, as they did not result in material changes to the underlying Proposed Development to which the application relates. None of the changes required additional land not already included in the Order Limits and in fact reduced the land in the Order Limits, therefore the Infrastructure Planning (Compulsory Acquisition) Regulations 2010 were not engaged. The Applicant also noted that the changes did not change the conclusions of the report to inform an HRA [APP-092], nor require a new European Protected Species licence, nor reflect an impediment to the grant of any other consent or licence required outside the DCO.

4.6.41. The ExA concluded that the changes proposed in CR2 considered individually or collectively, separately or cumulatively, would not result in any material changes to the underlying proposed development to which the application related. Therefore,

the ExA issued a PD within its letter of 25 January 2023 [PD-020] accepting the proposed changes into the Examination of the application as non-material changes

Implications of CR1 and CR2 for connection to substation and cable route

- 4.6.42. Removal of Option 2 would mean that rights through the Option 2 land would still be required for underground cabling, however the need for the transformer compound at this location would be removed by changing the electrical configuration of the Proposed Development as set out in CR2 [AS-243] and reliance on Option 3 under which three onsite substations would transform the 33kV electricity generated by the solar modules to 400kV to facilitate connection with the existing Burwell substation.
- 4.6.43. The onsite substations would still be located within the limits of deviation of Work Nos. 3A, 3B and 3C as shown on the Works Plans. The changes would not affect the point of connection to the national grid, the reasons for selecting the site, or the reasons for selecting the proposed technology.
- 4.6.44. The proposed changes would not affect the reasons for selecting Sunnica West Site A or Sunnica East Sites A and B, the reasons for selecting the proposed technology, or the need to connect the Scheme to Burwell National Grid Substation. The outcome of routing options for the grid connection route would not have been affected by the change as a more southerly grid connection route from Sunnica West Site A to Burwell Substation would be constrained by horseracing industry sites (in particular the Godolphin Stables and Gallops), the urban area of Newmarket, Snailwell Village and Snailwell Meadows SSSI.
- 4.6.45. To maintain a similar generation capacity from a smaller land area, the reduction in developable area would be mitigated by adopting 575W panels across the Application Site such that the overall output would remain relatively unchanged ([REP3A-037]). Therefore, there would not be a material change to the carbon benefit of the Scheme as a result of the proposed change as the carbon benefit was relative to the level of electricity produced.
- 4.6.46. Onsite cabling would be located within the limits of deviation of Work Nos. 2A, 2B and 2C as shown on the Works Plans. As noted above on acceptance of CR2, works would still be required to construct Grid Connection Route B to connect the Proposed Development to Burwell substation. Therefore, access at Cable Route Access B would be retained for those works and for maintenance during operations.

Capacity

- 4.6.47. The Scheme is in receipt of a Grid Connection Offer from NGEN for 500MW of Transmission Entry Capacity as referred to in the Statement of Need [APP-260] which is based on the current design and not a proposed cap to installed generation capacity. There would be secured in the DCO, parameters for the Proposed Development which would be within the final design, so it could benefit from technological improvements up until commencement of development. This would increase capacity beyond existing assumptions provided that the Proposed Development remained within the parameters in the Application. This aligned with dNPS EN-3 (paragraph 2.47 2) in anticipating levels of land efficiency for solar generation, for both the land take required and the evolution in technology anticipated to bring about efficiency benefits through the life of the Proposed Development.
- 4.6.48. With an ever-growing share of renewable generation capacity on the NETS, the bulk transfer of power over long distances remained vitally important (paragraph 7.4.5

Statement of Need [APP-260]). By connecting to the Burwell Substation, the grid supply point for Cambridgeshire and much of Cambridge, the Proposed Development would provide a local low-carbon source of supply for local residents and businesses, whilst playing an important role in providing bulk power, capable of transport across the entire NETS to where it is demanded. The connection at Burwell could improve the import transfer position so as to, among other things, provide an important source of low-carbon power in East Anglia and displace the need for power to be transported from generators in the north to demand in the south through the NETS when conditions required it (paragraphs 8.1.5 and 8.1.10 Statement of Need [APP-260]).

EXAMINATION

- 4.6.49. Concerns were raised by IPs with the Applicant's Statement of Need [APP-260] and its choice of site on several grounds. The common themes of the objections can be grouped as follows:
- questioning motives of Applicant, eg that they were purely for the financial gain, the real driver was the BESS rather than solar energy generation, speculative in that Applicant would compulsorily acquire farmland then sell at an inflated price;
 - doubting the need for or efficiency of the proposals, eg more land needed for solar generation than other generation technology;
 - priority should be given to food security;
 - negative impacts on the environment and local communities;
 - alternatives should be used such as new homes built with solar panels; and
 - carbon neutral requirements would never be delivered due to lifetime greenhouse gas emissions arising from the scheme.
- 4.6.50. SNTS alleged in its Comments on Relevant Representations (RR) [REP 1-023] that the scheme would not be connected locally but to the national transmission system and therefore would do little to strengthen and diversify the grid locally.
- 4.6.51. An Issue Specific Hearing (ISH3) was held on 8 December 2022 in respect of the principle and nature of development with particular reference to the implications for the Proposed Development of an eventual recommendation to delete a part or parts of the Order limits (as set out in the Update by the Applicant on Heritage Matters and Substation Correction [REP3A-037] (ie the removal of Sunnica West B). The hearing examined issues adopted by the host authorities in the Joint Local Report (LIR) [REP1-024] in terms of what could be agreed with the Applicant, what required more work, and issues fundamental to the nature of the Proposed Development and local geography, unlikely to be capable of being dealt with, in particular the host local authorities' view that areas within the Order Limits should be removed (for example ECDC's written representation [REP2-131] that parcels E05 and W03 to W12 should be removed).
- 4.6.52. In principle, the Applicant agreed that a reduced scale of the Proposed Development might still be consented but unlike Sunnica West B ecological measures may not be linked to a single parcel and landscape measures may need to be rethought if the developable area changed, and removing land required for solar arrays might require the removal or redistribution of other parts of infrastructure in relation to BESS, the substations and/or cable routes. The best use of the grid connection at Burwell had to be considered as to how removal of land would impact on delivery of 500MW output for the purpose of renewable energy generation. It was not just a question of mitigation hierarchy and seeking to avoid any harm: national policy identified the approach which, for example in terms of ecology, paragraph 5.3.7 NPS EN-1 stated "*development should aim to avoid*

significant harm” not just any harm. Further paragraph 5.3.13 noted that in light of the need for new infrastructure, local and regional biodiversity interests “should not be used in themselves to refuse development consent”.

- 4.6.53. Various IPs queried whether a definite outcome for the Proposed Development should be secured in terms of generating capacity and battery storage. This matter was considered at the DCO ISH1 The Applicant's position is recorded in paragraphs 4.2 and 4.3 of its written summary of the oral submissions made [REP2-036]. It explained that each part of the BESS would be Associated Development (AD) and not an aim in itself. Justification for the BESS being AD was found in the Planning Statement [APP-261-2631 at paragraphs 3.2.3-3.2.10 and the functions of the BESS were described in Table 10.1 of the Statement of Need [APP-260].
- 4.6.54. Further details were provided as to the operation of the BESS and why it was AD within the meaning of statute and relevant guidance. The BESS had not been finally designed so the total amount of energy was not yet known but it would be sized so it could take all the power from the solar PV, there being no additional power or capacity in the system. In scale and proportionality terms, the size parameters in-the DCO controlled the areas identified as suitable for the BESS, being about 31ha out of over 1000 ha. (Section 4.2, Written Summary of Sunnica Limited Oral Submissions at the DCO ISH1 on 1 November 2022 [REP2-036]).
- 4.6.55. SNTS disagreed with an interpretation of policy that sought maximisation of generation output “*at all costs*”, implying that this was the Applicant's interpretation of the policy advanced at the ISH hearings (paragraphs 26 and 27 [REP 7-084]). It wished consideration to be given to setting a power limit for the BESS.
- 4.6.56. The Applicant replied, noting that the Little Crow Solar Park Order provided for 90MW of BESS, noting that power limit, but was concerned about this reference setting a precedent as it was unclear from the SoS's decision letter why that figure was chosen. In addition, it noted that locating solar farms at places with grid connection capacity maximises existing grid infrastructure, minimises disruption to community infrastructure or biodiversity and reduces overall costs. The degradation of solar efficiency over time is noted in dNPS EN-3 paragraphs 2.48.8 and 2.49.9 and as a result applicants might elect to replace panels during the lifetime of site.
- 4.6.57. The design of the scheme was criticised by several IPs including SNTS. At its D7 submission [REP7-084] it disagreed that the Proposed Development complied with the underlying policy imperative of good design, citing relevant parts of NPS EN-1 that applying good design to energy projects should produce sustainable infrastructure sensitive to place; showing how good design, in terms of siting and use of appropriate technologies, can help mitigate adverse impacts such as noise; and demonstrating good design in terms of siting relative to existing landscape character, landform and vegetation, and ecology (paragraphs 4.5.1-3 and 2.4.2).
- 4.6.58. SNTS considered this did not mean that removal of parts of the Proposed Development which would have especially harmful impacts, would be contrary to national policy. Solar was “*ultimately modular; an all or nothing approach maximising generation at all costs ignores this and does not find a place in policy.*” Overall, whilst referring to several generic impacts, the clear implication (paragraph 16 [REP7-084]) was that the site selection approach was subordinated to landowner considerations. The Little Crow, Cleve Hill, and Longfield schemes were single large area solar farms which in SNTS's view did not have internal cumulative impact because they were not “*scattered into islands across the landscape*”. The general point made was that the scale and sprawling nature of the Proposed Development

would make it hard for local people to escape its impact as it would not integrate into the landscape.

- 4.6.59. The Applicant responded that its size and shape was necessary in order to deliver the scale of renewable energy generation benefit that was required [REP3A-035] Response to Written Representations. Further details had been provided in the Statement of Need [APP-260]. The design incorporated offsets from solar farm structures to settlement edges, existing vegetation, including hedgerows, public rights of way and road networks; conserved field patterns, ecology and historical features (including below ground archaeology). Overall, this approach preserved the sense of identity of the landscape. The Design and Access Statement [APP-264] described how the approach to the development of the design of the Scheme was “*sensitive to place and local character*”.
- 4.6.60. Issues were raised as to the loss of generating capacity if the Proposed Development were reduced in scale due to mitigation not being perceived as sufficient to manage its residual impacts. In paragraph 5.1 9 of Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 4 (ISH4) [REP7-060], the Applicant stated that:
- "The total loss of generation capacity would be over 60% of the total energy to be generate by the Scheme, and the equivalent of more than six solar NSIPs. Assuming the Scheme could still be brought forward with these parcels removed, it would deliver substantially less by way of renewable energy. The Local Authorities' proposal would necessitate a fundamental reassessment of the Scheme and reconsideration of the extent and location of the Cable Route Corridor. In terms of viability, the Applicant would need to consider any proposal in detail, but it is unlikely that there would be a viable Scheme that could be brought forward in the same way as it would be a wholly different proposition. As for the grid connection at Burwell, which is agreed at 500MW, at least 60% of this capacity would remain idle if the energy generated by the Scheme were reduced to the extent proposed. This would fundamentally undermine National Grid's objective of maximising renewable energy input into the grid."*
- 4.6.61. The ExA queried whether the connection to Burwell substation could only be used in relation to the Proposed Development if it could potentially be used by other schemes. The Applicant confirmed at ISH4 [REP7-060] that the grid connection at 500MW of capacity at Burwell was not allocated to any other project. If the Proposed Development were to connect at a lower capacity, the remaining headroom would be unused, and the capacity of the substation underutilised "*until National Grid sought to recover that capacity and reallocate it.*"
- 4.6.62. SNTS at D7 expressed concerns [REP7-084] about the size of the scheme and sought an explanation for the Applicant requiring a capacity of around 630MWp when the connection capacity at Burwell substation was limited to 500MWp. The Applicant responded in its Response in relation to Scheme Sizing and 'Over Badging' [REP9-004] noting that all solar schemes planned for above the contracted amount of power that could be delivered to the National Grid, a typical ratio being 1.25:1.00 to 1.40:1.00 DC:AC ratio. The Proposed Development was already at the bottom end of that range, therefore there was no scope to remove additional parcels from the Proposed Development without affecting the amount of power that could be so exported, which would undermine the government's energy policy and legal commitments to net zero.

- 4.6.63. The ExA also queried whether the Proposed Development would bestow any special benefit on the local community over and above that which the general population would eventually experience through the reduction in energy costs. The Scheme would according to the Applicant reduce energy costs at a national level, but not differently in the local area. In this connection the ExA referred to the Equality Impact Assessment [REP3-020] which suggested that the contribution to renewable energy might reduce poverty amongst underrepresented groups, such as younger people or ethnic minorities. The Applicant clarified that it would be the same benefit in terms of the reduction in energy costs, but that reduced energy costs would be felt "more keenly" for those in fuel poverty.

CONCLUSION

- 4.6.64. The Government has identified that to meet its energy and climate change objectives, there is an urgent need for new electricity generating stations. It has committed to sustained growth in solar capacity. NPS EN-1 and draft EN-3 NPS EN-1 makes clear that there is an urgent need for all types of energy generation and dNPS EN-1 recognises that solar will make a meaningful contribution to meeting this need. The host local authorities acknowledged this position in their joint LIR [REP1-024]. Assessing the Proposed Development on the presumption, as required in NPS EN-1 that there is a need for such types of infrastructure, the ExA gives substantial weight to the contribution that it would make towards meeting this need.
- 4.6.65. The ExA is satisfied that there is no obvious reason why a grid connection would not be possible at Burwell Substation. The Applicant has included in its ES, information about the main alternatives studied and the main reasons for the choice made, considering the environmental, social and economic effects, including technical and commercial feasibility. Clearly, more consideration might have been given to the implications of including Sunnica West B in the submitted application, however the Applicant responded within the examination process and submitted changes to the application that were accepted as non-material changes into the Examination.
- 4.6.66. The key considerations involved in the siting of solar farms and technical considerations including in terms of land use, biodiversity and nature conservation, water management, residential amenity, cultural heritage and traffic and transport impacts were assessed by the Applicant and considered further in the individual planning issues set out below. The alternatives to the Application Site were set out in a systematic and staged approach prior to the selection of the Proposed Development Site. The design developed to address specific landscape or visual effects, or concerns raised through consultation and examination. Whilst the design has considered the landscape, the Applicant focused also on the design iterations relating to settlements within or in proximity to the Proposed Development.
- 4.6.67. The ExA considers that given the national policy imperatives inherent in selection of a site that meets the objective need for the proposed development and have a realistic prospect of delivering the same capacity in the same timescale, especially in respect of the recognised need for large scale solar sites, the alternative sites assessment was undertaken in a proportionate manner. Land type is not a predominating factor in determining the suitability of site location. The ExA is mindful of the advice in dNPS EN-1 that an application should not be refused because there would be fewer adverse impacts from developing similar infrastructure on another suitable site, however in any event no other candidate site with those credentials was in fact identified.

- 4.6.68. Whilst the ExA is conscious of the arguments concerning carbon emissions over the lifetime of the Proposed Development, these are more in the nature of generic uncertainties that could potentially apply to a wide range of renewable energy sources. The Applicant is not required to demonstrate the overall need for renewable or low carbon energy. The Applicant's case is that there would be considerable net benefits in terms of carbon emissions over the 40-year life span of the Proposed Development, and the ExA does not find compelling evidence to suggest that its impacts would not be acceptable. For example, a significant feature of the land use change proposed would be the beneficial GHG impact of around 100,000 tonnes carbon dioxide equivalent (tCO₂e), largely due to the conversion of large areas of cropland to grassland which has a higher carbon sequestration value than cropland (paragraph 6.3.6, ES Chapter 6 Climate Change [APP-038]).
- 4.6.69. Solar is a key part of the government's strategy for low-cost decarbonisation of the energy sector. The British Energy Security Strategy and draft energy NPSs indicate that the government expects a significant increase in solar electricity generation as part of its commitment to achieving net zero. Other forms of generation may provide different benefits. However, solar generation of various sizes is likely to form part of the government's preferred approach to energy generation and security in the future. The principle and viability of large-scale solar developments has been accepted in previous NSIP applications (see Cleve Hill Solar Park and Little Crow Solar Park).
- 4.6.70. The Climate Change Act 2008 requires the SoS to reduce the net UK carbon account for 2050 to least 100% lower than the 1990 baseline and the Proposed Development would make a meaningful contribution towards meeting that target and the legally binding commitment to end the UK's contribution to climate change.
- 4.6.71. The ExA is satisfied that the import capacity of the BESS would be equivalent to the export capacity of the solar PV system, providing a clear relationship that falls within the definition of AD. Storing energy from a source other than solar PV is technically feasible and appropriate, as and when it may be required by the grid, especially when energy storage is likely to be needed to a greater extent going forward.
- 4.6.72. Furthermore, in the ExA's view a capacity limit would not constrain the environmental impacts of the Proposed Development but rather the amount of renewable energy that could be generated. The ExA agrees with the Applicant that such a limit would not be in furtherance of national policy statements, subject to parameters secured through Requirements in the DCO, the Works Plans and the Design Principles (APP-264] which formed the basis of the Environmental Impact Assessment.
- 4.6.73. The ExA agrees with the Applicant that efficient grid connection is an important aspect of viability, permitting projects to come forward at lower costs and helping to reduce overall costs to consumers. There would be no element within the Proposed Development that would directly provide more affordable energy costs for the local community; however that is not a policy requirement in the national policy statements. Given the grid connection agreement, the Proposed Development would maximise generation capacity installed behind the grid connection point, with every prospect of achieving higher volumes of low carbon electricity generated for a single episode of construction work over its 40-year life.
- 4.6.74. Overall, and subject to detailed consideration of the planning issues considered below, there would be no conflict in principle between the Proposed Development and national or local planning policy. The Proposed Development would positively

contribute to a secure, flexible energy supply, significantly contribute to meeting the identified need for additional generating capacity, and in view of the urgent need for additional low carbon generation, the ExA considers this should be afforded very considerable weight.

- 4.6.75. In terms of the Government's intention to bring large scale ground mounted solar generating stations within scope of the energy NPSs, the Proposed Development would be consistent with the relevant emerging policy in dNPS EN-1, dNPS EN-3 and dNPS EN-5 in all material respects.
- 4.6.76. The Proposed Development generally accords with the policy support for renewable energy generation and the legal obligation to reduce greenhouse gases. Subject to consideration of the specific impacts of the Proposed Development in the remainder of this Chapter, the principle of the Proposed Development accords with both local and national policy.

4.7. AIR QUALITY AND HUMAN HEALTH (INCLUDING BATTERY STORAGE)

INTRODUCTION

- 4.7.1. This section considers the effects of the Proposed Development on air quality and human health in relation to policy requirements. The ExA identified air quality and human health, particularly in respect of glint and glare and battery energy storage, as principal issues in its initial assessment [PD-009].
- 4.7.2. Issues considered in this section are:
- air quality;
 - health impacts, including mental health and wellbeing;
 - glint and glare; and
 - battery energy storage.
- 4.7.3. The following chapters of the ES are relevant, along with the associated figures and appendices:
- Chapter 3 Scheme Description [APP-035];
 - Chapter 14 Air Quality [APP-046];
 - Chapter 15 Human Health [APP-047];
 - Chapter 16 Other Environmental Topics [APP-048]; and
 - Chapter 18 Summary of Significant Environmental Effects [APP-050].
- 4.7.4. There is some overlap with the Traffic and Transport section of this Chapter in respect of air quality and health impacts.
- 4.7.5. Appendix 16A Glint and Glare Assessment [APP-121] refers to "glint" as a momentary flash of bright light and "glare" as a continuous source of bright light. Glint and glare is a cross-cutting issue which is also considered in the Landscape and Visual Impact and the Socio-economics and Land Use sections of this Chapter, particularly in respect of views and the horse racing industry (HRI).

POLICY CONSIDERATIONS AND LEGISLATION

- 4.7.6. Under retained EU law, Council Directive 2008/50/EC on ambient air quality and cleaner air for Europe (the Air Quality Directive) requires Member States to assess ambient air quality with respect to sulphur dioxide (SO₂), nitrogen dioxide (NO₂),

oxides of nitrogen (NOx), particulate matter (PM10 and PM2.5), lead, benzene, carbon monoxide and ozone. It sets legally binding concentration-based limit values as well as target values to be achieved for the main air pollutants and establishes control actions where these are exceeded. The Air Quality Directive is transposed into UK law through the Air Quality Standards Regulations 2010 made under the Environment Act 1995.

National Policy

- 4.7.7. The applicability of national policy, and in particular the National Policy Statements (NPS) EN-1, EN-3 and EN-5 and emerging NPSs, is discussed earlier in this Report.
- 4.7.8. At the time of the Examination NPS EN-1 was the overarching national policy statement for energy. NPS EN-3 is the national policy statement for renewable energy infrastructure and does not cover solar energy generation.

Air quality and dust

- 4.7.9. With reference to air quality and dust, paragraphs 5.2.1 and 5.6.1 of NPS EN-1 say that infrastructure development can have adverse effects on air quality in the construction, operation and decommissioning phases. Air emissions include dust, particulates and gases such as sulphur dioxide, carbon monoxide and nitrogen oxide. NPS EN-1 paragraph 5.2.2 notes that the decision maker does not need to address individual applications against carbon budgets.
- 4.7.10. Where the project is likely to have adverse effects on air quality, the Applicant should assess the impacts in the ES (NPS EN-1 paragraphs 5.2.6, 5.6.4). The assessment should include the type, quantity and timing of emissions, effects on particular premises or locations, and the proposed mitigation (NPS EN-1 paragraphs 5.2.7 and 5.6.5).
- 4.7.11. Paragraph 5.2.9 says that where a project would lead to a deterioration in air quality in an area, or would result in a new area where air quality breaches any national air quality limits, the decision maker should generally give air quality considerations substantial weight, and that air quality considerations will also be important where substantial changes in air quality are expected, even if this does not lead to a breach of national air quality limits.
- 4.7.12. Paragraph 5.2.11 of NPS EN-1 states that the decision maker should consider whether any additional mitigation measures are needed and whether there is a need for a construction management plan (NPS EN-1 paragraph 5.6.10). Paragraph 5.6.11 of NPS EN-1 gives examples of engineering, layout and administrative mitigation.
- 4.7.13. Paragraph 5.2.10 of NPS EN-1 says that the decision maker must always take account of any statutory air quality limits and refuse consent if a project will lead to non-compliance with a statutory limit.
- 4.7.14. Paragraphs 174 and 186 of the NPPF and paragraphs 5 and 7 of the NPPG are relevant to air quality.

Human health

- 4.7.15. With reference to human health, paragraph 4.13.1 says that energy production has the potential to impact on people's health and wellbeing, that access to energy is

beneficial to society and that energy production, distribution and use may have negative impacts.

- 4.7.16. Where the proposed project has an effect on human health, paragraph 4.13.2 says that the ES should assess these effects for each element of the project, and identify adverse health impacts and measures to avoid, reduce or compensate. The impacts of more than one development may affect people simultaneously, so cumulative impacts on health should be considered.
- 4.7.17. Paragraph 4.13.3 says that impacts may arise from increased traffic, air or water pollution, dust, odour, hazardous waste and substances, noise, exposure to radiation and pests. Glint and glare is not explicitly referred to, but has been considered by the ExA as an artificial light emission in relation to paragraph 5.6.1.
- 4.7.18. Paragraph 4.13.4 says that new energy infrastructure may also affect the composition, size and proximity of the local population, and in doing so have indirect health impacts on access to key public services, transport or the use of open space for recreation and physical activity.
- 4.7.19. Paragraph 4.13.5 says that the decision maker will want to take account of health concerns when setting requirements, but generally those aspects of energy infrastructure most likely to have a significantly detrimental impact on health are subject to separate regulation which will constitute effective mitigation.
- 4.7.20. Paragraph 5.10.2 says that open spaces, sports and recreational facilities all help to underpin people's quality of life and have a vital role to play in promoting healthy living, and that Government policy is to ensure adequate provision to meet the needs of local communities. Green infrastructure in particular will also play an increasingly important role in mitigating or adapting to the impacts of climate change.
- 4.7.21. With reference to light pollution, paragraph 5.6.1 of NPS EN-1 says that infrastructure development has the potential for the release of a range of emissions including artificial light, which have the potential to have a detrimental impact on amenity. Paragraph 5.6.4 says that the applicant should assess the potential for artificial light to have a detrimental impact on amenity as part of the ES.
- 4.7.22. The assessment should include effects on particular premises or locations, and the proposed mitigation (NPS EN-1 paragraph 5.6.5).
- 4.7.23. Paragraph 5.6.7 of NPS EN-1 says that the decision maker should be satisfied that an assessment of the potential for artificial light emissions to have a detrimental impact on amenity has been carried out and that such impacts have been minimised. Glint and glare is considered by the ExA to be a form of artificial light. The decision maker should also consider whether any additional mitigation measures are needed and whether there is a need for a construction management plan (NPS EN-1 paragraph 5.6.10). Paragraph 5.6.11 of NPS EN-1 gives examples of engineering, layout and administrative mitigation.
- 4.7.24. Paragraphs 92, 93, 98 and 100 of the NPPF and paragraph 46 of NPPG are relevant to human health and wellbeing, the latter suggesting that a health impact assessment is useful for considering significant impacts.

Draft National Policy

- 4.7.25. At the time of the Examination, NPS EN-1 and NPS EN-3 were currently undergoing revision. Of particular significance is that solar energy generation is expected to come within the remit of the revised NPS EN-3.
- 4.7.26. Relevant paragraphs relating to draft NPS EN-1 are:
- paragraph 5.2.9 in respect of air quality; and
 - paragraph 4.13.5 in respect of human health.
- 4.7.27. In relation to glint and glare, dNPS EN-3 notes at paragraph 2.52.4 that: *“Solar PV panels are designed to absorb, not reflect, irradiation. However, the Secretary of State should assess the potential impact of glint and glare on nearby homes and motorists”*.

Local Policy

- 4.7.28. The local plan policies relevant to air quality and human health are cited in the Joint LIR [REP1-024] as follows:
- East Cambridgeshire District Council (ECDC) Local Plan (adopted April 2015);
 - policy ENV9: Pollution;
 - Forest Heath District Council (FHDC) Core Strategy (adopted 2010);
 - policy CS4 on reduction of emissions, and mitigation and adaptation to climate change; and
 - West Suffolk Council Joint Development Management Policies Document (last updated February 2015);
 - policy DM14: Protecting and enhancing natural resources, minimising pollution and safeguarding from hazards;

THE APPLICANT’S CASE

Application documents

- 4.7.29. Volume 1 Chapter 3 of the ES (the Scheme Description) [APP-035] sets out the main components of the proposed development. Of particular relevance to air quality and human health are the sections on construction and decommissioning of the solar infrastructure and the operation of the panels and the BESS.
- 4.7.30. Volume 1 Chapter 14 of the ES [APP-046], supporting Figures 14.1 and 14.2 [APP-254, APP-255] and Appendix 14A [APP-119] present the results of the Applicant’s Environmental Impact Assessment (EIA) of the potential impacts of the Proposed Development on air quality.
- 4.7.31. Volume 1 Chapter 15 of the ES [APP-047] and supporting Appendix 15A [APP-120] present the results of the Applicant’s EIA of the potential impacts of the Proposed Development on human health. There are no supporting figures.
- 4.7.32. Volume 1 Chapter 16 of the ES [APP-048] and supporting Appendices 16A [APP-121] and 16D [APP-124] report respectively on the assessment of glint and glare and the assessment of unplanned atmospheric emissions from the BESS.
- 4.7.33. Pre-application consultation on air quality matters was carried out by the Applicant and is summarised in Table 14-4 [APP-046]. The main consultation issues identified by the Applicant were:

- Dust due to construction activities;
- BESS fire and toxic fumes; and
- Odours from the construction sites.

4.7.34. Pre-application consultation on health and wellbeing was carried out by the Applicant and is summarised in Table 15-3 [APP-047]. The main consultation issues identified by the Applicant were:

- Exploitation of people through the supply chain, eg mining of materials;
- Loss of views;
- HGV movements; and
- Air quality.

4.7.35. No comments directly relevant to air quality were received at statutory consultation: in respect of human health issues, odour and electromagnetic fields (EMF) were scoped out of the EIA [APP-046] [APP-047].

4.7.36. Statutory consultation on glint and glare was carried out by the Applicant and is summarised in Table 16-1 [APP-048]. The main issues raised were

- a need for a full consideration of visual impact, highway safety and aviation safety; and
- concerns regarding glint and glare in respect of equestrian users and facilities.

The Ministry of Defence (MoD) said that it has no aerodrome height or technical safeguarding concerns.

4.7.37. Pre-application consultation in respect of major accidents and disasters is shown in Table 16-8 [APP-048].

Battery energy storage is not explicitly mentioned, but the Health and Safety Executive (HSE) was consulted and said that there was one major accident hazard site and also six major accident hazard pipelines within the proposed Order limits.

HSE also said that *“The presence of hazardous substances on, over or under land at or above set threshold quantities (Controlled Quantities) will probably require Hazardous Substances Consent (HSC) under the Planning (Hazardous Substances) Act 1990 as amended. Further information on HSC should be sought from the relevant Hazardous Substances Authority.”*

Public Health England (PHE) said that *“The EIA should include consideration of the COMAH Regulations (Control of Major Accident Hazards) and the Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations 2009: both in terms of their applicability to the installation itself, and the installation’s potential to impact on, or be impacted by, any nearby installations themselves subject to the Regulations.”*

The Applicant considered that these were generic statements and did not consider them further, as no hazardous materials were expected, nor would quantities of dangerous substances equalling or exceeding COMAH thresholds be stored within the Order limits [APP-048].

PHE also said that the EIA should include information on how the promoter would respond to fires: the Applicant responded to say that a BESS Air Quality Fire Risk Assessment had been undertaken, and this was presented as Appendix 16D of the application [APP-124].

Concerns about the fire risk of the BESS being installed as part of the proposed development were raised at statutory consultation on major accidents and disasters. The Applicant responded [APP-048] to say that

“This issue is covered in this Section (of Chapter 16 of the Environmental Statement). Additionally, an Outline Fire Safety Management Plan has been prepared as part of the DCO submission [EN010106/APP/7.9]. An Unplanned Atmospheric Emissions from Battery Energy Storage Systems (BESS) is presented in Appendix 16D of this Environmental Statement [EN010106/APP/6.2].”

- 4.7.38. Volume 1 Chapter 18 of the ES [APP-050] summarises what the Applicant considers to be the significant environmental effects during the construction, operational and decommissioning phases of the proposed development. Table 1 shows that the Applicant considers that there are no significant residual effects in respect of air quality, human health and wellbeing, glint and glare or major accidents and disasters.

Legislation, policy and guidance

- 4.7.39. The Applicant has considered relevant national and local legislation and policy [APP-119] [APP-120] and has set out the relevant air quality objectives for NO₂ and for PM₁₀ and PM_{2.5} particulate matter in Table 3-1 of Appendix 14A [APP-119].
- 4.7.40. The Applicant has also cited extensive legislation, policy and guidance in respect of major accidents and disasters [APP-048].
- 4.7.41. While acknowledging that the *“proposed energy generating technology is not currently specifically referenced by a National Policy Statement”* [APP-119], the Applicant takes account of the relevant paragraphs of NPS EN-1 and relevant Local Plan policies, concluding that there are no relevant air quality or human health requirements in the other NPSs [APP-119] [APP-120].
- 4.7.42. The Applicant has also taken account of the draft NPSs EN-1, EN-3 and EN-5 [APP-119, APP-120] and concludes that the only relevant paragraphs relate to draft NPS EN-1, namely:
- paragraph 5.2.9 in respect of air quality (see Table 3-3 of Appendix 14A [APP-119]): as the Proposed Development is not in or near an Air Quality Management Area (AQMA) or Clean Air Zone, and air quality limits are not in danger of being exceeded, mitigation measures are not required; and
 - paragraph 4.13.5 in respect of human health (see Table 2-2 of Appendix 15A [APP-120]): addressed in section 15.8 of the ES [APP-120].

Baseline conditions

- 4.7.43. The air quality in the study area is generally good, there are no AQMA, and the relevant local authorities have no concerns and do not monitor air quality around the Order land.
- 4.7.44. The human health baseline consists of a description of the local area, including community resources and healthcare facilities, and the associated human health profile. The Applicant considers that this is not expected to change in the future.
- 4.7.45. Construction traffic and use of non-road mobile machinery (NRMM) will be very limited during the operational phase so operational phase impacts have not been considered, leaving only construction and decommissioning air quality impacts to be assessed [APP-046].

- 4.7.46. A 24-month construction period and a 24-month decommissioning period have been considered as the worst case. Due to the smaller amount of decommissioning required (as the cables will remain in the ground), the decommissioning phase has not been assessed separately.
- 4.7.47. 2023 has been used as the worst case construction year for the assessment of background pollutant concentrations, as it is expected that levels will reduce over time. Background concentration figures were obtained from Defra Background Maps to establish a baseline for assessment of the effects of peak construction flows. Trunk road traffic has been included in the dispersion model and therefore omitted to avoid double counting.
- 4.7.48. Existing local sources of dust include vehicle emissions, vehicle brake and tyre wear, agricultural dust and long range transport of material from outside the study area.
- 4.7.49. The landscape has been assessed as open but with varying vegetation patterns across the glint and glare study area and some screening for surrounding aviation, railway, road, PRow, dwelling and equestrian receptors.

Assessment methodology

Air quality

- 4.7.50. The potential for fugitive emissions of particulates during construction was assessed through a Dust Risk Assessment (DRA) conducted in accordance with Institute of Air Quality Management (IAQM) guidance, and the results are presented in Table 14-8 [APP-046].
- 4.7.51. Assessment of emissions due to traffic was carried out using flows obtained in 2019: although this is some time before the application was submitted, this traffic flow information predated the Covid-19 pandemic and so was considered to be more reliable for long term assessment than 2020 flows. Dispersion modelling was used to assess the impacts at sensitive receptors, both for the dust risk assessment and the construction traffic emissions assessment.
- 4.7.52. The Applicant considers that emissions from NRMM will be temporary and localised, and no unusual plant or machinery will be used, so they will not be significant and have therefore not been assessed further: this is consistent with the scoping opinion.

Human health

- 4.7.53. The Applicant said that there was no consolidated assessment methodology for human health, and therefore assessed impacts qualitatively using best practice principles as provided in the NHS England Healthy Urban Development Unit Health Impact Assessment Toolkit 2019. Impact categories are shown in Table 15-1 and the results of the health assessment are presented in Tables 15-5 to 15-9 [APP-047], which cover:
- Access to healthcare services and other social infrastructure;
 - Air quality, noise and neighbourhood amenity;
 - Accessibility and active travel;
 - Access to work and training; and
 - Social cohesion and lifetime neighbourhoods.

Glint and glare

4.7.54. In the Applicant's view there was no process for determining the effects of glint and glare or for assessing the impacts of solar reflections in the available guidance, so the Applicant has identified receptors in a study area surrounding the Order land and then considered:

- visibility of panels from receptors;
- whether reflection can occur, and if so at what time;
- location of direct sunlight;
- published studies and guidance; and
- whether a significant detrimental effect is expected.

4.7.55. As the panels would be fixed and facing south, the Applicant has scoped out reflections towards receptors to the north of the Proposed Development.

4.7.56. The Applicant's ES Chapter 16 (other environmental topics), Appendix 16A: Glint and Glare Assessment [APP-121], assessed the potential impact of glint and glare not only on the matters stated in dNPS EN-3, but also on horse facilities, concluding:

“Solar reflections are geometrically possible towards the Snailwell Gallops and British Racing School. Screening in the form of existing vegetation will however obstruct views of the reflecting panels for horse and riders at both horse facilities, which will be further bolstered by the proposed vegetation. No impacts are predicted, and no further mitigation is required.”

4.7.57. The United States Federal Aviation Administration (FAA) guidance was referenced and quoted on pages 73 et seq of [APP-121]. “Glint” is a momentary flash of bright light and “glare” is a continuous source of bright light. It further explains geometric analysis, ie geometric studies as the most technical approach for reflectivity issues, conducted when glare is difficult to assess through other methods, by employing geometry and the known path of the sun to predict when sunlight will reflect off a fixed surface like a solar panel and contact a fixed receptor.

4.7.58. The Applicant's Glint and Glare assessment analysed in some detail the potential impacts on key receptors relating to horse facilities in the area to determine the impact upon equestrian activity. An overview is presented in Table 16 at section 7.11 which found no predicted solar reflections likely at Limekilns Gallops, Godolphin Stables, Bury Hill Gallops, or Long Hill Gallops. At Snailwell Gallops and British Racing School predicted solar reflections were only found to be possible in the am period but would be significantly screened by existing vegetation. The white areas in Figure 30 at section 8.10 showed the areas of significant vegetation screening. This area corresponds with the bottom apex of Sunnica West A, and in particular parcels W03-7 and ECO5.

4.7.59. The modelling is based on an elevation angle of 25 degrees, whilst a variation in the defined range of angle (15-35 degrees) would not significantly change the results of the report, particularly as most effects would be screened. Solar reflections from the frame were not considered as they have a much lower surface area than the panels and would not significantly add to the effects. Line of sight to the development from receptors was considered but only available street view imagery and satellite mapping was used. The imagery was expected to be representative of the perspective at each sampled location.

4.7.60. The ExA notes that the solar PV array height was originally 3.5m to accommodate three panels in portrait; however, this was reduced to two panels in portrait meaning the racking height could reduce to up to 2.5m in height, to minimise the potential

visual impact of the Proposed Development (paragraph 3.5.15, Design and Access Statement [APP-264]). The middle of the solar panel has been used as the assessed height in metres above ground level (agl), chosen as it represents the smallest possible variation in height from the bottom and top of the solar panels (assuming a maximum height of 2.5m (section 2.3 [APP-121])).

- 4.7.61. The impact of glint and glare, particularly in relation to equestrian and other users, is discussed later in this part of Chapter 4 with reference to relevant representations (RR) and written representations (WR).

Major accidents and disasters

- 4.7.62. The assessment of major accidents and disasters considered three categories:

- Events that could not realistically occur, due to the nature of the Proposed Development or its location;
- Events that could realistically occur, but for which the Proposed Development, and associated receptors, are no more vulnerable than any other development; and
- Events that could occur, and to which the Proposed Development is particularly vulnerable, or which it has a particular capacity to exacerbate.

- 4.7.63. Table 16-9 [APP-048] lists those major accident and disaster events which have been shortlisted for further consideration. Fire is included, along with reference to the Outline Fire Safety Management Plan [APP-267], but battery fires are not explicitly listed.

- 4.7.64. Vulnerable receptors were identified and assessed, both for the construction/ decommissioning and operational phases [APP-048].

- 4.7.65. Fire is recognised as a potential event during the construction and decommissioning phases (paragraph 16.5.15) and will be managed by the contractor as part of normal site procedures.

- 4.7.66. The subheading to identify the assessment of potential effects during the operational phase is missing but paragraph 16.5.20 says in respect of potential effects during the operational phase that:

- 4.7.67. *“... the Scheme does not process or include large scale chemicals and criminal damage to the infrastructure is unlikely to lead to a large-scale leak, explosion, or other major event. Therefore, the Scheme is not expected to have an effect on the environment due to the risk of a major accident occurring as a result of criminal activity during operation”* however:

“... There is a potential fire risk associated with certain types of batteries such as lithium ion. An Outline Battery Fire Safety Management Plan has been prepared and is provided with the DCO application [EN010106/APP/7.6]. The implementation of the Outline Battery Fire Safety Management Plan will be secured by a Requirement to the DCO. This fully explores the risks associated with fires from BESS equipment and minimises the impact of an incident during construction, operation and decommissioning of the facility ...”

- 4.7.68. Dispersion modelling was carried out and emissions of hydrogen fluoride were assessed against PHE’s acute exposure guideline levels (AEGL), which start at AEGL-1 and increase in severity of health outcome up to AEGL-3. The assessment concluded that emissions would be below the AEGL-1 value which is defined as the

“level of the chemical in air or above which the general population could experience notable discomfort” [APP-048].

Mitigation

- 4.7.69. Primary mitigation measures are embedded within the Applicant’s proposals. Good site practices will be implemented through measures to control dust in accordance with IAQM guidance, for instance wheel washes with rumble grids.
- 4.7.70. Mitigation measures in respect of the DRA have been incorporated into the Framework Construction Environment Management Plan (CEMP). Other mitigation measures included in the framework CEMP relate to communications, site management, construction activities and monitoring, and are shown in Table 14-12 [APP-046].
- 4.7.71. The mitigation associated with the health assessment is presented in Tables 15-5 to 15-9. No mitigation other than that already embedded was deemed necessary [APP-047].
- 4.7.72. Mitigation for glint and glare is only considered to be required for reflections assessed as being visible for more than an hour per day and for more than three months per year. The Applicant considers that embedded mitigation, including careful siting of the proposed development, conserving landscape, ecology and archaeological features and new vegetation screen planting, will be sufficient, with a temporary solid hoarding adjacent to the A14 to screen road users until the new screening vegetation is sufficiently established.
- 4.7.73. Mitigation in respect of major accidents and disasters will be achieved through carrying out risk assessments as required by the framework CEMP, Operation Environmental Management Plan (OEMP) and Decommissioning Environmental Management Plan (DEMP) provided as part of the ES [APP-123] [APP-126] [APP-125]. In particular, mitigation in respect of battery fires is included in the outline Battery Fire Safety Management Plan [APP-267].

Cumulative impacts

- 4.7.74. Other development schemes are listed in ES Chapter 5: EIA Methodology [APP-037].
- 4.7.75. Any development occurring at the same time as the Proposed Development will have to undertake its own DRA and ensure no off site impacts, and the CEMP requires regular liaison meetings with other high risk construction sites within 500m of the Order limits. The Applicant therefore concludes that there will be no potential for cumulative effects in respect of air quality.
- 4.7.76. The Applicant considers that the assessment of health impacts related to access to healthcare services is inherently cumulative as it is based on changes in traffic levels including other committed developments, and the non-motorised user (NMU) assessment concludes no change. In respect of air quality, there are no cumulative impacts expected, although there could be some cumulative noise effects at Burwell substation. In respect of access to work and training, other committed developments would generate employment and training opportunities both during construction and operation.
- 4.7.77. It is considered that the other solar schemes will also be effectively screened and consequently cumulative glint and glare effects would be unlikely.

4.7.78. No specific conclusions are reached in respect of major accidents and disasters.

Residual effects

4.7.79. Effects on air quality were considered to be negligible and not significant.

4.7.80. There were some negative effects on health and wellbeing, but these were due to construction and decommissioning activities and considered temporary, and due to operational noise arising from the Burwell substation extension. These negative effects were not considered to be significant. In its summary of significant environmental effects, the Applicant concludes that *“No significant residual effects on human health and wellbeing are predicted during construction of the Scheme.”* [APP-050].

4.7.81. The Applicant considered that there will be no significant residual effects in respect of glint and glare [APP-050].

4.7.82. In respect of major accidents and disasters, the Applicant states that the focus is on prevention and then mitigation if an event does occur, and considers that the risk of accidents and disasters is considered low. Consequently *“No significant residual effects on the environment are predicted during construction of the Scheme as a result of the vulnerability of the Scheme to risks of major accidents and disasters.”* [APP-050].

EXAMINATION

Joint Local Impact Report (LIR) [REP1-024]

4.7.83. The four host local authorities submitted a Joint LIR. The chapters relevant to air quality and human health issues were

- 11 Noise, Vibration, Dust, Light/Glare;
- 15 Air Quality; and
- 18 Battery Fire Safety.

4.7.84. The main concerns raised in the Joint LIR were:

- Unplanned atmospheric emissions from the BESS in the event of a fire; and
- Dust and air quality emissions during construction and decommissioning;

and paragraph 11.45 says that *“There are no concerns regarding artificial lighting proposals during construction and operational phases of the development providing there is compliance in full with the detail contained in the framework CEMP.”*. Nor are there concerns about cumulative impacts in respect of the issues discussed under this topic heading.

4.7.85. In relation to dust and air quality, paragraph 11.48 says that there are *“concerns raised by sensitive receptors. The details contained within the Framework CEMP are acceptable with respect to the options for air quality assessments and dust monitoring and this will be used moving forward to the final CEMP, following discussion and agreement with the LA.”*.

4.7.86. The first concern in respect of BESS (paragraph 15.2) is that *“There are a number of unknowns with the exact nature of the BESS and this impacts the findings of the assessment. There will need to (be) a refinement of the assessment following the completion of the detailed design and specification of the BESS. This will need to be secured by the terms of the DCO.”*

- 4.7.87. The other concern in respect of BESS (paragraph 18.1) is that *“Cambridgeshire and Suffolk Fire and Rescue Services (CRFS and SFRS) can’t define the impact of the battery fire safety in the absence of sufficient detail (including type and scale) being provided by the Applicant.”* Consequently the LIR considers the reasonable worst case in some detail, but notes that the requirements for water supplies for firefighting, for access to and around the Proposed Development sites for attending emergency vehicles, and for operational emergency preparedness cannot be assessed properly without a final design. Paragraph 18.35 concludes on this matter that *“There is a clear relationship between the design of the system and the potential hazards and risks posed to responders and the local environment alike. Once further information is received regarding the system design and the appropriate evidenced based emergency mitigation solutions the Councils will be in a more informed position to advise further.”*
- 4.7.88. The Applicant responded to the air quality and human health issues raised in the Joint LIR [REP3-019]. Its section 11 entitled “Noise and Vibration” also includes a brief response to light and dust issues with reference to its revised Framework CEMP [REP2-026] and Framework DEMP [REP2-028].
- 4.7.89. The Applicant did not respond to chapter 15 (air quality), saying at paragraph 1.1.3 of its response to the Joint LIR that *“The Applicant has not produced a response to Chapter 15 (Air Quality) as it wasn’t considered a response was necessary given the contents on the Local Impact Report on this topic.”*
- 4.7.90. The issues raised in chapter 18 of the Joint LIR relate chiefly to the level of information provided, which is considered insufficient to enable a proper assessment of the potential impacts. The Applicant responded in some detail, saying that *“In recognition of the concerns raised by interested parties the Applicant has updated the outline Battery Fire Safety Management Plan [REP2-032] ... It is considered this provides a very detailed plan which ensures that the final design of the BESS will be acceptable and that in the unlikely event of a fire it would be managed safely ensuring the safety of site staff, first responders and the wider community.”*

Relevant Representations (RR)

- 4.7.91. In its RR [RR-0638], the UK Health Security Agency (UKHSA), (formerly Public Health England) did not object. However, the East of England Ambulance Service (EEAS) submitted a holding objection [AS-013] detailing its concerns in respect of the impacts of the Proposed Development on the services (particularly emergency services) it provides, particularly in respect of the lack of information about access to PRoW and the Proposed Development, and about the impact on operational resources, capacity and efficiency.
- 4.7.92. The Applicant noted in response to EEAS that *“Major accidents and disasters have been assessed as part of Chapter 16: Other Environmental Topics of the Environmental Statement [APP-048], concluding there are no likely significant effects. No mitigation measures that would need to be secured by a Section 106 planning obligation have been identified.”*
- 4.7.93. Air quality and human health impacts were mentioned in around 300 Relevant Representations, including:
- risk to human life from spooking of horses;

- that the HSE should assess the health and safety impacts of the proposed development and that it should be subject to the Control of Major Accident Hazards (COMAH) Regulations;
 - mental health impacts, chiefly from reduced access to open space and PRow; and
 - more general negative impacts on human health
- 4.7.94. Many relevant representations also expressed concerns about possible impacts on air quality and human health resulting from the safety of the BESS and what would happen in the event of fire.
- 4.7.95. The Applicant commented on all relevant representations prior to the start of the Examination [REP1-016].
- 4.7.96. In response to relevant representations about the spooking of horses, the Applicant said *“Sample receptor points were taken at the six identified facilities: Snailwell Gallops, British Racing School, Limekilns Gallops, Godophin Stables, Bury Hill Gallops, Long Hill Gallops: The Glint and Glare Assessment concluded that reflections from the PV panels to the receptors (including pedestrians and riders using PRow) during operation will either not be geometrically possible or will be sufficiently screened by the existing vegetation and landform, as well as the proposed planting for the Scheme ...”*
- 4.7.97. In response to Relevant Representations saying that HSE should be involved in assessing assess the health and safety impacts of the Proposed Development and that it should be subject to the COMAH Regulations, the Applicant said at pages 539 and 550 of [REP1-016] that:
- 4.7.98. *“The Applicant has consulted with the HSE during the preparation of the Outline Battery Fire Safety Management Plan [APP-267]. This document will be updated during each stage of the project lifecycle and will include ongoing consultations with HSE and other applicable stakeholders”*; and
- 4.7.99. *“The COMAH Regulations are applicable to any establishment storing, or otherwise handling, large quantities of chemicals or substances of a hazardous nature. The Scheme will not require the storage or handling of large quantities of chemicals and therefore, the COMAH Regulations are not applicable to the Scheme.”*
- 4.7.100. The Applicant’s response to representations on mental health impacts said at page 548 of [REP1-016] that *“The Applicant recognises that construction activity can be disruptive and has the potential to impact upon local communities ... Owing to the short duration of any disruption (to PRow)... it is not anticipated that any significant negative impacts would be experienced by users, both in respect of access and mental health by consequence.”* and at page 547 of [REP1-016] the Applicant said that *“During the operation phase of the Scheme, new permissive routes will be created ... providing a beneficial effect for users of PRows in the area ... Where significant impacts have been identified, the Applicant has proposed mitigation which is outlined in the Framework Construction Environmental Management Plan [APP-123].”*
- 4.7.101. In response to relevant representations about more general negative impacts on air quality and human health, the Applicant referred to ES Chapters 14 and 15 [APP-046, APP-047] and at pages 538 and 545 of [REP1-016] said:

The Applicant acknowledges that there would be a negative impact on human health in respect of air quality during construction, which would be temporary” and

“Mitigation has been identified to minimise these impacts. Following that mitigation, no likely negative human health effects have been identified for the Scheme.”

4.7.102. The majority of relevant representations on air quality and human health related to the safety of the BESS and what would happen in the event of fire. In summary, the Applicant responded to these relevant representations by reference to the worst-case risk approach in ES Appendix 16D Unplanned Atmospheric Emissions from Battery Energy Storage Systems (BESS) [APP-124] and to the provisions in the outline Battery Fire Safety Management Plan [APP-267]. In particular the Applicant at page 542 of [REP1-016] disagreed that the fire safety plan was inadequate, as it had *“been prepared in consultation with the local fire services and is a comprehensive view of the potential risk. As stated in the document, it will be updated during each stage of the Scheme lifecycle to ensure all potential risks are identified.”*

4.7.103. In response to relevant representations about BESS fires around the world, the Applicant responded at page 541 of [REP1-016] that *“The Outline Battery Fire Safety Management Plan [APP-267] has considered research on fire tests as well as lessons learnt from BESS fires”*; and in response to relevant representations that BESS fires could not be extinguished and are left to burn out referred at page 544 of [REP1-016] to the outline Battery Fire Safety Management Plan, which *“includes a risk evaluation of the BESS ... and details the Applicant’s proposed measures to reduce any fire risks.”*

Written Questions [PD-017, PD-021, PD-025]

4.7.104. The ExA considered the application documents, the LIR and relevant representations, and put written questions about air quality and human health matters in three rounds of written questions. These were directed at the Applicant, the relevant local authorities, the fire and rescue services, HSE, UKHSA (formerly PHE) and EA, and assisted the ExA in understanding the relevant issues and the positions of the various parties.

4.7.105. The ExA inquired into dust mitigation, NRMM emissions standards and the relationship between certainty in construction timescales and mental health and wellbeing.

4.7.106. However, the main focus of the ExA’s written questions was on

- BESS and related matters, including unplanned atmospheric emissions from BESS;
- Consultation;
- the applicability of the COMAH and the Planning (Hazardous Substances) (P(HS)) regulations;
- health and safety related consents; and
- major accidents and disasters and the associated emergency response planning.

4.7.107. In response [REP2-037, REP2-038] to questions posed by the ExA (ExQ1) [PD-017] seeking clarification and further information on these matters, the Applicant peer reviewed and made substantial revisions to its outline Battery Fire Safety Management Plan [REP2-032]. ES Appendix 16D Unplanned Atmospheric Emissions from BESS [REP2-264] was also updated.

4.7.108. Following its assessment of the Applicant's responses to ExQ1, the ExA decided to issue further written questions (ExQ2) [PD-021]. In its response [REP5-056] to these further questions, the Applicant said

- in response to ExQ2.1.2 that *"In summary it is said that at this stage, without detailed design of the BESS, it is not known with certainty whether Hazardous Substances Consent or authorisation under the COMAH Regulations is required. If, following detailed design, it is determined that consent is required then the Applicant will apply for it at the relevant time."* and also confirmed that it has not sought to disapply the legislation;
- in response to ExQ2.1.3 that *"BESS is rapidly evolving area of technology that will improve in the coming years. There is no justification for the Applicant to specify the detailed design of the BESS at this stage ..."*
- in response to ExQ2.1.14 that *"It should be reiterated that the Unplanned Atmosphere Emissions from BESS assessment [APP-124] was based upon the assessment undertaken for the Cleve Hill Solar Farm DCO, which has been through the DCO process and been granted development consent, thus setting a precedent for the level of information required at this stage."*
- in response to ExQ2.1.15, which referred back to the Applicant's response to ExQ1.1.57 [REP2-037] and asked how the Applicant would ensure that the unplanned emission levels predicted in Appendix 16D would not be exceeded, that *"The detailed consequence modelling that will be undertaken once the detailed design for the Scheme is determined will allow an accurate model of the emissions in the case of a fire at the BESS ... the key point is that there should be no adverse impacts outside of the site boundary ..."*;
- in response to ExQ2.1.16 concerning emergency response planning, that *"The OBFSMP has been updated and submitted at Deadline 5 to include more detail on the ERP with the minimum level of detail to be provided in the plans shown in 5.2.3 and 5.2.4. These measures will allow emergency responders to respond to a potential incident within the Scheme effectively and communicate with local residents as necessary."*;
- in response to ExQ2.1.17 seeking further explicit requirements in the outline Battery Fire Safety Management Plan, that *"An independent Fire Protection Engineer specialising in BESS will review all UL 9540A test results and any additional fire and explosion test data which has been provided. This is now made clear in the OBFSMP."* and *"IEEE has ... new standards in development that will cover BESS data analytics, electrical controls and maintenance / replacement of battery systems. Once the new standards have been published and reviewed the OBFSMP will be amended to include (the) new standards."*;

4.7.109. Outstanding issues remained in respect of BESS following the Applicant's responses to ExQ2, so the ExA asked a third round of questions [PD-025]. However, the Applicant essentially reiterated its previous responses [REP7-055], particularly in respect of the COMAH and P(HS) Regulations and the detailed design of the BESS.

Written Representations (WR)

4.7.110. Notwithstanding the Applicant's explanation of its position in respect of air quality and human health matters, both in its response to RR [REP1-016] and its response to the ExA's first written questions [REP2-037, REP2-038], the ExA received over 100 WR about air quality and human health issues, almost all of which mentioned the BESS and added more detail to the relevant representations. These included a comprehensive submission from the Say No To Sunnica action group (SNTS) which included a specialist report about the BESS [REP2-240i].

- 4.7.111. The SNTS submission also made reference to the Applicant's glint and glare assessment [APP-240], with particular reference to
- there being only one receptor on the Limekilns, and that *"this receptor does not appear to be the most sensitive receptor as views of Sunnica West A are possible further east ..."*;
 - there being *"no receptors on Railway Field despite views of West A being possible."*;
 - Risks to horse and rider: *"The risk to racehorses being startled is acute ... and a more comprehensive assessment should have been done"*;
 - The risk of injury *"to horse and/ or rider in the event of a bolt has both welfare and cost implications that are significant"*; and
 - Other recreational riding locations such as Badlingham Lane, where *"panels are shown on both sides of the lane making it dangerous for riding"*.
- 4.7.112. Common threads in these representations were inadequate assessment and the lack of sufficient information to enable IPs to assess the likely impacts of the proposed development.
- 4.7.113. The Applicant responded to written representations [REP3A-035]. In its responses to submissions about the BESS, the Applicant refers to its updated outline Battery Fire Safety Management Plan [REP2-032]. In particular, the Applicant said in its responses
- at page 40 that *"The updated outline Battery Fire Safety Management Plan [REP2-032] identifies "red flag" design features which will not be accepted at detailed design stage."*;
 - at page 44, quoting the response to a Parliamentary Question, that *"The Health and Safety Executive considers that the current regulatory framework is sufficient and suitably robust in relation to lithium-ion batteries and battery energy storage systems"*;
 - at page 46 the Applicant notes that *"The Scheme is still progressing through the design process ... Hence it is not yet possible to undertake a robust review of the potential for generation of hazardous substances which can then be used to assess whether COMAH or HSC apply ... the COMAH and HSC requirements will be reviewed in full at the appropriate point in the project design process. The COMAH Competent Authority (CA) will be consulted with regard to the adequacy of the risk assessments undertaken and asked to confirm the applicability of COMAH and HSC ..."*;
 - at page 177 that *"current applicable safety standards for Sunnica ... will be updated at the detailed design stage to ensure compliance with the latest BESS standards and codes."*; and
 - at page 197 in respect of glint and glare at both Railway Field and the Limekilns, and the adequacy of the assessment, that the only receptor, on the Limekilns (Figure 9 [APP-121]), is *"a representative location of potential impacts based on professional judgement ... a representative point to determine potential glint and glare ..."* and that *"no solar reflection is geometrically possible from the Limekilns and therefore no impacts are possible ..."*.

Hearings (ISH3) [EV-035] [EV-051 to EV-058]

- 4.7.114. The ExA scrutinised all these submissions very carefully and decided to explore what it considered to be important and relevant matters further at an Issue Specific Hearing (ISH3) on 8 December 2022.
- 4.7.115. In the time available, the ExA heard oral submissions on safety issues relating to

- battery chemistry;
- fire risk;
- gas emissions; and
- the outline Battery Fire Safety Management Plan

and probed the Applicant for more detailed information.

- 4.7.116. Health and safety related consents and emergency planning including evacuation plans were dealt with by way of written questions.
- 4.7.117. The ExA referred to the Applicant's response [REP2-037] to ExQ1.1.6 which identified Nickel Manganese Cobalt (NMC) and Lithium Ion Phosphate (LFP) as battery chemistries, and asked how they compared with other emerging chemistries in respect of safety. The Applicant explained that
- different cell types with the same chemistry may generate significantly different levels of hydrogen, hydrocarbons and carbon monoxide during thermal runaway;
 - other factors such as design, cell geometry, and how the battery module and battery rack are integrated are also relevant; and
 - specific information would be available at detailed design stage.
- 4.7.118. The Applicant also explained that thermal testing is often done at 100% state of charge irrespective of chemistry. Venting usually occurs rather than a flame reaction and the gas composition is different: the risk in any BESS is established by testing the cell, then the module and then the whole system, which will be post-consent.
- 4.7.119. In response to a question from the ExA about fire risk, the Applicant said that significant factors at the detailed design stage would include adherence to new codes and standards coming into effect in 2023, and there would be safety requirements to prove that a fire could not propagate from one BESS container to another. There had also been significant input from the fire and rescue services in relation to site layout, particularly in respect of container spacing, location of water tanks, access routes and observation areas: this was reflected in the revised indicative site plans included with the updated outline Battery Fire Safety Management Plan.
- 4.7.120. In response to a further question from the ExA, the Applicant confirmed that as the technology improves, the resulting effects would not get any worse than the worst case considered in the application, in line with the Rochdale Envelope approach adopted in the Applicant's assessment.
- 4.7.121. The ExA asked the Applicant further questions about the risks associated with fire and explosion, and whether an air gap or a thermal barrier was preferred for fire protection. The Applicant reiterated its earlier oral submission in respect of battery chemistry, saying that the fire and explosion risks are in proportion to the battery capacity, and that there were different modes of failure which would be investigated as part of the detailed design. Mitigation would include
- Not allowing an explosive atmosphere to build up;
 - Effective ventilation;
 - Integration of passive barriers and spacing to reduce propagation rate;
 - Inclusion of active cooling of modules;
 - Fire protection and suppression systems including early detection of problems which could cause fire or venting.

The Applicant also said that both air gaps and thermal barriers are important fire protection features, that a consequence assessment would be undertaken at detailed design stage as part of compliance with the final Battery Fire Safety Management Plan, and that the outline version would be updated to reflect this [REP5-050].

4.7.122. In relation to gas emissions, the ExA referred to the Applicant's response to ExQ1.1.46 and asked about the AEGL levels, whether this related to fires left to burn out, and whether in the event of a serious incident the outline Battery Fire Safety Management Plan would require people to keep windows closed and take advice from the fire services. The Applicant explained the AEGL guidelines, and that the assessment related to short term impacts: such matters would form part of the emergency response plan, the need for which is identified in the outline Battery Fire Safety Management Plan.

4.7.123. The ExA asked the Applicant if an independent expert would test the BESS to the applicable standards, and whether use would be made of new technology to give advance warning of maintenance requirements and to respond if there are safety related problems, so that lives are not put at risk. The Applicant responded that an independent expert would be involved and that the battery integrator would provide data to first responders.

4.7.124. The ExA invited oral submissions from first responders, their representatives and IPs.

4.7.125. Suffolk County Council (SCC), as a fire and rescue service authority, noted that:

- matters of detail would come at a later stage;
- what was important was that there was an adequate regulatory regime in place at that time; and
- the county authorities felt that they would be able to deal with detailed matters provided that they, rather than the relevant planning authorities, were the discharging authorities for Requirement 7 in the dDCO (approval of the Battery Fire Safety Management Plan);

SCC also confirmed that the outline Battery Fire Safety Management Plan provided a suitable mechanism and asked that Requirement 7 be amended in the next revision of the dDCO. CCC, ECDC, and WSC concurred. The Applicant said it was content and the dDCO was revised accordingly [REP4-005].

4.7.126. Submissions were made to the ExA by Dr Fordham and SNTS about:

- the differences between metal oxide and LFP chemistries, citing the SNTS (Professor Christensen) report at Appendix H of the SNTS Written Representation [REP4-121];
- fire and explosion risks, including propagation between containers, system size, and system design, and referring to a fire in Beijing; and
- gas emissions and the failure to consider toxic smoke.

4.7.127. The Applicant explained that there had been testing of nickel oxide cells following the Arizona fire. This had resulted in improved mitigation by way of better ventilation, battery cooling systems and module architecture, but mitigation needs to cover all types of failure and the fire and explosion risks are in proportion to the battery capacity regardless of battery chemistry. This is reflected in the updated outline Battery Fire Safety Management Plan, which proposes general risk mitigation methods as the actual mitigation will depend on the consequence

assessment undertaken on the detailed design of the BESS. The BESS cannot operate until the Battery Fire Safety Management Plan has been approved, which will only be when the detailed design has been finalised.

4.7.128. The Applicant also explained that the BESS in the Beijing fire was located on top of a shopping centre in an urban area with a different layout, that it was unclear what electrical incident had caused the fire, that battery to battery propagation is very rare, and that the problems were directly related to firefighters working at very close quarters, and reiterated the continuing testing and the number of new standards due to come into effect. The ExA noted that this fire related to a different design, location and circumstances from those envisaged by the Applicant in respect of the Proposed Development.

4.7.129. In respect of submissions about gas emissions, the Applicant addressed the following points made by IPs relating to ES Appendix 16D Unplanned Atmospheric Emissions from Battery Energy Storage Systems (BESS) [REP2-264]:

- that the assessment ignores emissions other than hydrogen fluoride (HF), such as hydrogen cyanide (HCN), carbon monoxide (CO) and toxic smoke such as nickel oxide particles;
- that HCN is produced by the plastics around the cells rather than the cells themselves and that potentially most of the toxic emissions from a battery fire arise from combustion of the plastic components;
- that it was not clear how the emission rate for HF had been arrived at;
- that it is based on out of date information; and
- the later Larsson report (2017) by the same team estimates 20-200 mg/Whr but the Sunnica storage capacity is not defined and the HF load is greatly understated.

4.7.130. The Applicant responded that

- Appendix 16D is a preliminary assessment of potential risks, and a full consequence model cannot be undertaken at this stage but comes later in the design process;
- The amount of particulate matter which can be absorbed into the bloodstream (PM_{2.5}) is highly dependent on the type of ignition and fire, as well as the system components, so dispersion modelling was carried out to establish dilution rates rather than concentrations;
- Carbon monoxide from fires disperses rapidly and is not likely to be a problem outside the site boundary;
- The total HF load had been derived from the Cleve Hill application: also Appendix 16D does not state that this is the total for the entire BESS but that it is the total which could be released at any one time, multiple ignition points occurring both independently and simultaneously not being considered to be representative, so the assumption that a fire starting at a single point is considered valid; and
- Storage capacity is not a suitable metric: it is clear from the Ventura study (which includes several battery assessment reports including Larsson) that the plastic content of the battery is more indicative of HF emissions than any other factor.

and concluded that ES Appendix 16D provides a reasonable worst case assessment and should be read as intended, ie as a preliminary assessment showing that AEGL-1 levels are not exceeded outside the site, rather than as a detailed consequence model. The Applicant provided further information addressing these concerns [REP4-044].

- 4.7.131. Submissions on air quality and human health matters, particularly those related to BESS, were also made at the open floor hearings [EV-033, EV-040, EV-041, EV-060, EV-061]. No new issues were identified.

Outstanding Issues

- 4.7.132. The main outstanding issues in respect of air quality and human health related to the impacts of glint and glare on equestrians and to P(HS) and COMAH consents.
- 4.7.133. Shortly before the close of the Examination, the ExA issued a Rule 17 letter seeking views on Hazardous Substances consent [PD-031] but the matter remains unresolved: the Applicant considers that the matter can be dealt with post consent [REP11-012] but in their submissions the Joint Councils and Dr Fordham disagree [REP11-025, REP11-028].

CONCLUSION

- 4.7.134. The extent and scale of the application meant that the ExA needed to undertake a number of unaccompanied site inspections (USI): these were conducted to observe both summer (27 and 28 July 2022) [EV-011, EV-012] and winter conditions (25 and 26 January 2023) [EV-064].
- 4.7.135. The ExA also decided to undertake four Accompanied Site Inspections (ASI): these took place on 29 September 2022 [EV-013], 2 and 3 November 2022 [EV-021] and 15 February 2023 [EV-065].
- 4.7.136. These site inspections enabled the ExA to observe the layout and interrelationship between the four parts of the site as indicated on the Parameter Plans [APP-135, APP-136] and the nearby settlements of Burwell, Fordham, Snailwell, Chippenham, Freckenham, Isleham, West Row, Worlington, Red Lodge and Kennett. Between these were scattered farmsteads and stud farms, isolated cottages and the small hamlet of Badlingham.
- 4.7.137. The ExA considered various application documents as noted above, together with their supporting figures and appendices, relevant representations, written representations and also updated and additional documents produced during the Examination, including
- The outline CEMP, OEMP and DEMP and revisions;
 - The outline Battery Fire Safety Management Plan and revisions;
 - responses to Written Questions;
 - comments on those responses;
 - oral submissions at ISH3 and post-hearing submissions; and
 - extensive submissions from SNTS and Dr Fordham.
- 4.7.138. There were a great many detailed submissions about the BESS: the ExA considered all these submissions very carefully insofar as they related to important issues of relevance to the application.
- 4.7.139. In respect of matters generally, the ExA notes that
- the Joint LIR commented on the level of information provided, which was considered insufficient to enable a proper assessment of the potential impacts;
 - there was a large number of relevant representations; and
 - the great majority of these related to inadequate information in respect of the safety of the BESS

- 4.7.140. In respect of air quality, the ExA notes that
- the Applicant acknowledges that there would be a temporary negative impact on air quality during construction; and
 - with the identified mitigation, no likely negative human health effects have been identified;
- 4.7.141. In respect of glint and glare, particularly in respect of equestrian activities, the ExA notes
- the size of the proposed development;
 - the extent and nature of the facilities used, including stables, paddocks, gallops and PRoW;
 - the methodology used and the number of receptors selected for assessment;
 - that only periods of more than 1 hour per day were considered significant; and
 - the importance of all year round screening, both existing and proposed.
- 4.7.142. With particular reference to representations about the adequacy of the glint and glare assessment undertaken at Railway Field and the Limekilns, the ExA notes that there is only one receptor, but on that basis the Applicant has concluded that no solar reflection is geometrically possible at the Limekilns and therefore no impacts are possible.
- 4.7.143. The ExA also notes SNTS submissions in respect of
- racehorses being started;
 - the need for a more comprehensive assessment;
 - risk of injury and the consequent significant welfare and cost implications; and
 - impacts on recreational riding.
- 4.7.144. The ExA notes the Applicant's position that BESS is a rapidly evolving area of technology that will improve in the coming years, so there is no justification for undertaking the detailed design of the BESS at this stage.
- 4.7.145. In respect of unplanned atmospheric emissions from BESS, the ExA notes that the Applicant's assessment is based on the assessment undertaken for the Cleve Hill Solar Farm DCO, *"which has been through the DCO process and been granted development consent, thus setting a precedent for the level of information required at this stage."*
- 4.7.146. At ISH3, the ExA noted that the Applicant has undertaken a preliminary assessment of unplanned atmospheric emissions and proposes to undertake consequence modelling as part of detailed design post consent, whereas Dr Fordham and SNTS appeared to expect a detailed design and a full consequence model at this stage.
- 4.7.147. The ExA further notes the Applicant's position that detailed consequence modelling undertaken post consent would ensure that unplanned emission levels would not be exceeded and that there should be no adverse impacts outside the site boundary.
- 4.7.148. The ExA notes in respect of major accidents and disasters that
- the EEAS expressed concerns in respect of the impacts of the proposed development on
 - access to PRoW and the Proposed Development; and
 - operational resources, capacity and efficiency.

- HSE was consulted at pre-application stage and commented in relation to the presence of hazardous substances and the need for Hazardous Substances consent;
- PHE was consulted at pre-application stage and commented in relation to consideration of the COMAH Regulations, both in respect of the BESS installations and their potential to impact on or be impacted by any other nearby installations;
- the Applicant considered that these were generic statements and gave its reasons for not considering either the P(HS) or COMAH regulations further [APP-048];
- following the ExA's second round of written questions, the Applicant conceded that consent may be required under P(HS) or COMAH, that it has not sought to disapply this legislation, and if necessary it will apply for consent at the relevant time post consent.

4.7.149. The ExA notes that the Battery Fire Safety Management Plan now includes all the necessary items at this stage, that it will be updated during each stage of the project lifecycle and will include consultations with HSE and other applicable stakeholders.

4.7.150. The ExA is satisfied that cumulative impacts have been satisfactorily addressed and that there are no significant residual effects.

4.7.151. At the close of the Examination, the ExA considered that the main outstanding issue related to the safety of the proposed battery energy storage system (BESS) and, in particular, the assessment method and whether a requirement for hazardous substances consent should be included in the dDCO.

4.7.152. In summary,

- Following consideration of the application documents and representations, responses to written questions, comments on those responses, discussions between the parties and submissions made into the Examination, including revisions to the outline CEMP, OEMP and DEMP, Appendix 16D and the outline Battery Fire Safety Management Plan, the ExA is in broad agreement with both the methodology and assessment of air quality and human health impacts, and concludes that adverse construction impacts are mainly capable of satisfactory mitigation.
- In respect of operational impacts due to glint and glare, the ExA has considered:
 - the size and siting of the proposed development;
 - the selection, variety and number of receptors used in the assessment;
 - the extent and nature of the facilities used
 - the existing and proposed screening; and
 - written submissions made by SNTS.

and concludes that therefore there may be impacts which have not been adequately assessed.

- The ExA concludes that there could be significant impacts due to glint and glare which have not been adequately assessed in respect of equestrian and other users and facilities (notably the Limekilns) or can be satisfactorily mitigated.
- The ExA does not agree that basing the preliminary assessment of unplanned atmospheric emissions on the assessment undertaken for the Cleve Hill project constitutes precedent but is nevertheless persuaded that the preliminary assessment undertaken by the Applicant is adequate at this stage.
- The ExA is also persuaded that BESS is a rapidly evolving area of technology, that safety and performance will improve in the coming years, and that the

battery fire safety management plan now secured in the recommended DCO provides a satisfactory mechanism capable of addressing and mitigating all adverse impacts satisfactorily at the detailed design stage.

- However, the ExA is not persuaded that detailed consequence modelling undertaken post consent would necessarily ensure that unplanned emission levels would not be exceeded.
- The ExA also concludes that the adverse impacts of unplanned atmospheric emissions at any of the BESS sites could result in adverse air quality and human health impacts, particularly to receptors close to the Order limits.
- The ExA concludes that cumulative impacts have been satisfactorily addressed and that there are no significant cumulative residual effects.
- Drawing these findings together, the ExA concludes that the Proposed Development may have adverse impacts, particularly during operation in respect of the proposed BESS and the possible impacts of glint and glare which have not been assessed; these operational impacts may cause harm and therefore carry moderately negative weight in the planning balance.

4.8. ECOLOGY AND BIODIVERSITY

INTRODUCTION

- 4.8.1. This section addresses the effects of the Proposed Development on ecology and biodiversity. There is some overlap with matters associated with the Habitats Regulations Assessment (HRA) and the implications for European sites which are discussed in detail in Chapter 5.

POLICY CONSIDERATIONS

National Policy Statements (NPSs)

NPS EN-1

- 4.8.2. Paragraph 5.3.3 and 5.3.4 of NPS EN-1 state that where a development is subject to Environmental Impact Assessment (EIA) the Applicant should ensure that the Environmental Statement (ES) clearly sets out any effects on internationally, nationally and locally designated sites of ecological importance, on protected species and habitats and other species identified as being of principal importance for the conservation of biodiversity. The Applicant should also show how the project has taken advantage of opportunities to conserve and enhance biodiversity.
- 4.8.3. Paragraph 5.3.7 of NPS EN-1 advises that development should aim to avoid significant harm to biodiversity, including through mitigation and the consideration of reasonable alternatives and that where significant harm cannot be avoided, appropriate compensation measures should be sought.
- 4.8.4. Paragraph 5.3.8 of NPS EN-1 notes that in decision-making, appropriate weight should be attached to designated sites of international, national and local importance; protected species; habitats and other species of principal importance for the conservation of biodiversity; and to biodiversity within the wider environment.
- 4.8.5. Paragraph 5.3.17 of NPS EN-1 advises that wildlife habitats and species with statutory protection or identified as being of principal importance for the conservation of biodiversity should be protected from the adverse effects of development.

- 4.8.6. NPS EN-1 explains in paragraphs 5.3.15 and 5.3.18 that opportunities for building-in beneficial biodiversity as part of good design should be maximised and that appropriate mitigation measures should be included as an integral part of a proposed development.

Draft NPS EN-3 (September 2021)

- 4.8.7. Section 2.4 of Draft NPS EN-3 advises that proposals for renewable energy infrastructure should demonstrate good design, including in relation to mitigating effects on ecology.
- 4.8.8. Section 2.50 of Draft NPS-EN-3 relates specifically to solar photovoltaic generation and acknowledges in paragraph 3.10.8 that the scale of development will inevitably have impacts, particularly if sites are in rural areas.
- 4.8.9. Paragraph 2.50.2 of Draft NPS EN-3 advises Applicants in relation to the need for ecological assessments to be undertaken.
- 4.8.10. Paragraph 2.50.10 of Draft NPS EN-3 states that proposed enhancements should achieve environmental and biodiversity net gain, for example by maintaining or extending existing habitats and potentially creating new important habitats. Applicants are advised to develop an ecological monitoring programme to monitor impacts upon the flora of the site and upon any particular ecological receptors (such as bats and wintering birds).

National Planning Policy Framework, revised July 2021 (NPPF)

- 4.8.11. Chapter 15 of the NPPF contains overarching policies for conserving and enhancing the natural environment. It indicates that planning decisions should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

Forest Heath Local Plan

- 4.8.12. Forest Heath Local Development Framework Core Strategy (2010) [REP1-024a, Appendix 1] includes Policy CS2 relating to natural environment. This policy includes measures to safeguard biodiversity, including the protection and restoration of habitats, protection and management of designated sites, and the reconnection of fragmented habitats. Specific protections are included in relation to stone curlew and other species for which the Breckland Special Protection Area (SPA) was classified.
- 4.8.13. The Forest Heath and St Edmundsbury Local Plan Joint Development Management Policies Document (2015) [REP1-024a, Appendix 2] includes Policies DM10, 11 and 12 which include safeguards against the impacts of development on sites of biodiversity importance, for protected species and for the mitigation, enhancement, management and monitoring of biodiversity.

East Cambridgeshire Local Plan

- 4.8.14. The East Cambridgeshire Local Plan, adopted in April 2015 [REP1-024e], contains Policy ENV7 which covers biodiversity and requires all development proposals to protect the biodiversity of land and minimise harm to or loss of environmental features, to provide appropriate mitigation or compensatory measures where harm to environmental features and habitat is unavoidable and to maximise opportunities for creation, restoration, enhancement and connection of natural habitats as an

integral part of development proposals. It also includes Policy COM5 which sets out local requirements for the protection of existing strategic green infrastructure, including existing sites designated for their biodiversity.

“Made” Neighbourhood Plans

- 4.8.15. Five neighbourhood plan (NP) areas fall within or in close proximity to the Proposed Development, for which three have “made” neighbourhood plans [REP1-024a]. The Isleham and Fordham NPs both extend into the area of the Proposed Development and have policies relating to ecology and biodiversity.

Fordham NP (“made” December 2018) [REP1-024a Appendix 11]

- 4.8.16. Policy 8 states that development proposals that would have a significant adverse effect on Chippenham Fen will not be approved, that development proposals should include strong landscaping schemes and that development proposals should avoid the loss of wildlife habitats or natural features, and should demonstrate biodiversity net gain.

Isleham NP (“made” May 2022) [REP1-024a Appendix 12]

- 4.8.17. Policy 7 requires that all development proposals should include strong landscaping schemes, should avoid the loss of biodiversity, habitats or natural features, and should demonstrate biodiversity net gain.

THE APPLICANT’S CASE

- 4.8.18. The principal application documents in relation to ecology and biodiversity were;

- [APP-015]: Statutory and Non-statutory Sites or Features of Nature Conservation, Habitats of Protected Species and Important Habitats Plan
- [APP-040]: ES Chapter 8 – Ecology and Nature Conservation
- [APP-077]: ES Appendix 8A – Relevant Legislation and Policy for Ecology and Nature Conservation
- [APP-078]: ES Appendix 8B – Preliminary Ecological Appraisal Report
- [APP-079]: ES Appendix 8C – Terrestrial Habitats and Flora Report
- [APP-090]: ES Appendix 8D – Terrestrial Invertebrate Survey Report
- [APP-081]: ES Appendix 8E – Aquatic Scoping and Ditch Surveys
- [APP-082]: ES Appendix 8F – Great Crested Newt Survey Report
- [APP-083]: ES Appendix 8G – Report on Surveys for Reptiles
- [APP-084]: ES Appendix 8H – Wintering Bird Survey Report
- [APP-085]: ES Appendix 8I – Report on Surveys for Breeding Birds
- [APP-086]: ES Appendix 8I – ANNEX D – CONFIDENTIAL (but can be supplied to the Department on request)
- [APP-087]: ES Appendix 8J – Report on Surveys for Bats
- [APP-088]: ES Appendix 8K – Badger Survey Report
- [APP-089]: ES Appendix 8K – Annex 8A – Results and Evaluation for the Badger Survey Report – CONFIDENTIAL (but can be supplied to the Department on request)
- [APP-090]: ES Appendix 8K – Annex 8B – Badger Mitigation Strategy – CONFIDENTIAL (but can be supplied to the Department on request)
- [APP-091]: ES Appendix 8L – Report on Surveys for Riparian Mammals
- [APP-092]: ES Appendix 8M – Habitats Regulations Assessment (HRA) – Report to Inform an Appropriate Assessment
- [APP-108]: ES Appendix 10I – Landscape and Ecology Management Plan (LEMP)

- [APP-185]: ES Figure 8-1 – Statutory Designated Sites within 10km (International) and 2km (National) of the Order Limits
- [APP-186]: ES Figure 8-2 – Non-Statutory Sites within 2km of the Order Limits
- [APP-187]: ES Figure 8-3 – Phase 1 Habitat
- [APP-193]: ESA Figure 10-3 – Designations
- [APP-209] to [APP-214]: ES Figures 10-14a to 10-14f – Landscape Masterplan
- [APP-257]: ES Schedule of Environmental Mitigation
- [APP-258]: ES – Offsetting Habitat Provision for Stone Curlew Specification
- [APP-259]: ES – Biodiversity Net Gain Assessment

4.8.19. New or amended documents relating to ecology and biodiversity were subsequently submitted into the Examination by the Applicant at deadlines as part of the Change Requests, in response to Written Questions and other requests from the Examining Authority (ExA) and from Interested Party (IP) submissions. These included:

- [AS-320]: Ecology Position Statement
- [AS-326]: Hedgerow Creation/Retained/Loss
- [REP3-021] and [REP7-046] and [REP7-047]: Arboricultural Impact Assessment
- [REP3-022]: Environmental Masterplan
- [REP7-054]: Environmental Masterplan (Zoomed In)
- [REP8-026]: The Applicant’s position on “parcel by parcel” mitigation and residual effects
- [REP8-050]: Comments on the Report for the Implications of European Sites (RIES)
- [REP10-012] and [REP10-013]: ES Appendix 10I – Outline Landscape and Ecology Management Plan
- [REP10-020 and REP10-021]: Biodiversity Net Gain Assessment
- [REP10-041]: Environmental Masterplan (Zoomed Out)
- [REP10-050 and REP10-051]: Environmental Masterplan (Zoomed In)

Methodology and Approach to Ecological Assessment

4.8.20. The Applicant set out the initial scope and approach to ecological assessment in the EIA Scoping Report [APP-051]. Early studies included a Preliminary Ecological Appraisal, which included a desk study, Phase 1 Habitat Survey and Protected Species Scoping Survey. Surveys of wintering birds commenced in November 2018.

4.8.21. Chapter 8 of the ES [APP-040] describes the measures taken to complete the ecological assessment, commencing with identifying a Study Area and a Zone of Influence (Zoi) within which all designated sites, sensitive habitats and species of importance would be considered. The extent of the Zoi varied according to the ecological receptor in question and with regard to the precautionary principle to ensure that sufficient data were gathered to meet any design iterations which may have changed the likely Zoi used to undertake the impact assessment. A desk study enabled the determination of appropriate study areas, within which all important biodiversity features requiring assessment, as well as biodiversity features that could be directly or indirectly affected by the Proposed Development, were subject to field survey.

4.8.22. The Applicant described how the impact assessment had been undertaken in accordance with best practice guidance for Ecological Impact Assessment (EclA), issued by the Chartered Institute of Ecology and Environmental Management (CIEEM), including focussing on all habitats and species considered to be relevant,

and determining the scale at which the relevant features identified through the desk studies and field surveys were considered to be of value.

4.8.23. For each ecological feature only those characteristics relevant to understanding the ecological effect of the Proposed Development and determining the significance were described. The determination of the significance of effects was made on the predicted effect on the structure and function, or conservation status, of relevant features, as follows:

- Not significant – no effect on structure and function, or conservation status; and
- Significant – structure and function, or conservation status is affected.

4.8.24. The Applicant translated the findings of the CIEEM assessment into the classification of effects scale as outlined in Table 8-2 of ES Chapter 8.

4.8.25. The main matters raised by consultees in relation to the Scoping Opinion and during Statutory Consultation were set out in Table 8-3 of ES Chapter 8.

Baseline Conditions

4.8.26. Chapter 8 of the ES [APP-040] set out the baseline environmental characteristics of the Order Limits and Study Areas with specific reference to important ecological features.

4.8.27. Statutory designated sites within 10 kilometres (km) (international) and 2km (national) of the Order Limits were shown on Figure 8-1 [APP-185]. 17 statutory sites were identified within the Zol, with the Fenland Special Area of Conservation (SAC)/Chippenham Fen Ramsar site/National Nature Reserve (NNR), and Chippenham Fen and Snailwell Poor's Fen Site of Special Scientific Interest (SSSI) and Snailwell Meadows SSSI being directly adjacent to Sunnica West B. 29 non-statutory sites designated for nature conservation were identified within 2km of the Order limits, with a number lying within or adjacent to the proposed site. These were shown in ES Figure 8-2 [APP-186] and described in ES Appendix 8B [APP-078].

4.8.28. The land use of the Proposed Development site was described as being dominated by arable fields with mature trees and hedges, small copses and ponds. The terrestrial and aquatic habitats present within the Order limits were recorded during Phase 1 habitat surveys in 2019, 2020 and 2021; these are summarised in Table 8-6 of ES Chapter 8 and are shown on Figure 8-3 [APP-187]. The biodiversity importance of the habitats was assessed as being from Below Local up to County level.

4.8.29. Baseline details for legally protected and notable species within the Order limits and survey areas were set out in Table 8-7 of ES Chapter 8, with full baseline conditions for individual biodiversity features being presented in ES Appendices 8B to 8M [APP-078 to APP-092]. An evaluation was made of the importance/value (sensitivity) of the ecological features for each species, with the terrestrial invertebrate assemblage of Sunnica East B being considered of up to Regional Importance. Stone curlew were considered to be of County Importance and part of a nationally important population.

Scheme Design, Mitigation and Enhancement Measures

4.8.30. In Chapter 8 of the ES the Applicant stated that the scheme had been designed so that impacts upon important habitats were avoided or reduced, where reasonably practicable, and compensated for where not, through the retention of existing

habitat and the creation of replacement habitat. Further details on the location factors, scheme layout and alternative layouts and design evolution were presented in ES Chapter 4 [APP-036] and the Planning Statement [APP 261, 262 and 263].

4.8.31. The mitigation and compensation measures included in the Proposed Development as originally submitted were set out in the Outline Landscape and Ecology Management Plan (OLEMP) [APP-108], Framework Construction Environmental Management Plan (CEMP) [APP-123] and Framework Operation Environmental Management Plan (OEMP) [APP-126] and summarised in the ES Schedule of Environmental Mitigation [APP-257] and would be secured through the Landscape and Ecology Management Plan (LEMP) and the Development Consent Order (DCO). In summary these measures included:

- 99.3 hectares (ha) of land within Sunnica East Site A, 67.1ha within Sunnica East B, 87.4ha within Sunnica West A and 38.25ha within Sunnica West B would not be subject to development and were to be set aside for the creation of biodiverse habitats;
- Approximately 108ha of this proposed ecological mitigation land would be reverted from arable use to grassland;
- Small areas of existing acid grassland would be retained and would form the basis for reverting adjacent areas in Sunnica East B to semi-natural grassland that was characteristic of the Breckland heaths;
- The perimeter security fence around the site would include gaps to allow mammals to pass underneath;
- Areas throughout the Proposed Development where notable arable flora had been recorded would be managed to provide suitable conditions for annual species;
- The southern section of field W09 would be sown with a winter bird cover crop;
- Gaps in hedges would be planted with suitable native species and new areas of tree planting would be provided to provide both screening of development infrastructure and to improve habitat connectivity; and
- A maximum of ten 2ha nesting/foraging plots for stone curlew would be created in advance of construction in fields where stone curlew had been recorded during surveys, and in addition to the bare ground plots approximately 108ha of predominately arable land would revert to grassland to offer nesting and foraging opportunities for stone curlew, providing offsetting areas to mitigate any impact on the local population.

4.8.32. Although not yet a requirement for Nationally Significant Infrastructure Project (NSIP) applications, the application documents include a Biodiversity Net Gain (BNG) Assessment [APP-259] undertaken using Defra's Biodiversity Metric 3.0 to quantify the overall effect of the Proposed Development on biodiversity and to inform habitat design. The Applicant considered that the scheme would result in an estimated net gain of 83.51% habitat units, a net gain of 16.87% linear hedgerow units and a net gain of 1% river units. As the BNG was expected to exceed the 10% target, the Applicant made no additional provision for these habitats.

Potential Effects Identified by the Applicant

4.8.33. The potential and effects of the construction, operation and decommissioning of the Proposed Development are set out in ES Chapter 8 and summarised as follows:

Construction and Decommissioning

- There would be losses and gains of habitats as a result of changes in land use resulting from the development, for example temporary works associated with

site clearance, and permanent land-take associated with the installation of the solar farm;

- Populations or habitats would be fragmented due to development dividing a habitat, site or ecological network;
- Disturbance would be caused by changes in normal conditions such as light, noise, vibration or human activity resulting in species changing behaviour or range;
- Habitat degradation could take place due to reduction in condition of a habitat and its suitability for some or all of the species it supports;
- Species mortality could be caused by construction activities such as site clearance;

Operation

- Changes to foraging and commuting habits could take place for example due to changes in land use from agricultural to grassland;
- There might be potential attraction to or avoidance by species such as bats and birds to the solar panels, potential noise attraction/disturbance from the battery energy storage system (BESS), on-site substations and operational compounds, and potential barrier effects of these;
- The potential for nesting and/or roosting in new infrastructure; and
- There would be the potential for indirect beneficial impacts through a possible reduction in pesticide use on crops within the local area resulting in an increase in prey availability.

4.8.34. The Applicant later submitted a Proposed Change (CR2) [REP5-059] which proposed the removal of Sunnica West B from the Proposed Development; this involved the deletion of land parcels W01 and W02 along with the ECO4 environmental mitigation land, with just the proposed cable route remaining. Subsequent versions of the OLEMP and Environmental Masterplans were amended accordingly.

EXAMINATION

Relevant Representations

4.8.35. Of the 1360 Relevant Representations (RR) submitted, just under half mentioned potential adverse impacts on wildlife and habitats. Detailed submissions in respect of ecology and biodiversity were received from Natural England (NE), the local authorities and the Suffolk Wildlife Trust (SWT). Six parish councils raised concerns about potential impacts on wildlife.

4.8.36. NE [RR1291] summarised its advice by saying that there were no fundamental ecological reasons why the development should not proceed and offered detailed advice in relation to designated sites and habitat and wildlife mitigation. Five European/internationally designated sites were identified that were relevant to the application:

- Breckland SPA;
- Chippenham Fen Ramsar site;
- Devil's Dyke SAC;
- Fenland SAC; and
- Rex Graham Reserve SAC.

National sites relevant to the application were:

- Brackland Rough SSSI;

- Chippenham Fen and Snailwell Poor's Fen SSSI;
- Devil's Dyke SSSI;
- Rex Graham Reserve SSSI; and
- Snailwell meadows SSSI.

4.8.37. NE advised that further clarification was required in relation to:

- Measures to offset impacts on stone curlew, a qualifying species of Breckland SPA;
- Further details of noise and light impacts to Chippenham Fen; and
- Hydrological impacts on Brackland Rough SSSI.

4.8.38. In terms of species, NE identified bats and otter as being European protected species that might be affected by the proposals, and badger, water vole and wintering and breeding birds (including barn owl, common quail, hobby and little ringed plover as being nationally protected species potentially affected. NE advised that losses in habitat extent and continuity would require suitable avoidance and mitigation/compensation measures, and relevant licence applications. In respect of biodiversity net gain NE advised that further assessment was needed by the applicant to distinguish BNG calculations from mitigation and offsetting provision for impacts to statutory designated sites, priority habitats and protected species.

4.8.39. SWT [RR-1142] considered there to be insufficient evidence in the ES to support the Applicant's conclusion of no potential to experience significant effects in relation to several ecological features. This was especially the case in instances of insufficient detail or uncertainty around the long-term management of the mitigation and compensation habitat or decommissioning of the site.

4.8.40. The local authorities in their RRs [RR-0998; RR-1178; RR-1340 and RR-1351] raised concerns in relation to the potential detriment to biodiversity and made the following key points:

- There had been insufficient adherence to the mitigation hierarchy;
- There was insufficient detail provided within the application to safely base conclusions of no significant effects on the ecological receptors identified within the zone of influence of the scheme;
- The OLEMP did not demonstrate how the scheme would deliver adequate biodiversity mitigation/enhancement and deliver BNG;
- Habitat creation plans were lacking in detail and in ambition;
- It was considered that more could have been done within the scheme layout to adhere to the mitigation hierarchy, particularly in relation to stone curlew and arable flora;
- It was considered that the Proposed Development would result in adverse impact to a stone curlew population with a functional link to the Breckland SPA, that the proposed compensatory measures contained too much risk and that management plans were lacking important detail;
- The impact on Chippenham Fen and Snailwell Poor's Fen, including Fenland SAC, Chippenham Fen Ramsar/ NNR, Chippenham Fen and Snailwell Poor's Fen SSSI had not been adequately considered or justified;
- Adverse impacts on invertebrates (including aquatic invertebrates) had not been adequately assessed;
- The Proposed Development did not adequately avoid, mitigate or compensate the losses of priority habitat including arable weed margins; and
- There was a lack of information on the long-term survival (i.e. beyond 40 years) of the newly created habitats.

Local Impact Report

- 4.8.41. The local authorities, in their joint Local Impact Report (LIR) [REP1-024], reiterated the concerns set out in their RR, providing further detail in relation to additional baseline survey work, proximity to designated sites, the applicant's assessment of effects on ecological receptors, and the adequacy of proposed mitigation measures.
- 4.8.42. The local authorities' ecologists had begun meeting with nature conservation organisations and NE in early 2022 to discuss ecological matters in relation to the Proposed Development and they had drafted an ecological vision and ambitions for the scheme, which was attached to the LIR as Annex A. This contained three principles:
- Apply the mitigation hierarchy by prioritising the avoidance of adverse impacts on ecology first, mitigating unavoidable impacts through good ecological design, and compensating for residual impacts only after the first two steps had been rigorously applied;
 - Prevent any adverse impacts on statutory and non-statutory wildlife sites and the features for which they were designated; and
 - Have a significant positive impact on biodiversity and ecology.
- 4.8.43. In terms of baseline survey work, the local authorities had concerns in relation to:
- Stone curlew surveys, which had not always spanned the whole breeding season and had not covered all of the 500 metre (m) buffer zone around the Order land;
 - Invertebrate surveys (terrestrial or aquatic) which were limited in coverage and had not been completed to inform a robust assessment and evaluation of the potential for both construction and operational impacts on Chippenham Fen and local populations;
 - Hedgerow surveys were not complete;
 - Surveys of arable field margins had not been completed for all arable fields;
 - Badger territory mapping had not been carried out; and
 - Phase 1 habitat mapping was inaccurate in places.
- 4.8.44. The councils considered that whilst the Proposed Development included mitigation measures to address identified potential impacts on a suite of ecological receptors, these were either inadequate, too vaguely defined or inadequately secured in the DCO to give certainty that all ecological impacts could be satisfactorily addressed as part of the Proposed Development, including post-decommissioning.
- 4.8.45. The LIR suggested that further information should be sought during the Examination in relation to Phase 1 habitat surveys, hedgerow surveys, tree surveys and overall biodiversity losses and gains, and also identified the following ecological receptors for which they considered that further clarification and/or information should be sought during Examination:
- Fenland SAC/Chippenham Fen Ramsar/Chippenham Fen and Snailwell Poor's Fen SSSI, Concerning the cable route and hydrology;
 - Disturbance to stone curlew during construction;
 - Havacre Meadows and Deal Nook County Wildlife Site (CWS), Badlingham Lane CWS and Worlington Heath CWS;
 - Acid grassland; arable flora and associated terrestrial invertebrates;
 - Veteran trees;
 - Watercourses;
 - Breeding bird assemblages;

- Wintering bird assemblage;
- Wintering skylark;
- Wintering linnet;
- Badgers; and
- Bats.

4.8.46. Ecological receptors for which the councils suggested that the Applicant should bring forward changes to the application as part of the Examination or provide further clarification were:

- Fenland SAC, Chippenham Fen Ramsar, Chippenham Fen and Snailwell Poor's Fen SSSI, where there was a lack of information in relation to the effects of the solar panels on aquatic macroinvertebrates which the councils suggested required a precautionary approach and the removal of panels from Sunnica West B;
- Stone curlew, in relation to a lack of confidence in the effectiveness and amount of offsetting land provided, a precautionary approach and the removal of solar panels from land parcels E12, and potentially parcels E05 and E13, which should be retained as stone curlew habitat along with the identification of additional and alternative stone curlew mitigation measures; and
- Notable arable flora, for which a lack of confidence in the effectiveness and location of proposed compensation suggested that the high-quality arable field margins of land parcel W09 should be retained and that compensation areas for the loss of arable field margins should be expanded across the Proposed Development area.

4.8.47. The councils did not agree that there would be no significant residual effects on ecological receptors during construction and operation of the Proposed Development and the LIR detailed concerns in relation to specific ecological receptors where they considered that impacts remained insufficiently assessed and/or inadequately mitigated/compensated for. They also considered it essential that adequate monitoring provisions be secured, for the construction, operation and decommissioning phases, to ensure that mitigation and compensation measures would be implemented successfully and retained in the long term. Without these measures being addressed, the councils considered that the Proposed Development would be likely to result in avoidable ecological impacts.

Other Representations to the Examination

4.8.48. NE in its Written Representation (WR) [REP2-090] expanded on the main points it considered to be outstanding, with the most significant ecology and biodiversity issues presented as "amber" as follows:

- Clarification and further details were requested in relation to stone curlew habitat surveys;
- Further information was requested in relation to nutrient management in the proposed stone curlew offsetting areas;
- NE had outstanding concerns in relation to the number and locations of stone curlew mitigation nest plots;
- A commitment to monitoring stone curlew for the lifetime of the development should be secured;
- Any provisions for maintenance of the solar panels and minimising the impact of this on stone curlew should be included in the OLEMP; and
- Land proposed as offsetting for stone curlew should not be included within BNG calculations.

4.8.49.

SWT's WR [REP2-248] provided a collective view on behalf of the non-governmental organisations (NGOs) involved in the Ecology Stakeholder Group and set out their main outstanding concerns as:

- There was insufficient evidence that the construction and operation of the proposed solar arrays on land parcels W01 and W02 and the associated cable corridor would not have significant adverse impacts on Chippenham Fen and Snailwell Poor's Fen SSSI, Snailwell Meadows SSSI and the Fenland SAC;
- There was insufficient evidence to inform a reasonable assessment of the likely scale of impact of the Proposed Development on aquatic invertebrates which included several nationally rare species, focussed on Chippenham Fen and Snailwell Poor's Fen SSSI, Snailwell Meadows SSSI and the Fenland SAC, and mitigation proposed to prevent flying insects in existing wetland sites from reaching the solar arrays in parcel W01 could limit the effectiveness of work to restore and re-connect wetlands in the area;
- There was potential for the cable crossing through Havacre Meadows and Deal Nook CWSs to have adverse impacts on the site;
- Further clarification was required from the Applicant on how they had established that there would be no significant cumulative effects from the Proposed Development in combination with other developments;
- Additional surveys were required to establish with greater confidence the number of stone curlew nesting territories that would be affected by the Proposed Development;
- Public access to proposed mitigation areas could reduce their suitability for stone curlew nesting;
- There was insufficient survey evidence to understand the full impact of the Proposed Development on arable flora and Brecks plant communities and insufficient detail on proposed mitigation for any loss of these habitats to give confidence that there would not be any residual adverse impacts;
- Additional surveys and more comprehensive monitoring of wintering birds, breeding birds, bats and badgers was required in order to assess likely impacts and inform avoidance, mitigation and compensation in line with the mitigation hierarchy;
- More detail was needed to demonstrate that the potential barrier effects of the Proposed Development would be effectively mitigated;
- There was a lack of evidence to inform the assessment of likely impacts on chalk streams and other freshwater ecosystems and inadequate consideration of ecological mitigation and enhancement measures for these;
- The BNG report was incomplete and inadequate and a full copy of the Metric tool spreadsheet and plan should be provided;
- Insufficient detail had been provided of proposed habitat establishment and management processes and mechanisms for securing and maintaining habitats in good condition to provide confidence in the success of habitat creation in mitigation areas;
- The level of detail in the Framework CEMP was not sufficient and more detail was needed of precautionary working methods for avoiding impacts on ecological features during the construction phase;
- There was a lack of detail in the LEMP of proposed habitat establishment and management processes and mechanisms and insufficient provision for ecological monitoring of ecological impacts; and
- There was uncertainty around the decommissioning of the site and retention of created habitats in perpetuity, casting doubt on the long-term retention of any benefits arising from habitat creation and enhancement undertaken as part of the Proposed Development.

- 4.8.50. A WR from the Say No to Sunnica Action Group (SNTS) [REP2-240; REP2-240a and REP 2-240e] considered that the Applicant had not presented a sufficiently accurate representation of the baseline ecological interest within the Order limits so it was not possible to determine whether harm to biodiversity would be avoided by the Proposed Development. As such, it considered that the mitigation and compensation proposals were founded on an incomplete understanding and representation of the baseline position and could not be relied upon as a safeguard to avoid the Proposed Development causing a significant net loss of biodiversity.
- 4.8.51. Dr Alastair Burn submitted a WR [REP2-127] suggesting that the proposed stone curlew mitigation habitat would not benefit other declining farmland birds such as yellow wagtail.
- 4.8.52. Dr Anne Noble [REP2-103] explained that fields within the Order limits that are used for arable crops and for the grazing of pigs have high levels of phosphates and potash which would take a number of years to subside, resulting in the growth of highly competitive arable weeds under the solar panels, which would require control by herbicides or mowing. Dr Noble further considered that the proposed application of chalk mixed with topsoil for areas of chalk grassland establishment would be unlikely to result in habitat that would support a range of grassland species for many years, and the creation of acid grassland would be hampered by the high pH of the soils.
- 4.8.53. The Friends of Isleham Nature Reserves [REP2-140] commented that stone curlew had nested in fields that would be developed for solar arrays and that this would cause disturbance, and suggested that the application contained insufficient information about the effects of run-off from the solar panels, including possible impacts on Lea Brook.
- 4.8.54. Worlington Parish Council [REP2 -263] described the importance of land within the Order Limits for stone curlew and swift in particular. They reported the results of bat surveys within the village and surrounding area which recorded seven species of bat plus four Myotis species and expressed concern that the Proposed Development would cause disturbance and have a significant detrimental effect on the local bat population both during and after construction.

Key Issues Examined

- 4.8.55. Building on the key issues identified in the Initial Assessment of Principal Issues [PD-009] and drawing on issues raised in RR, WR and the LIR, the following were identified by the ExA as key issues for examination:

- Stone curlew;
- Other birds;
- Arable and other flora;
- Mammals, fish, reptiles, amphibians and invertebrates; and
- Impacts on designated sites; and
- Adequacy of mitigation measures in general and biodiversity net gain.

Issues specifically relating to the Habitats Regulations Assessment (HRA) are discussed in Chapter 6.

Stone curlew

- 4.8.56. Due to the sensitivity of information relating to stone curlew some information in the ES and subsequent documents [APP-086, APP-258 and REP10-013] was redacted.

The ExA has however had sight of these documents and they can be made available to the Secretary of State on request.

- 4.8.57. The ES identified that land within and around the Order limits was used by stone curlew for breeding [APP-086]. Stone curlew is given the highest level of protection under Schedule 1 of the Wildlife and Countryside Act, 1981 (as amended) (WCA) and is listed on Annex 1 of the EU Birds Directive. Between 2019 and 2021 up to four pairs were recorded as breeding inside or within 500m of the Proposed Development site. A fifth pair was also present but was not confirmed to be breeding. It was considered that the stone curlew on and near the site were functionally linked to the stone curlew population of the Breckland SPA and discussions between NE and the Royal Society for the Protection of Birds (RSPB) had indicated that the mitigation objective of the Proposed Development should be to ensure that there was no net loss of breeding pairs in Breckland SPA by embedding sufficient areas within the design of the Proposed Development to offset the loss of potentially suitable arable farmland through the erection of solar arrays.
- 4.8.58. The local authorities in their joint LIR [REP1-024] expressed concern that stone curlew surveys undertaken by the applicant had not always spanned the whole breeding season and had not covered all of the 500m buffer zone around the Order limits.
- 4.8.59. SWT explained in its answer to WQ1.2.5 [REP2-079] that whilst it agreed that the type of mitigation measures proposed for stone curlew, i.e. the creation of semi-natural habitat and stone curlew plots, were appropriate in principle, it considered that the offsetting measures proposed by the Applicant were not adequate or realistic to retain stone curlew, including breeding pairs, and that the birds would be effectively excluded from the operational area due to the lack of openness, potential human interference and possible increased predation.
- 4.8.60. During the course of the Examination the Applicant refined the mitigation measures proposed in relation to stone curlew within land parcels ECO1, ECO2 and ECO3 and amended the OLEMP [REP10-013], proposing to phase construction so that areas within 500m of the proposed stone curlew mitigation habitat would be developed outside the breeding season, and the replacement stone curlew plots would be ready for use by the breeding season at the start of construction. Pre-commencement surveys for stone curlew would be undertaken in advance of works commencing and monitoring of the condition of the stone curlew offsetting areas would take place in the context of providing optimal nesting and foraging habitat. The monitoring would occasionally include those areas within 500m of the construction site where there was suitable nesting habitat during the breeding season. All construction staff working within Sunnica Sites A and B would be given a toolbox talk regarding the sensitivity of stone curlew.
- 4.8.61. NE was satisfied with the provisions made to safeguard stone curlew and mitigate related habitat [REP6-070 and REP8-031 though their concerns primarily related to HRA issues and potential effects on the Breckland SPA.
- 4.8.62. The Applicant reached agreement with the Suffolk Wildlife Trust [REP8-034] in relation to the appropriateness of operational areas from the disturbance point of view for stone curlew nesting and the precautionary measures that would be put in place during construction and operation of the Proposed Development. However, SWT considered that the proposed mitigation areas were sub-optimal; they considered that there was insufficient evidence that the measures would be adequate to eliminate any residual adverse impact on nesting stone curlews on land

functionally linked to the Breckland SPA, and that there could be disturbance impacts on mitigation areas due to public access and the proximity of built development.

- 4.8.63. The local authorities reached agreement with the Applicant [REP8-029] on the monitoring arrangements for stone curlew set out in the OLEMP but not on the applicant's assessment of construction, operation and decommissioning effects on stone curlew, on the approach to habitat provision for them or on the management arrangements for determining the effectiveness of the proposed stone curlew mitigation measures. Throughout the Examination the councils maintained their position that parcels E05, E12 and E13, where stone curlew had previously nested, should be removed from the proposed development.
- 4.8.64. In their joint LIR [REP1-024] the local authorities referred to potential conflicts between management of the archaeological areas and the stone curlew plots and the ExA requested more detail on this in ExQ2.2.6 [PD-021]. Cambridgeshire County Council's (CCC's) reply [REP5-079] detailed the aspects of stone curlew offsetting that had the potential to cause conflict with the preservation and management of archaeological interest and which primarily related to grassland management and the provision of bare ground nesting plots. CCC expressed concern [REP6-057] that the Applicant had not taken into account the archaeological constraints of the stone curlew offsetting habitat in parcels ECO1, ECO2 and ECO3 and that in ECO1 specifically the provision of three nest plots should be reduced to two due to archaeological constraints.
- 4.8.65. SNTS considered that the compensation proposals for the displacement of stone curlew that habitually nest within the Order limits appeared predicated on a *de minimis* basis, introducing a high risk of net negative impact in the event of failure, the risk of which was itself rendered high by the absence of contingency or headroom provision [REP8-050 Appendix H]. SNTS considered that such negative effects would be of high significance notwithstanding the issue of whether there was considered to be a functional link to the Breckland SPA. SNTS also questioned the efficacy of stone curlew compensation habitat in parcels ECO1 and ECO2 which they considered could be affected by tree planting around parcel E05 [REP8-050]
- 4.8.66. In its End of Examination Position Paper [REP10-032] the Applicant explained that it had agreed a Deed of Obligation with SCC and CCC, by which it would make a contribution of £140,000 to the RSPB to be used for stone curlew research through monitoring the Breckland stone curlew and undertaking research projects. These would be approved by the Ecology Advisory Group (EAG) following consultation with NE.

Other birds

- 4.8.67. Four other WCA Schedule 1 species were confirmed to be holding breeding territories within the site survey area in 2019, these being quail, little ringed plover, barn owl and hobby, along with potentially a fifth, a breeding pair of woodlark. A total breeding bird assemblage of 73 species was recorded inside or within 50m of the Order Limits between 2019 and 2021, of which 31 species met at least one of a range of criteria relating to conservation importance and 18 species were listed as priority species in the UK Biodiversity Action Plan [APP-085]. The Applicant described the breeding bird assemblage within the Order as of county importance, but of local importance only within the individual component sites. In terms of individual species, in addition to stone curlew, the populations of curlew (*Numenius*

arquata), lapwing and skylark (of which up to 98 confirmed breeding territories of the latter had been recorded) were considered to be of county or district importance

- 4.8.68. The local authorities [REP1-024] considered that the applicant had provided insufficient evidence to demonstrate that their conclusions in relation to significance were accurate and robust, or that the effects on breeding birds associated with the loss of arable land would be temporary for the duration of the construction period and would not persist into the operational phase. They considered that the Applicant had not made clear how adverse effects of the loss of arable land on wintering skylark and linnet would be avoided.
- 4.8.69. SNTS [REP2-240e] disputed the Applicant's conclusion that no significant impact would be caused to farmland birds, especially in relation to skylarks where recently published research was quoted which found that skylark is typically displaced as a breeding species from fields where solar arrays are installed [REP2-240e Appendix 2]. SNTS did not consider that the land left undeveloped or set aside as ecological mitigation land within the Order limits would be sufficient to accommodate the displaced territories, or that it had been demonstrated that surrounding farmland could accommodate the displaced populations.
- 4.8.70. During the Examination, the Applicant maintained its position that it had not identified additional evidence to suggest that the criteria and sources presented in its assessments of the effects of the Proposed Development on farmland birds were incorrect and therefore no re-assessment was made [REP10-032].

Arable and other flora

- 4.8.71. In the ES [APP-040 and APP-079] the Applicant indicated that there were arable field margins within the Order limits with arable flora of between local and county importance and with some species classified as Vulnerable, Near Threatened, Nationally Scarce or Endangered (as set out in section 3.2 of ES Appendix 8C [APP-079]. These were identified within both chalkland and acid grassland habitats, with semi-improved acid grassland being identified as a habitat of county importance in its own right.
- 4.8.72. The local authorities [REP1-024] identified the potential impacts of the Proposed Development on notable arable flora as being negative, suggesting that compensation habitat should be re-designed and re-located so that it formed connected and functional areas that could be managed appropriately in the long term. Potential impacts on semi-improved acid grassland were similarly assessed as negative and the councils suggested that the solar arrays in parcels E13 and E31 should be designed to avoid all losses of acid grassland.
- 4.8.73. SNTS commented [REP2-240e] that there were omissions in the Applicant's Phase 1 classification and mapping, with some arable field margins not identified, and areas of species-rich and semi-improved grassland being mis-labelled as species-poor or arable. This then restricted the scope of the Phase 2 surveys and large parts of the site were omitted, including areas where SNTS's consultants found notable arable plants.
- 4.8.74. During the Examination and following discussions with stakeholders the Applicant extended the areas for arable flora, including within parcel W09 a continuous undisturbed buffer around the entirety of the field [REP10-051]. Whilst the local authorities considered this to be an improvement on the individual arable flora plots originally proposed [REP3-022], they suggested that, rather, arable flora mitigation

should be distributed across the entire site to address adequately the proposed loss of habitat and the importance of the entire site for arable flora [REP8-051].

- 4.8.75. In final Statements of Common Ground (SoCG), agreement was not reached between the Applicant and the local authorities in relation to arable flora, in terms of baseline surveys, assessment of effects or proposed mitigation [REP8-029] or with SNTS [REP8-040] in relation to the effects of the Proposed Development on rare arable flora. Agreement was reached in all respects with NE [REP8-031].

Mammals, fish, reptiles, amphibians and invertebrates

- 4.8.76. The Applicant's ES [APP-040] included technical reports relating to terrestrial invertebrates [APP-080], aquatic ecology [APP-081], great crested newt [APP-082], reptiles [APP-083], bats [APP-087], badgers [APP-088 to APP-090] and riparian mammals [APP-091]. Certain information relating to badgers was redacted and can be supplied to the Department on request. A number of legally protected or notable species were identified and were assessed for biodiversity importance as follows:

- Terrestrial invertebrates: up to regional importance
- Aquatic macro-invertebrates: up to regional importance
- Fish: up to regional importance
- Amphibians: local importance
- Reptiles: local importance
- Bats: up to county importance
- Badger: local importance
- Water vole: district importance
- Otter: local importance
- Hedgehog (not surveyed): local importance
- Brown hare (not surveyed): local importance

- 4.8.77. As a result of CR1 [AS-243] and the removal of the proposed substation at Burwell from the DCO application, the issue of potential conflict with badger setts was resolved and badger-related considerations thereafter related to access for foraging across the site. During the Examination the Applicant confirmed that fencing around operational areas would allow access by mammals [EV-043]. The OLEMP [REP10-012] and the Framework Construction Environmental Management Plan [REP10-014] made provision for precautionary working methods in relation to ecological risks including protected species where necessary, including the appointment of an Ecological Clerk of Works.

- 4.8.78. The local authorities' joint LIR [REP1-024] considered there to be potential negative effects of the Proposed Development on terrestrial invertebrates, aquatic invertebrates, bats and badgers. SNTS [REP2-240e] queried the Applicant's information in relation to great crested newt, and the assumptions within the ES relating to impacts on bats. They also queried the lack of assessment of potential impacts on brown hare, hedgehog and harvest mouse. Issues relating to aquatic invertebrates largely applied specifically to effects on designated nature conservation sites and are discussed below.

- 4.8.79. In the final, signed SoCGs there were no outstanding issues in relation to the mammals, fish, reptiles, amphibians and invertebrates listed above, except for the Parish and Town Councils' Alliance [REP8-042] which did not agree that impacts of the Proposed Development during construction on rare fish species and water voles, and proposed mitigation, were acceptable, or that effects of the Proposed Development on wildlife and protected species including great crested newts and bats were acceptable.

Impacts on designated nature conservation sites

- 4.8.80. The Applicant did not assess the potential effects on any adjacent or nearby internationally, nationally or locally designated sites as being significant.
- 4.8.81. The LIR [REP1-024] identified potential negative impacts on Fenland SAC/Chippenham Fen Ramsar during both construction and operation phases and suggested that the applicant provide more information and/or clarification into potential impacts of the cable route on hydrology. They further suggested that there was a lack of information in the application documents on the effects of the solar panels on aquatic macroinvertebrates, that this required a precautionary approach and that solar arrays should be removed from Sunnica West B. The local authorities stated that Chippenham Fen and the River Snail form a priority area in the emerging Nature Recovery Network for East Cambridgeshire and provide a landscape-scale stepping-stone between the Fens and the Brecks. They considered that the development of an industrial-scale solar farm within the immediate catchment of the historic fen would severely compromise the achievement of a nature recovery network and nature priorities likely to be set out in the Cambridgeshire Local Nature Recovery Strategy.
- 4.8.82. The local authorities also identified in the LIR potential negative impacts on Havacre Meadows and Deal Nook CWS due to the cable crossing in parcel W3, and Badlingham Lane and Worlington Heath CWSs, in both construction and operational phases. This was discussed during Issue Specific Hearing 2 (ISH2) [EV-042] in terms of the likelihood of horizontal directional drilling being used and the applicant replied that this would be taken on board in a revised CEMP [REP4-030] and these concerns were echoed by SWT.
- 4.8.83. NE in their WR [REP2-090] had no outstanding concerns in relation to nationally designated sites, and its outstanding concerns in relation to internationally designated sites concerned HRA issues (air quality issues and stone curlew offsetting).
- 4.8.84. At Deadline 3 the Applicant submitted a document entitled "Update by the Applicant on Heritage Matters and Substation Connection" [REP3A-037] which noted concern in relation to Sunnica West B, primarily in relation to archaeological issues and indicated that the whole of Sunnica West B would be removed from the Proposed Development. This was confirmed at Deadline 5 in the Second Change Request (CR2) [REP5-059]. Whilst primarily responding to concerns relating to archaeology, by removing the proposed solar array in parcels W01 and W02 ecological concerns relating to potential impacts on nearby designated nature conservation sites were negated and the proposed change was welcomed by the local authorities, except in relation to potential impacts from the cable route which remained passing along the northern edge of Sunnica West B [REP4-124 and REP4-080]. During ISH2 [EV-042] the ExA sought clarification as to whether the proposed ecological mitigation land in Sunnica West B (parcel EC04) would be removed from the Proposed Development and the Applicant confirmed that this would be the case and that the removal of the mitigation land would be taken into account in an updated BNG calculation [REP4-030]. It was subsequently agreed between the Applicant, the local authorities and SWT that cable routes passing through EC04 would be constructed to avoid interfering with groundwater flow or disturbing peat soils [REP8-029 and REP8-034].

Adequacy of ecological mitigation measures in general and biodiversity net gain

- 4.8.85. During the Examination the Applicant made successive changes to its proposed ecological mitigation in response to concerns raised, with the final proposals being set out in the final framework CEMP [REP10-015], OLEMP [REP10-012] and Environmental Masterplan [REP10-041, REP10-050 and REP10-051] submitted at Deadline 10. Specific changes in the final versions of the document as compared to the original submitted documents included:
- Increasing the extent of undeveloped buffers throughout the Proposed Development area, set at least 5m from existing boundary features, many of which involve new planting;
 - Creating linear arable flora strips on the northern boundary of parcels E14 and E15 and part of the boundary in-between parcels E27, E29 and E30, around parcel W09 and on the north-east boundary of parcel W07;
 - Ensuring that existing woodland, tree lines and the majority of hedgerows would be retained;
 - Retaining and managing existing grassland habitats;
 - More diversified habitat creation along the Beck Road frontage of parcel E05;
 - Willow trees to be planted alongside the River Lark to the west of parcel E01;
 - Allowing for the development of woodland, mixed scrub and rush pasture to the north of parcels W08 and W09; and
 - Indicative sustainable drainage system features (SuDS) included in most land parcels containing solar arrays.
- 4.8.86. The Applicant committed in the OLEMP, and secured through the DCO, to the establishment of the Ecology Advisory Group that would provide oversight to the monitoring, management and maintenance of the mitigation measures, and during construction, an Ecological Clerk of Works would oversee adherence to agreed ways of working and would monitor the site for protected species in advance of work taking place. In its final signed SoCG, SWT had outstanding concerns as to whether the OLEMP and the proposed role of the EAG would be adequate to prevent adverse ecological impacts or reduced ecological gains [REP8-034].
- 4.8.87. During the Examination concerns were raised about the likely success of grassland creation on the scale proposed in the application [REP2-240e, REP3A-063; REP8-050 and REP8-040]. The issues raised included securing the necessary quantities of appropriate seed, the establishment of species-rich and native grassland on nitrogen-rich former arable land, and the potential challenges associated with shading by the solar panels.
- 4.8.88. The local authorities considered that the mitigation measures proposed in relation to both ecological and landscape issues should remain in place in perpetuity [REP4-143] rather than just during the proposed forty years of the construction, operation and decommissioning of the Proposed Development. The Applicant considered that this was inappropriate for what was a temporary development [REP10-032]. The final Framework Decommissioning Environmental Management Plan (DEMP) [REP8-012 and referred to in REP10-032] included obligations on the developer to:
- Prepare a schedule of all landscape and ecological mitigation and enhancement measures put in place for the Proposed Development that would be retained;
 - Identify measures that would continue to have a landscape or ecological function after decommissioning; and
 - Put forward proposals that might secure the long-term retention, for a period of 25 years, of those measures after decommissioning.
- 4.8.89. The Applicant's methodology for calculating BNG, in terms of the assumptions made and details of habitats included or not included in the calculations, was not

agreed by the local authorities [REP6-057, REP6-080 and REP8-029], Suffolk Wildlife Trust [REP8-034] or SNTS [REP7-076, REP8-040 and REP8-050].

CONCLUSION

Approach and Methodology

- 4.8.90. In terms of baseline surveys, opinions varied between IPs in terms of whether the Proposed Development and associated ecological mitigation were based on adequate and appropriate survey work. Whilst preliminary desk surveys appear to have been adequate, the ExA considers that some elements of the field survey work were lacking or missing. Whilst some additional information was submitted during the Examination, primarily in relation to trees and hedgerows, important gaps in accurate, up-to-date and relevant information remained relating to farmland birds and arable flora. This was important in terms of the proposed site layout and ecological mitigation and compensation which were based on these surveys and the possible impacts and effects on certain species and assemblages. In terms of stone curlew specifically, there was general agreement on the number of breeding pairs using the site, which the ExA accepts, but a lack of agreement on the interpretation of the data, which the ExA has taken into account in reaching its conclusions. The ExA concludes that the applicant has not fully satisfied the requirement in draft NPS EN-3 to undertake ecological assessments that identified any ecological risk from developing on the proposed site.
- 4.8.91. The ExA has considered the Applicant's methodology for the assessment of the potential impacts and effects on designated nature conservation sites and ecological receptors and, with the exception of Chippenham Fen, which was later removed from the Proposed Development, agrees that this was a reasonable approach. Apart from issues relating to stone curlew, the limitations in the survey methodology set out above did not give cause to doubt their conclusions.

Effects on Designated Nature Conservation Sites

- 4.8.92. Careful consideration has been given by the ExA to possible effects of the Proposed Development on international nature conservation sites identified by IPs as being potentially impacted by it and due to the priority afforded by NPS EN-1 and draft NPS EN-3 in relation to international sites, great weight has been given to these areas by the ExA and they are covered in Chapter 6 relating to HRA.
- 4.8.93. Although there are a number of SSSIs within 10km of the Order limits there are no outstanding concerns relating to these sites and the ExA is satisfied that there will be no significant effects on them as a result of the Proposed Development. Although Breckland Farmland SSSI is of importance for stone curlew, it was not raised as a relevant issue by IPs and is therefore not considered further by the ExA.
- 4.8.94. Whilst potential effects were identified by IPs in relation to Havacre Meadows and Deal Nooks and Badlingham Lane and Worlington Heath CWSs, the ExA is content that the measures embedded in the CEMP will provide adequate safeguards.

Stone Curlew

- 4.8.95. There was considerable discussion throughout the Examination in relation to effects on and proposed mitigation for stone curlew and the ExA has given much consideration to the issue of whether the proposals afford adequate protection to the population within or near the Order limits, given the important conservation status of this breeding bird. Whilst NE were satisfied that the proposals included

adequate mitigation, other IPs including the local authorities and SNTS maintained their concerns that the Applicant's approach did not include satisfactory avoidance and mitigation and therefore did not follow the mitigation hierarchy. The ExA has considered these issues in the light of the guidance in NPS EN-1 and draft NPS (dNPS) EN-3.

- 4.8.96. The ExA has considered representations in relation to site selection and whether it was appropriate to include fields containing known previous stone curlew nesting sites within operational areas of the Proposed Development where solar panels would be placed. The Applicant has pointed out that stone curlew are likely to move their nest sites from year to year in reaction to changing arable cropping and other farming practices, and that in this regard the current habitat is sub-optimal, but despite these conditions the numbers of stone curlew present and breeding in and adjacent to the Order limits have remained consistent during the years surveyed. Although mitigation measures including the provision of offsetting land have been proposed by the Applicant, there is no guarantee that the stone curlew will use it and therefore there is no certainty that it will be successful or that there will not be an impact on breeding. The stone curlew population within and adjacent to the application site is small and any reduction in numbers would therefore be a significant impact. The ExA is not satisfied that the tests in NPS EN-1 relating to avoiding harm to biodiversity and to the consideration of reasonable alternatives have been met. The local authorities suggested that land parcels E05, E12 and E13, where stone curlew had nested in recent years, should be removed from the Proposed Development and the ExA considers that approach to have some merit.
- 4.8.97. In terms of the proposed stone curlew mitigation, the ExA notes that that the Applicant has improved the measures set out in the OLEMP to prevent disturbance from construction and operational work and for monitoring and that there is now general agreement in relation to these. The ExA is content that the proposed measures are now satisfactory. As far as the provision of replacement stone curlew habitat for foraging and breeding purposes is concerned, the ExA has considered the concerns raised by the local authorities [REP4-131; REP6-057], SNTS [REP8-050] and SWT [REP2-079] which suggest that the proposed mitigation habitat is inadequate or unsuitable due to potential management issues. These concerns include the proximity of public recreational access in the vicinity and landscape screening, the conflicting requirements of land providing mitigation for both archaeological and ecological (stone curlew) purposes and the management of the wider grassland areas in terms of sward height and density.
- 4.8.98. On balance the ExA considers that the Proposed Development has the potential to cause significant harm to the stone curlew population within and adjacent to the site, that there was inadequate consideration of reasonable alternatives and that it has not been demonstrated that the proposed mitigation measures will give adequate protection against adverse harm to the local stone curlew population, as required by NPS EN-1. This weighs slightly against the Order being made.

Other Birds

- 4.8.99. Potential adverse effects on other bird assemblages were discussed during the Examination and the ExA has taken note of these concerns which relate to farmland birds in particular, including skylark, yellow wagtail, linnet and lapwing [REP6-057; REP8-050] and other breeding birds of important conservation status including quail, hobby and ringed plover [REP1-024]. Agreement was not reached between IPs and the Applicant in these respects [REP8-029, REP8-034 and REP8-040]. The ExA considers that the overall size of the Proposed Development and the solar

arrays within it, have the potential to cause adverse effects on some bird species, and notes that in relation to skylark evidence was presented indicating that this species is displaced by solar farm developments [REP2-240e]. This weighs slightly against the Order being made.

Arable Flora

- 4.8.100. The ExA considers that the improvements made by the Applicant in relation to measures to mitigate adverse effects on arable flora were a positive step, with linear arable strips around field boundaries giving greater connectivity and improved opportunities for management than the individual plots originally proposed. The ExA notes the outstanding concerns relating to arable flora mitigation [REP8-029, REP8-034 and REP8-040] but is content that the measures set out in the Environmental Masterplans and OLEMP, including oversight by the proposed Ecology Advisory Group, will be adequate and that the effects of the Proposed Development can be adequately mitigated.

Other Habitats and Species

- 4.8.101. So far as potential impacts and effects on other habitats and species are concerned, the ExA notes that there are no substantial remaining concerns between parties relating to great crested newt, mammals and veteran or ancient trees and is satisfied with the proposed development in these respects. Whilst some outstanding concerns remain in relation to mitigation for watercourses, acid grassland and invertebrates [REP8-029] the ExA is satisfied that no significant adverse effects will result from the Proposed Development and little weight is attached to these remaining concerns.

Mitigation in General and Biodiversity Net Gain

- 4.8.102. A major element of the proposed ecological mitigation relies on the establishment and future management of grassland across the site, including underneath and around the solar arrays [REP6-075]. Concerns were expressed about whether grassland re-establishment using appropriate conservation seed mixes would be realistic on the scale proposed, or whether practical issues such as the availability of adequate supplies of appropriate grass seed will limit the successful implementation of the proposed mitigation. The ExA notes that concerns have also been expressed about the practicality and viability of the Applicant's proposal to graze sheep on the site [REP1-024], but the alternative option of mowing also presents problems for example in relation to ground-nesting birds. Whilst the ExA considers that these are issues that can be resolved through the CEMP and with the oversight of the Ecology Advisory Group, and carry little weight, they are matters of concern largely due to the size of the Proposed Development and the extent of the areas that will need to be seeded and managed.
- 4.8.103. The ExA has considered related concerns largely caused by the overall size of the Proposed Development scheme and the adequacy of resources relating to supervision and monitoring of the site, for example by the Ecological Clerk of Works and the Ecology Advisory Group [REP6-074; REP8-034] but is satisfied that these carry little weight.
- 4.8.104. So far as Biodiversity Net Gain is concerned, the ExA has noted concerns raised in relation to the Applicant's methodology, and as BNG is not yet a statutory requirement in relation to NSIP developments the Applicant's conclusions in respect neither weigh in favour of nor against the Proposed Development.

- 4.8.105. Taking all relevant representations and policies into account, in summary the ExA concludes that:
- The Proposed Development does not demonstrate that adequate and appropriate ecological assessments were made to identify any ecological risk from developing as a result and this weighs slightly against the Order being made;
 - The Proposed Development includes adequate safeguards to prevent harm to nature conservation sites of national and local importance and this is neutral in terms of the Order being made;
 - The Proposed Development has the potential to cause significant harm to the stone curlew population within and adjacent to the site and this weighs slightly against the Order being made;
 - It has not been demonstrated that the mitigation measures included in the Proposed Development will give adequate protection to farmland birds from adverse effects and this weighs slightly against the Order being made; and
 - The ExA is satisfied that effects on other habitats or species from the Proposed Development will be limited and adequately mitigated and this is neutral in terms of the Order being made.
- 4.8.106. In overall terms the ExA considers that the Proposed Development would be likely to have a negative impact on ecology and biodiversity and this weighs against the Order being made.
- 4.8.107. The Suffolk County Council Alternative Proposal (SCC AP) would remove from the Proposed Development the key stone curlew nesting sites and would therefore mitigate potential adverse effects on the species. Although the SCC AP would also result in the removal from the Proposed Development of the ecological mitigation areas (ECO1, ECO2, ECO3 and ECO5), including the stone curlew nesting plots, the effects of this would be neutral as there would be no loss of historic nesting sites. In respect of other farmland birds, substantial areas of land supporting these would be removed from the Proposed Development area, but the areas remaining comprise current arable land with populations that would still suffer adverse impacts from the Proposed Development, and this would still weigh slightly against it. As far as other species are concerned, the loss of all the ecological mitigation sites could have adverse implications as there would still be a considerable extent of solar arrays but without meaningful ecological mitigation. The potential impacts of this would need to be assessed. The SCC AP would have no further implications in respect of local and national nature conservation sites and would thus be neutral in terms of the planning balance.

4.9. CULTURAL HERITAGE AND HISTORIC ENVIRONMENT

INTRODUCTION

- 4.9.1. This section considers the effects of the Proposed Development on the historic and cultural environment, in relation both to designated heritage assets and to sites/assets of local interest, and considers the potential effects of mitigation. Discussion and conclusions in this section relate closely to landscape and visual impact, especially in relation to the settings of heritage assets

POLICY AND LEGISLATIVE CONSIDERATIONS

The Infrastructure Planning (Decisions) Regulations 2010

4.9.2. Regulation 3, under the heading “*Listed buildings, conservation areas and scheduled monuments*” requires:

- 1) *When deciding an application which affects a listed building or its setting, the decision-maker must have regard to the desirability of preserving the listed building or its setting or any features of special architectural or historic interest which it possesses.*
- 2) *When deciding an application relating to a conservation area, the decision-maker must have regard to the desirability of preserving or enhancing the character or appearance of that area.*
- 3) *When deciding an application for development consent which affects or is likely to affect a scheduled monument or its setting, the decision-maker must have regard to the desirability of preserving the scheduled monument or its setting.*

National Policy Statements (NPSs)

NPS EN-1

4.9.3. Paragraph 5.8.2 of NPS EN-1 explains that the historic environment includes all aspects of the environment resulting from the interaction between people and places through time. It recognises that heritage assets are those elements of the historic environment that hold value through their historic, archaeological, or artistic interest, which may be any building, monument, site, place, area or landscape. The sum of an asset’s heritage interest is referred to as its significance.

4.9.4. Paragraphs 5.8.4 to 5.8.6 advise that heritage assets with archaeological interest that are not currently designated as scheduled monuments may be demonstrably of equivalent significance and that these should be considered subject to the same policy considerations as that apply to designated heritage assets. Other non-designated heritage assets may also have a significance that merits consideration in decisions, even though those assets are of lesser value than designated heritage assets.

4.9.5. Paragraphs 5.8.8 to 5.8.10 of NPS EN-1 require applicants to assess the significance of the heritage assets affected by their proposals. Applicants should also ensure that the extent of any impacts can be adequately understood from their application and supporting documents.

4.9.6. Paragraph 5.8.12 of NPS EN-1 advises that the particular nature of the significance of heritage assets should be taken into account in decision-making, along with the value that they hold for this and future generations.

4.9.7. Paragraph 5.8.13 of NPS EN-1 refers to the desirability of sustaining and, where appropriate, enhancing the significance of heritage assets and the contribution of their settings and advises on the consideration of design-related issues.

4.9.8. NPS EN-1 states in paragraph 5.8.14 that there should be a presumption in favour of the conservation of designated heritage assets and the more significant the heritage asset, the greater the presumption in favour of its conservation should be. Substantial harm to a grade II listed building, park or garden should be exceptional, and substantial harm to designated assets of the highest significance, including Scheduled Ancient Monuments, should be wholly exceptional.

4.9.9. Paragraphs 5.8.15 to 5.8.18 of NPS EN-1 advise that any harmful impact on the significance of a designated heritage asset should be weighed against the public

benefit of development, recognising that the greater the harm to the significance of the heritage asset the greater the justification that will be needed for any loss.

- 4.9.10. Paragraph 5.8.18 of NPS EN-1 considers settings of heritage assets, advising that whilst applications that preserve those elements of a setting that make a positive contribution to the significance of an asset should be treated favourably, any negative effects should be weighed against the wider benefits of the application.

Draft NPS EN-1, Sept 2021

- 4.9.11. Draft NPS EN-1 largely repeats the advice of the earlier, designated version, adding in paragraph 5.9.21 that great weight should be given to a heritage asset's conservation when considering the impact of a proposed development on the significance of the asset. It goes on to advise that the more important the asset, the greater the weight should be, and that this is irrespective of whether any potential harm amounts to substantial harm, total loss, or less than substantial harm to its significance.
- 4.9.12. Paragraph 5.9.22 of draft NPS EN-1 states that any harm or loss of significance of a designated heritage asset, including from development within its setting, should require clear and convincing justification and paragraph 5.9.23 adds that considerable importance and weight should be given to the desirability of preserving all designated heritage assets and that any harmful impact on the significance of a designated heritage asset should be given significant weight when weighed against the public benefit of development.
- 4.9.13. Paragraph 5.9.24 of draft NPS EN-1 addresses the need to demonstrate that substantial harm to or total loss of significance of a designated heritage asset is necessary to achieve substantial public benefits that outweigh that harm or loss, and that consent should be refused if the stated tests are not met.
- 4.9.14. Paragraph 5.9.26 of draft NPS EN-1 advises that the effect of an application on the significance of a non-designated heritage asset should be taken into account and that a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.
- 4.9.15. The guidance in draft NPS EN-1 in relation to settings of heritage assets states that considerable importance and weight should be given to the desirability of preserving settings and that significant weight should be given to any negative effects when weighing them against the wider benefits of the application.

Draft NPS EN-3, Sept 2021

- 4.9.16. Draft NPS EN-3 explains that applications for solar photovoltaic generation infrastructure may have direct or indirect impacts on heritage assets above or below ground and that where there is the potential for this, applicants should submit appropriate desk-based assessments and, where necessary, field evaluations.
- 4.9.17. Paragraph 2.53.5 of draft NPS EN-3 advises applicants to take account of the results of historic environment assessments in their design, ensuring that heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting. A large-scale solar farm within the setting of a heritage asset may cause substantial harm to the significance of the asset.

- 4.9.18. Paragraph 2.53.6 of draft NPS EN-3 addresses the importance of specific elements of a proposed development being micro sited carefully in order to avoid or minimise damage to archaeology and of the need for some flexibility to allow for this.
- 4.9.19. Paragraph 2.53.7 of draft NPS EN-3 advises that solar farms and associated infrastructure have been designed sensitively taking into account known heritage assets and their status.
- 4.9.20. Paragraph 2.53.8 of draft NPS EN-3 advises that the length of time for which consent is sought should be considered when considering the impacts of any indirect effects of solar farms on the historic environment, such as effects on the settings of designated heritage assets.

National Planning Policy Framework (NPPF), revised July 2021

- 4.9.21. The NPPF advises that heritage assets should be conserved in a manner appropriate to their significance, including the contribution made by their settings. The effect of an application on the significance of a non-designated heritage asset should be taken into account in the determination of applications.

Forest Heath Local Plan

- 4.9.22. Policy CS3 of the Forest Heath Local Development Framework Core Strategy (2010) [REP1-024a, Appendix 1] affords protection to landscape character and the historic environment.
- 4.9.23. The Forest Heath and St Edmundsbury Local Plan Joint Development Management Policies Document (2015) [REP1-024a, Appendix 2] includes the following policies that relate to the historic environment: DM15 (listed buildings); DM16 (local heritage assets and buildings protected by an Article 4 Direction); DM17 (conservation areas); DM19 (parks and gardens of special historic or design interest); and DM20 (archaeology).

East Cambridgeshire Local Plan

- 4.9.24. The East Cambridgeshire Local Plan (2015) [REP1-024e] contains the following historic environment policies: ENV 11 (conservation areas); ENV 12 (listed buildings); ENV 13 (local register of buildings and structures); ENV 14 (archaeology); and ENV 15 (historic parks and gardens).

“Made” Neighbourhood Plans

- 4.9.25. Five neighbourhood plan (NP) areas fall within or in close proximity to the Proposed Development, for which three have “made” neighbourhood plans [REP1-024a]. The Isleham and Fordham NPs both extend into the area of the Proposed Development and have policies relating to heritage and cultural assets.

Fordham NP (“made” December 2018) [REP1-024a Appendix 11]

- 4.9.26. Policy 7 designates Locally Important Buildings and requires submission of a heritage statement with proposals affecting these buildings or their settings.

Isleham NP (“made” May 2022) [REP1-024a Appendix 12]

- 4.9.27. Policy 6 designates Locally Important Buildings, including The Ark church, and requires submission of a heritage statement for development proposals affecting these buildings or their settings. It advises that proposals that would result in harm

to the significance of a locally important building should normally be refused unless the harm is outweighed by the substantial benefit of the proposal. The NP also identifies the site of a United States Air Force (USAF) plane crash as being of historical interest locally.

THE APPLICANT'S CASE

4.9.28. The principal application documents in relation to cultural heritage and historic environment were:

- [APP-017]: Features of the Historic Environment Plan
- [APP-039]: Environmental Statement (ES) Chapter 7 – Cultural Heritage
- [APP-059]: ES Appendix 7C – Sunnica East Archaeological Desk Based Assessment
- [APP-060]: ES Appendix 7D – Sunnica West Archaeological Desk Based Assessment
- [APP-062]: ES Appendix 7F – Sunnica East and West Geophysical Survey Report
- [APP-063] to [APP-074]: ES Appendices 7F and 7G – Geophysics Report Map Books and Survey Reports
- [APP-075] and [APP-076]: ES Appendices 7H and 7I – Archaeological Trial Trenching Reports
- [APP-108]: ES Appendix 10I – Landscape and Ecology Management Plan (LEMP)
- [APP-179]: ES Figure 7-1a-I – Designated and Non-designated Heritage Assets within the Order Limits
- [APP-180]: ES Figure 7- 2a – Designated Heritage Assets within 1km of Sunnica East Sites A and B
- [APP-181]: ES Figure 7- 2b – Designated Heritage Assets within 1km of Sunnica West Sites A and B
- [APP-182]: ES Figure 7-2c – Designated Heritage Assets within 1km of Burwell Substation and the Cable Corridor
- [APP-183]: ES Figure 7-3 – Geophysical Survey Area Zone
- [APP-184]: ES Figure 7-4a-I – Heritage Visualisations
- [APP-209] to [APP-214]: ES Figures 10-14a to 10-14f – Landscape Masterplan

4.9.29. New or amended documents relating to cultural heritage and the historic environment were subsequently submitted into the Examination by the Applicant at Deadlines, as part of the Change Requests, in response to requests from the Examining Authority (ExA), including Written Questions, and in response to the submissions of Interested Parties (IPs). These included:

- [AS-317]: Crash Site Exclusion Area Plan
- [REP3A-037]: Update on Heritage Matters and Sub-station Connection
- [REP4-031]: Chippenham Park Historic Maps
- [REP5-014]: Appendix 10I - Landscape and Ecology Management Plan including Historic Environment Management Plan (HEMP)
- [REP5-060]: Report on Current Status of Heritage Aspects of the Registered Park and Garden
- [REP5-066]: Detailed Archaeological Mitigation Strategy
- [REP7-062]: B050 Crash Site Report

Methodology and Approach to Environmental Assessment

- 4.9.30. The Applicant set out the initial scope and approach to the assessment of the historic and cultural environment in the Environmental Impact Assessment (EIA) Scoping Report [APP-051], which suggested a study area extending 1 kilometre (km) from the Order limits, or up to 5km and potentially beyond in relation to high-value assets and their settings. The baseline was derived from the Historic Environment Record (HER) databases and comprised assets dating from the palaeolithic to the modern periods.
- 4.9.31. Chapter 7 of the ES [APP-039] set out the assessment undertaken and represented the Applicant's realistic worst case and precautionary approach based on a Rochdale Envelope. The baseline was drawn from historic environment desk-based assessments produced for the Proposed Development in 2018 and updated in 2021. Historic Landscape Characterisation data were not available from the Cambridgeshire HER so instead an analysis of historic mapping and other available data was undertaken which identified three distinct character areas across the Order limits. It was also intended that air photo analysis would be undertaken, but this was not possible due to Covid-19 restrictions, and agreement was reached with both County Councils that this would not be submitted as part of the Environmental Assessment. Geophysical surveys were not able to be undertaken pre-submission due to farming and access-related issues but, along with trial trenching investigations, were completed and submitted during the Examination.
- 4.9.32. The study area for the ES extended predominately to 1km from the Order limits, with designated heritage assets of the highest significance, namely Scheduled Monuments (SMs), Grade I and Grade II* listed buildings and registered parks and gardens (RPGs) being considered up to 5km of the Order limits. Cross-reference was made to the Zone of Theoretical Visibility (ZTV) and to the Landscape and Visual Impact Assessment (LVIA), with specific viewpoints from a number of heritage assets being included [APP-184]. The study area for Grid Connection Routes A and B was limited to 1km due to the largely below-ground nature of the proposed work.
- 4.9.33. The purpose of the study area was for data capture, encompassing heritage assets, both designated and non-designated, including archaeological sites and monuments, historic buildings, conservation areas and registered parks and gardens, together with the relevant historic landscape character. All of the captured data was reviewed and those assets potentially affected by the Proposed Development were taken forward into the EIA.
- 4.9.34. In terms of the assessment of potential impacts and effects, the Applicant followed the guidance of Historic England and the Chartered Institute for Archaeologists. Effects on cultural heritage assets were assessed that would be likely to arise from the construction, operation and decommissioning of the Proposed Development.
- 4.9.35. The Applicant independently evaluated the significance of the cultural heritage resources and the magnitude of impact upon that significance. By combining the value of the cultural heritage resource with the predicted magnitude of impact, the significance of the effect was determined, being either beneficial or adverse. The cultural heritage assessment included an assessment of potentially affected assets, in line with NPS EN-1 and the NPPF, both of which required the assessment to take account of changes to both the physical asset and its setting. The value of heritage assets and the magnitude of impact on heritage assets were both assessed on a scale from "high" to "very low".

Baseline Conditions

- 4.9.36. Chapter 7 of the ES details the designated heritage assets identified within the application site and within 1km of the Order land and these are shown on ES Figure 7-1a to I [APP-179], ES Figure 7-2a [APP-180], ES Figure 7-2b [APP-181] and ES Figure 7-2c [APP-182]. These are listed in ES Chapter 7 Appendices 7C to 7E [APP-059 to APP-061]. In summary, in respect of Sunnica West there were 85 heritage assets identified within the application site or within 1km of the Order limits including:
- One SM falling within Sunnica West A and another adjacent to Sunnica East B;
 - 68 listed buildings within 1km of the Order limits including two Grade I and four Grade II* buildings;
 - One RPG falling within the Order limits at Sunnica West A; and
 - Three conservation areas falling within 1km of the Order limits.
- 4.9.37. The baseline for non-designated archaeological assets included 508 records for Sunnica West and 395 for Sunnica East. In respect of the grid connection routes, eight designated assets were identified within 1km of Route A and 46 within 1km of Route B. Most of the latter comprised listed buildings in Burwell and therefore also fell within 1km of the proposed Burwell Substation Extension.
- 4.9.38. SMs, Grade I and Grade II* listed buildings were considered to be of “high” value, Grade II listed buildings and the Grade II RPG as “medium” value and conservation areas as “medium” value.

Scheme Design, Mitigation and Enhancement Measures

- 4.9.39. The Proposed Development as originally submitted contained historic environment mitigation measures which were set out in the ES Chapter 7 [APP-039] and in the Outline Landscape and Environmental Management Plan (OLEMP) [APP-108]. These included:
- Embedded archaeological mitigation measures including the removal of ten areas of significant (high value) archaeology, totalling approximately 97 hectares (ha) and designated as native grassland planting;
 - Proposed screening to minimise the visual intrusion of the Proposed Development;
 - Setbacks limiting visibility from key routes through the landscape;
 - Buffer areas around settlements to ensure that they remain isolated in the landscape;
 - A reduction in the Order limits in the vicinity of Chippenham Park RPG, no development to take place adjacent to the formal park boundary and new planting proposed along the Avenue;
 - Flexibility in the scheme design, with options for alterations to detailed design in the event of significant archaeology being identified and requiring preservation *in situ* or where significant effects were anticipated on the settings of assets; and
 - A programme of archaeological investigation, recording and associated mitigation would be undertaken to reduce the impacts and effects of construction on cultural heritage.

Potential Effects Identified by the Applicant

- 4.9.40. Potential impacts and effects of the construction, operation and decommissioning of the Proposed Development on the historic environment were detailed in ES Chapter 7 [APP-039].
- 4.9.41. Potential construction effects were summarised as:

- Partial or total removal of heritage assets;
- Compaction of archaeological deposits by construction traffic and structures;
- Effects on the setting of heritage assets as a result of visual intrusion, noise, severance, access and amenity; and
- Effects on the settings of heritage assets as a result of the presence of the Proposed Development in the landscape.

4.9.42. Residual effects on cultural heritage following the implementation of mitigation were assessed, with a significant effect (moderate adverse) being identified on Chippenham Park RPG as a result of the development of Sunnica West A and B. A significant, moderate effect was identified in relation to four Bronze Age bowl barrows north of the A11/A14 junction, forming part of the Chippenham Barrow Cemetery in Sunnica West A. Some significant effects were also identified for a number of non-designated archaeological assets within Sunnica East A, Sunnica East B and Sunnica West A.

Change Request 2

4.9.43. At Deadline 3, the Applicant submitted a document entitled “Update by the Applicant on Heritage Matters and Substation Connection” [REP3A-037] which noted concern in relation to Sunnica West B, primarily in relation to archaeological issues and indicated that the whole of Sunnica West B would be removed from the Proposed Development. It also proposed an amendment to parcel E05 in Sunnica West A relating to the site of a military aircraft crash, removing solar panels from the vicinity of the crash. These changes were confirmed in the Second Change Request (CR2) [REP5-059].

EXAMINATION

Relevant Representations

4.9.44. Of the 1360 Relevant Representations (RRs) submitted, 60 mentioned cultural heritage and historic environment issues. Potential impacts noted were in respect of historic buildings and structures in villages that might be affected by vehicle movements, effects on conservation areas, impacts on the historic U6006 public right of way, effects on the settings of rural settlements and direct impacts on the site of a military plane crash at Isleham.

4.9.45. Historic England (HE) commented that the Proposed Development lay in a sensitive area for the historic environment, within the settings of a range of high-value heritage receptors. Its primary consideration was the potential impact on the Chippenham Park RPG and on the SM comprising four Bronze Age bowl barrows north of the A11/A14 junction and forming part of the Chippenham Barrow Cemetery. Also mentioned was the Roman Villa Scheduled Monument south of Snailwell Fen. HE confirmed that whilst it considered that there would be some harm to the significance of these assets, the impacts were at a level it considered likely to be broadly acceptable in policy terms. It was keen however that there should be adequate mitigation to reduce impacts and to reduce any resulting harm further. HE noted that a number of non-designated heritage assets would be affected but deferred to the local authorities in respect of these.

4.9.46. The local authorities in their RRs [RR-0998; RR-1178; RR-1340 and RR-1351] raised concerns in relation to potential adverse effects on the historic environment and on the following specific issues:

- Potential impacts on Grade II listed Chippenham Park RPG;

- The archaeological mitigation strategy was considered incomplete;
- Impacts on non-designated heritage assets were focussed on archaeological sites, and historic buildings of local interest did not appear to have been considered; and
- Small works areas included within the Order limits in the Freckenham and Exning conservation areas were not sufficiently detailed for an assessment to be made as to potential effects on the character and appearance of the conservation areas and on the setting of listed buildings.

Local Impact Report

4.9.47. The local authorities considered cultural heritage in their joint Local Impact Report (LIR) [REP1-024], identifying the following potentially negative effects:

- Fundamental proximity conflict with the Chippenham Park complex of Grade II RPG, Grade II* and II listed buildings and non-designated assets, in terms of changes to the immediate and wider rural setting of the park and the interruption of established views. It was not considered that screening would mitigate the extensive development proposed, and that proposed screening could exacerbate impacts, for example by blocking views, competing with the dominance of the Avenue and by interrupting long-established visual relationships between the park and the landscape beyond.
- The proposed solar arrays and associated development in parcels W03 to W12 would sever the connection between Chippenham Park and the Limekilns. Further tree planting to screen the Proposed Development would add to the harm to the historic park by distracting from its dominance in the landscape.
- The integrated ancient landscape associated with Snailwell Fen would be negatively affected by the Proposed Development. The setting of the scheduled Roman Villa to the west of the River Snail and the Order limits would be seriously harmed, as would the relict floodplain forming the setting of the non-designated, contemporary settlement associated with the Roman Villa on the riverbank. It was considered that these two associated sites would be detrimentally harmed by the Proposed Development; screening would not mitigate the impacts and could exacerbate the adverse effects on the historic landscape by blocking views to and across the River Snail and its floodplain. Physical impacts could be caused by construction in parcel W01, causing the desiccation of peat-filled Roman ditches, channels, and potential buried old ground surfaces.

Other Representations to the Examination

4.9.48. HE in its Written Representation (WR) [REP2-143] commented that the Proposed Development lies in a highly sensitive area for the historic environment and that the Development Consent Order (DCO) would, if granted, result in significant effects on historic environment receptors. Whilst considering the baseline data provided by the Applicant to be broadly appropriate, and the methodology used to assess the cultural heritage datasets sufficient, there were a number of issues that HE highlighted and requested consideration of during the Examination, including:

- Chippenham Park RPG and associated listed buildings including the Hall and southern gates;
- The four bowl barrows (part of the Chippenham Barrow Cemetery) and Snailwell Roman Villa Scheduled Monuments; and
- The management of archaeological sites within the Proposed Development.

4.9.49. HE broadly supported the conclusions reached in the ES for the majority of the assets considered but noted some inaccuracies and concerns in relation to the

assessment of significance of heritage assets that is derived from their settings. It considered that some of the proposed solar arrays would infill a large expanse of the existing open agricultural land to the east and south of Chippenham Hall and its RPG, and that this modern infrastructure of an industrial character would be out of keeping with the historic context of the landscape park. Although proposed buffer planting would assist in reducing some of the visual impacts, HE considered that there would remain a perceptible change to the character of the setting of the RPG and, to a lesser extent, to its associated listed buildings, notably the grade II* neoclassical lodges and Triumphal Arch. This would result in harm to their significance. Whilst agreeing with the Applicant's conclusion that the Proposed Development would have a medium magnitude of impact on the RPG, resulting in a moderate adverse and significant effect, HE's view diverged from the Applicant's in terms of the latter's assertion that the harm would be temporary and reversible. HE noted that the Proposed Development would be in place for nearly two generations and would establish the principle of built form of an industrial character in land between Chippenham Hall and Newmarket, thereby creating a precedent for potential extended operation or intensification. HE considered that this would create a fully residual effect and would equate to a higher magnitude of impact and a greater level of harm than the Applicant stated; there would be a significant residual impact and effect from changes to the landscape and this would result in loss of significance through changes to the setting of the heritage assets.

- 4.9.50. HE supported the placing of the bowl barrows SM in a mitigation area to be managed as permanent grassland but considered that this would not fully reduce the impact of the Proposed Development upon the monument. HE suggested that the industrial nature of the solar panels and associated development to the north and west would change its setting considerably, and that the new hedges proposed to be planted as landscape mitigation would further enclose it. The Proposed Development would therefore, in HE's view, cause harm to the significance of the designated heritage asset through development within its setting and would be out of keeping with the historically open and undeveloped context of the barrow cemetery. Whilst the Applicant had identified a moderate adverse impact of the Proposed Development upon the SM, and a significant effect, HE suggested that this would equate to a high degree of harm in relation to NPPF policies and a significant residual effect of a higher magnitude of impact and a greater level of harm than considered by the Applicant.
- 4.9.51. In respect of the Roman Villa SM between Fordham and Snailwell, HE acknowledged that the SM itself would be outside the Order limits but considered that the Proposed Development at Sunnica West B would be within its setting and would cause less than substantial harm to the significance of the heritage asset and that this would be a significant effect. HE noted that the Applicant had stated that the setting of the villa did not contribute to the significance of the asset other than in a minor way but described this as a "*curious statement which does not bear scrutiny in relation to our understanding of the way in which a settlement would work in a landscape*". HE considered therefore that the impact of the Proposed Development upon the significance of the asset had been undervalued and that there would be a significant residual impact and effect from the permanent changes to the landscape which would result in the loss of significance through changes to its setting.
- 4.9.52. Say No to Sunnica Action Group (SNTS) [REP2-240; REP2-240a and REP2-240c] commented on the potential effects of the Proposed Development on designated and non-designated heritage assets. It disagreed with the Applicant's assessment of moderate adverse significance of effect on the Bronze Age bowl barrows (Chippenham Barrow Cemetery) and suggested that the Applicant had understated

the potential impact and that, rather, there would be a medium magnitude impact, which would have a major adverse significance of effect. SNTS noted some additional barrows outside the Order limits where it also considered that the Applicant's assessment of effects was too low.

- 4.9.53. In terms of the Snailwell Roman Villa SM, SNTS considered that the Proposed Development would cause a fundamental change in the landscape character of its setting, transforming it from an agricultural to a semi-industrialised landscape. SNTS considered that it would result in a low impact on an asset of high value, resulting in a moderate adverse significance of effect.
- 4.9.54. SNTS considered that the Proposed Development would have a detrimental effect on the Chippenham Park RPG by causing a significant impact on the character of the landscape forming its setting and that it would result in a major adverse significance of effect.
- 4.9.55. A number of listed buildings were identified that SNTS considered would suffer a detrimental impact, albeit with the exception of Waterhall Farmhouse and listed buildings associated with Chippenham Park RPG, SNTS agreed with the Applicant's assessments of effects.
- 4.9.56. SNTS acknowledged that the Proposed Development would not have direct impacts on any conservation areas but suggested that the transformation of the existing agricultural landscape into a semi-industrialised landscape would have a detrimental impact on the settings of the Isleham, Freckenham and Snailwell conservation areas.
- 4.9.57. A number of non-designated heritage assets were considered by SNTS to be potentially affected by the Proposed Development, including archaeological features and deposits, the site of a military plane crash near Isleham, and the culturally and historically important landscape around Newmarket and associated with the horseracing industry, in particular potential adverse impacts on the Limekilns gallops. Using the Applicant's assessment matrix, SNTS considered that the Proposed Development would result in an impact of medium magnitude on the Limekilns, resulting in a moderate adverse effect which would be significant.
- 4.9.58. Isleham Parish Council [REP2-148] and the Isleham Society [REP2-149] submitted WRs detailing concerns in relation to the historic and cultural environment and, specifically, to a military plane crash. In 1949 a fully-laden B-50 bomber aircraft had crashed into a field to the south-east of Isleham, narrowly avoiding the village and resulting in the deaths of the 12 crew. This field was included in the Proposed Development as land parcel E05 where solar panels were to be sited.
- 4.9.59. Chippenham Parish Council [REP2-115], Newmarket Town Council [REP2-207]; Isleham Parish Council [REP2-148] and Snailwell Parish Council [REP2-244] expressed concerns in relation to the impact of the Proposed Development upon aspects of the historic landscape and Worlington Parish Council [REP2-263] commented on the vulnerability of historic buildings and structures to potential damage from vehicles moving through the village.

Key Issues Examined

- 4.9.60. Building on the key issues identified in the Initial Assessment of Principal Issues [PD-009] and drawing on issues raised in RR, WR and the LIR, the following were identified by the ExA as key issues for examination:

- Heritage assessment;
- Archaeology;
- Chippenham Park RPG;
- The Isleham plane crash site; and
- Impacts on other designated and non-designated heritage and cultural assets.

Heritage Assessment

- 4.9.61. During the Examination and in Statements of Common Ground (SoCG), there was general agreement with the assessment methodology used by the Applicant. The local authorities and SNTS did not pursue their general objections as set out in their WRs, but where there were differences in opinion as regards the degree of potential harm to assets these concerns were raised under specific items, as discussed in detail below.

Archaeology

- 4.9.62. Concerns relating to the historic landscape and archaeology within and around Sunnica West B, including potential impacts on Snailwell Roman Villa SM, were addressed by the Applicant through the removal of Sunnica West B (apart from the cable route) from the Proposed Development as part of CR 2 [REP3A-037 and REP5-059] and associated changes to the OLEMP [REP10-012] and the Environmental Masterplan [REP10-041]. CR2 also included an additional archaeological protection area in the north of parcel W04, following the results of geophysical surveys that indicated an area of concentrated archaeological features that represented an extension to an area already proposed for archaeological preservation to the immediate west of W04. West Suffolk Council [REP4-131] raised concerns about the management of areas set aside for both archaeological and ecological (stone curlew mitigation) purposes (land parcel ECO1), specifically that archaeological constraints could conflict with the ecological management of the offsetting area.
- 4.9.63. At Deadline 5 the Applicant submitted a Detailed Archaeological Mitigation Strategy [REP5-066, later updated as REP10-052], along with a Historic Environment Management Plan (HEMP) as Annex E to the OLEMP [REP5-014, with a later, final version REP10-012]. Mitigation to minimise or prevent impacts on cultural heritage were included in the Framework Construction Environmental Management Plan [REP10-014].

Chippenham Park RPG

- 4.9.64. During the Examination there was discussion about potential impacts of the Proposed Development on the Chippenham Park RPG and the effects and level of harm that the Applicant and IPs considered would result. At the request of the ExA the Applicant submitted historic maps of Chippenham Park [REP4-031 – confidential] and a report on the current status of heritage aspects of the RPG [REP5-060] which also included, on a non-confidential basis, the historic maps previously submitted in [REP4-031]. The ExA and IPs visited Chippenham Park and its setting and surrounding landscape on Accompanied Site Inspection 1 (ASI1) [EV-013] and ASI4 [EV-065].
- 4.9.65. In response to concerns about the potential loss of trees where the proposed cable route would cross The Avenue, the Applicant agreed to avoid impacts on trees by micrositing the proposed works around them or by using horizontal directional drilling (HDD) [REP5-052 and REP7-058].

- 4.9.66. During Issue Specific Hearing 2 (ISH2) [EV-044] there was discussion about the degree of harm in respect of Chippenham Park RPG and HE considered that there would be a high level of harm on the setting. By the close of the Examination, although there was general agreement that the impact of the Proposed Development on the RPG would cause less than substantial harm, there were outstanding concerns on the part of the local authorities [REP8-029], and SNTS [REP8-040 and REP8-050] about the scale of harm, which they maintained would be at the upper end of less than substantial, and about the extent to which proposed mitigation was or was not appropriate.

The Isleham Plane Crash Site

- 4.9.67. Following representations from IPs concerning the plane crash site in parcel E05 the Applicant proposed to exclude the site of the crash from the operational area of the solar farm in that land parcel [REP3A-037], suggesting initially the exclusion of a 50 metre sq rectangle to be excluded. This was included in Change Request 2 (CR2) [REP5-059]. The Applicant applied to the Ministry of Defence Joint Casualty and Compassionate Centre (JCCC) for a licence under the terms of the Protection of Military Remains Act to undertake development in the vicinity of the crash site and suggested a provisional expanded exclusion area comprising a 100 metre (m) radius circle in the event of the licence not being granted. The Applicant submitted further, declassified, information about the crash obtained from the Ministry of Defence [REP7-062]. The proposed exclusion area (50m square) was included in the OLEMP [REP10-012] and the Environmental Masterplan [REP10-041 and REP10-050] which also included provision for a publicly accessible viewing place and memorial for the crash site within the landscape buffer on the Beck Road frontage of parcel E05. The exclusion area was said to be secured through Requirement 23 of the draft Development Consent Order (dDCO).
- 4.9.68. The potential exclusion of the plane crash site was a subject of discussion at ISH2 [EV-044] and also at ISH4 [EV-085], with Isleham Parish Council and SNTS asserting that the 50 m sq exclusion area was inadequate, given the nature of the crash and the fact that the aircraft had a 43-metre wingspan. They suggested that although MOD records stated that the remains of the aircraft and the bodies of the crew were recovered, it could not be ascertained that all remains had indeed been recovered, and magnetic disturbances recorded across the site indicated that they may not have been. East Cambridgeshire District Council and Cambridgeshire County Council had, at the time of submission of the application, been unaware of the presence of the plane crash site, but when they became aware of it and of its significance to the local community, they supported proposed measures to secure appropriate treatment for the crash site, whilst still seeking the removal of land parcel E05 from the Proposed Development for other reasons as set out in their joint LIR and WR.
- 4.9.69. The ExA observed the crash site and land parcel E05 on unaccompanied site inspections and on ASI2 [EV-021].

Other Designated and Non-designated Heritage and Cultural Assets

- 4.9.70. During ISH2 there was some discussion in relation to conservation areas, historic landscapes and buildings of local interest, the latter including the Lodge at the southern end of Chippenham Park Avenue. These were observed by the ExA on unaccompanied site inspections (USI) and ASIs [EV-001; EV-003 and EV-021]. In terms of conservation areas, considerations largely related to their wider settings and intervisibility between prominent features such as church towers.

- 4.9.71. By the close of the Examination there were outstanding concerns on the part of SNTS in relation to the significance of the historic horseracing landscape around Newmarket, specifically in terms of the Limekilns [REP8-040].

CONCLUSION

Approach and Methodology

- 4.9.72. The ExA recognises IP concerns in relation to a perceived skewing of the assessment of heritage assets and has applied its own judgement in terms of the value of the assets considered. Omissions in the initial assessments and deficiencies in information submitted by the Applicant were largely, but not entirely, covered by the submission of additional information by the Applicant and IPs and the ExA has reached its conclusions on the basis of the consideration of all material submitted and through its observations on USIs and ASIs.

Archaeology

- 4.9.73. The removal of Sunnica West B from the Proposed Development has resolved the potential conflicts with designated and non-designated heritage assets in that vicinity and the ExA is satisfied that impacts on the proposed cable route will be adequately mitigated through the Construction Environmental Management Plan (CEMP).
- 4.9.74. The proximity of the Bronze Age bowl barrows to solar arrays on land parcels W07 and W09 will have an adverse impact on the setting of the Scheduled Monument, although effects will be mitigated as the proposed landscape screening develops and matures.
- 4.9.75. The ExA has considered the various submissions in respect of the potential effects of the Proposed Development on archaeology and considers that whilst these may amount to some harm, they would have limited negative weight in terms of the DCO being made.

Chippenham Park RPG

- 4.9.76. Chippenham Park RPG owes much of its heritage interest and significance to the historic role of the house and estate in the wider agricultural landscape. Formal avenues such as that extending 4.3km south of the Hall acknowledged and emphasised the relationship between landowner and agricultural hinterland, with views across the wider parkland being an important part of the experience of arrival at the entrance to the formal park, gardens and house, that entrance at Chippenham Park originally having been the Triumphal Arch and lodges at the southern entry point in the Park Wall. Although the immediate surroundings have changed over the last three centuries, the ExA does not agree with the Applicant that the Avenue is “*a feature of lesser historic significance contributing little to the overall significance of the designated asset*” [REP5-060]. On ASIs it was observed that the formal alignment of trees associated with the Avenue still forms a distinct feature in the landscape over a wide area and that views to and from the Avenue and the Park Wall are more extensive than is apparent in the limited analysis of views presented by the Applicant.
- 4.9.77. The NPPF defines the setting of a heritage asset as being “*the surroundings in which a heritage asset is experienced*” and advises that “*any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification*”.

Whilst the Applicant and other IPs agree that the effects of the Proposed Development on Chippenham Park RPG would not be substantial, the ExA does not agree with the Applicant's assertion that the effects would be moderate adverse [APP-039]. The "*glimpsed views*" will, rather, be extensive views from multiple directions and those views will become quasi-industrial, comprising solar panels and associated infrastructure, rather than views across productive agricultural land.

4.9.78. Although the Applicant relies on proposed mitigation planting to reduce impacts of the Proposed Development on views, that planting will in itself change the landscape. It will reduce visibility over the wider landscape, so reducing the visual links between Park, wider agricultural estate and landscape and, in respect of the Avenue specifically, will blur the legibility of the once-formal Avenue in the immediate and wider landscape. Despite the fact that the formal lines of trees have largely been lost, the potential to recreate a more formal aspect remains and the proposed mitigation is not sensitive to the historic design of the Park.

4.9.79. The ExA finds conflicts in terms of both scale and proximity between the Proposed Development and the Chippenham Park RPG by virtue of harm to the setting in which the asset is appreciated. It considers that the harm would be at the high end of less than substantial. Although the Proposed Development would be temporary, the effects in terms of the visual impacts of the solar farm infrastructure on the setting of the RPG would be evident for two generations, and the effects in terms of alterations to the landscape through mitigation planting would be likely to be permanent. The ExA considers that these effects weigh substantially against the Proposed Development.

Isleham Plane Crash Site

4.9.80. The ExA has given very careful consideration to submissions relating to the effects of the Proposed Development on the site of the B-50 bomber crash in land parcel E05, which resulted in the tragic loss of twelve airmen whilst avoiding the village of Isleham. It was evident from written and oral submissions that the site is important to the local community and has the status of a non-designated cultural asset. The ExA is not persuaded that either the 50 m square, or 100 m radius, exclusion areas suggested by the Applicant are appropriate given the possibility that not all remains were removed from the site. Whilst the Applicant proposes to acknowledge the historic event by means of a viewing platform and commemorative plaque, surrounding solar panels would restrict visibility of the impact site and approach path, especially in relation to the 50 m square exclusion area. Furthermore, the change in character from an expansive, agricultural field to a semi-industrial, enclosed landscape would result in a marked change in landscape character which is part of the appreciation of the heritage site. The ExA notes that there are also concerns in relation to wider landscape and visual impact and to effects on biodiversity in relation to parcel E05 and considers that development in this land parcel would be inappropriate and weighs substantially against the Proposed Development.

Other Designated and Non-designated Heritage and Cultural Assets

4.9.81. Whilst effects on other designated and non-designated historic and cultural assets may individually be of a lesser magnitude, the overall size and geographic extent of the Proposed Development and the difficulties of implementing mitigation measures appropriate to all such assets mean that there are considerable challenges in terms of siting the development sensitively and achieving adequate mitigation. The ExA does not consider that the large-scale nature of the proposed solar farm takes

adequate account of the multiple historic and cultural assets within and around the site and their settings; this weighs slightly against the Proposed Development.

4.9.82. Taking all representations and policies into account, the ExA in summary concludes that:

- Potential adverse effects on archaeological sites, settings and landscapes weigh against the Order being made to a limited extent;
- The Proposed Development has the potential to cause harm to the setting of the Chippenham Park RPG and this weighs substantially against the Order being made;
- The Proposed Development does not demonstrate adequate and appropriate mitigation for potential effects on the Isleham B-50 bomber plane crash site and this weighs substantially against the Order being made; and
- The Proposed Development has not been designed sensitively in relation to heritage and cultural assets and their associated settings in general and this weighs slightly against the Order being made.

4.9.83. The weight of the ExA's conclusions in respect of Chippenham Park RPG and the Isleham plane crash site are such that, in overall terms, the ExA considers that the Proposed Development would have negative impacts on cultural heritage and the historic environment and this weighs substantially against the Order being made.

4.9.84. The removal of the land parcels E05 and W03 to W12 as suggested in the SCC AP, along with the substation/BESS site in parcel W17, would mitigate the Proposed Development in respect of adverse impacts on the setting of the Chippenham Park RPG, the Isleham plane crash site and the Bronze Age bowl barrow SAM. The ExA considers therefore that the SCC AP would reduce impacts on cultural heritage and the historic environment to minor adverse.

4.10. LANDSCAPE AND VISUAL IMPACT

INTRODUCTION

4.10.1. This section addresses the effects of the Proposed Development on the landscape and on views, in terms of specific and general impacts. It also considers the effectiveness and effects of proposed mitigation. Considerations under this heading relate to and overlap with discussions and conclusions in relation to cultural heritage and historic environment, ecology and biodiversity and socio-economics and land use (the latter in relation to the horseracing industry).

POLICY CONSIDERATIONS

National Policy Statements (NPSs)

NPS EN-1

4.10.2. Paragraph 4.5.1 of NPS EN-1 sets out the importance of applying "good design" to energy projects as this should produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible.

4.10.3. Paragraph 5.9.1 of NPS EN-1 notes that the landscape and visual effects of energy projects will vary from case to case according to the type of development, its location and the particular landscape setting.

- 4.10.4. In paragraph 5.9.8 of NPS EN-1 there is recognition that virtually all energy NSIPs will have landscape effects and that projects need to take account of their potential impacts. Having regards to siting, operational and other relevant constraints, the aim should be to minimise harm, providing reasonable mitigation where possible and appropriate. However, local landscape designations should not be used in themselves to refuse consent, as this may unduly restrict acceptable development.
- 4.10.5. Paragraph 5.9.14 of NPS EN-1 provides guidance for the consideration of the landscape effects of energy NSIPs that would be located outside nationally designated areas, but nevertheless may be highly valued and protected by development plan designations. Where a development plan has policies based on local character assessments, particular attention should be paid to such assessments.
- 4.10.6. Paragraph 5.9.15 of NPS EN-1 highlights that the scale of energy NSIPs may mean that they are visible over long distances. It is therefore necessary to judge whether any adverse landscape impacts would be so damaging as to outweigh an NSIP's benefits, including its need.
- 4.10.7. Paragraph 5.9.16 of NPS EN-1 advises that in considering whether any adverse impacts would or would not be acceptable, regard should be had to the duration of those impacts, including their reversibility in reasonable timescales.
- 4.10.8. Paragraph 5.9.17 advises that consideration should be given to whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation.
- 4.10.9. Paragraph 5.9.18 of NPS EN-1 recognises that all proposed energy infrastructure is likely to have visual effects for many visual receptors around proposed sites or for visitors to an area and it is therefore necessary to judge whether the visual effects outweigh the benefits of the project.
- 4.10.10. Paragraph 5.9.21 of NPS EN-1 refers to the potential for reducing the scale of projects to help mitigate their visual and landscape effects, although that might result in significant operational constraint and reduced generation output. There may, however, be exceptional circumstances, where mitigation could have a very significant benefit and warrant a small reduction in function. Paragraph 5.9.22 goes on to indicate that adverse landscape and visual effects may be minimised through appropriate siting, design and landscaping schemes.

Draft NPS EN-1

- 4.10.11. Draft NPS EN-1 repeats the advice set out above from designated NPS EN-1, with an addition in Paragraph 5.10.10 which advises that applicants should consider how landscapes can be enhanced using landscape management plans, as this will help to enhance environmental assets where they contribute to landscape and townscape quality.

Draft NPS EN-3, September 2021

- 4.10.12. Paragraph 2.48.4 of Draft NPS EN-3 recognises that utility-scale solar farms are large sites that may have a significant zone of visual influence and that the two main impact issues that determine distances to sensitive receptors are therefore likely to be visual amenity and glint and glare.

- 4.10.13. Paragraph 2.51.3 of Draft NPS EN-3 advises applicants to carry out landscape and visual assessments, which may require visualisations to demonstrate the effects of a proposed solar farm on the setting of heritage assets and any nearby residential areas or viewpoints.
- 4.10.14. Applicants are advised in Paragraph 2.51.4 of Draft NPS EN-3 to follow the criteria for good design set out in Section 4.6 of Draft NPS EN-1 (Section 4.5 of designated NPS EN-1) when developing projects and that they will be expected to direct considerable effort towards minimising the landscape/visual impact of solar PV arrays, including minimising the impact of security measures such as fencing.
- 4.10.15. Paragraph 2.51.5 of Draft NPS EN-3 advises applicants to have regard to the retention of vegetation on boundaries, considering landscape and visual impact carefully at the pre-application stage. Existing hedges and established vegetation, including mature trees, should be retained wherever possible and the impact of the proposed development on these should be informed by appropriate surveys and assessments.
- 4.10.16. Applicants are advised in Paragraph 2.51.6 of Draft NPS EN-3 to consider the potential to mitigate landscape and visual impacts through the retention or creation of hedgerows and use of natural features.
- 4.10.17. Paragraph 2.51.7 of Draft NPS-EN-3 advises that the Secretary of State will consider the visual impact of any proposed solar PV farm, taking account of any sensitive visual receptors, and the effect of the development on landscape character, together with the possible cumulative effect with any existing or proposed development.
- 4.10.18. Paragraph 2.52.4 of Draft NPS EN-3 advises the Secretary of State to assess the potential impact of glint and glare on nearby homes and motorists and other receptors.

National Planning Policy Framework (NPPF), revised July 2021

- 4.10.19. Chapter 15 of the NPPF contains overarching policies for conserving and enhancing the natural environment. It indicates that planning decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes, recognising the intrinsic character and beauty of the countryside.

Forest Heath Local Plan

- 4.10.20. Policy CS2 of the Forest Heath Local Development Framework Core Strategy (2010) [REP1-024a, Appendix 1] relates to the natural environment, and policies CS3 (landscape character) and CS5 (design quality and local distinctiveness) are also relevant.
- 4.10.21. The Forest Heath and St Edmundsbury Local Plan Joint Development Management Policies Document (2015) [REP1-024a, Appendix 2] includes the following policies that relate to the rural environment and landscape: DM2 (development principles and local distinctiveness); DM5 (development in the countryside); and DM5 (development in the countryside).

East Cambridgeshire Local Plan

- 4.10.22. Relevant policies in the East Cambridgeshire Local Plan (2015) [REP1-024e] are ENV1 (landscape character and settlement) and ENV2 (design).

“Made” Neighbourhood Plans

- 4.10.23. Five neighbourhood plan (NP) areas fall within or in close proximity to the Proposed Development, for which three have “made” neighbourhood plans [REP1-024a] and which contain policies relating to landscape and visual amenity.

Fordham NP (“made” December 2018) [REP1-024a Appendix 11]

Policy 6 designates Locally Important Views and advises that development proposals should not detract from these.

Isleham NP (“made” May 2022) [REP1-024a Appendix 12]

- 4.10.24. Policy 5 designates Locally Important Views, which include view IV11 from Beck Road to the Ark Church and farmland beyond.

Newmarket NP, “made” February 2020 [REP1-024a Appendix 9]

- 4.10.25. Policy NKT2 identifies extensive Key Views, including a number towards the east, which should be taken into account in development proposals. It emphasises the public recreation and amenity importance of the heathland and gallops surrounding Newmarket and owned by the Jockey Club (Community Action A2).

THE APPLICANT’S CASE

- 4.10.26. The principal application documents relating to landscape and visual issues were:

- [APP-042]: ES Chapter 10 - Landscape and Visual Amenity;
- [APP-101]: ES Appendix 10B – Tree Constraints Report
- [APP-102]: ES Appendix 10C – Landscape and Visual Impact (LVIA) Assessment Methodology
- [APP-103]: ES Appendix 10D – Published Landscape Character Extracts
- [APP-104]: ES Appendix 10E – Local Landscape Character Areas
- [APP-105]: ES Appendix 10F – Visual Baseline
- [APP-106]: ES Appendix 10G – Landscape Effects
- [APP-107]: ES Appendix 10H – Visual Effects
- [APP-108]: ES Appendix 10I – Landscape and Ecology Management Plan (LEMP)
- [APP-121]: ES Appendix 16A – Glint and Glare Assessment
- [APP-195] to [APP-200]: ES Figures 10-5 to 10-10 (landscape character – background)
- [APP-201] to [APP-206]: ES Figures 10-11a to 10-11f (zones of theoretical visibility) (ZTVs)
- [APP-207]: ES Figure 10-12 – Visual Receptor Plan Overview
- [APP-208]: ES Figure 10-13 – Verifiable View (Photomontage) Locations
- [APP-209] to [APP-214]: ES Figures 10-14a to 10-14f – Landscape Masterplan
- [APP-215] to [APP-219]: ES Figure 10 – Viewpoint Photographs
- [APP-220] to [APP-232]: ES Figure 10 – Verifiable Photomontages

- 4.10.27. New or amended documents relating to landscape and visual issues were subsequently submitted into the Examination by the Applicant at Deadlines as part of the Change Requests, in response to requests from the ExA including Written Questions and in response to the submissions of IPs. These included:

- [REP1-008 to REP1-013]: ES Figures 10-11a to 10-11f (ZTVs)
- [REP1-014]: ES Figure 10-12 – Visual Receptor Plan
- [REP1-017 to REP1-022]: ES Figures 1a to 1f – Equine ZTVs

- [REP2-037 Q1.7.1 and REP2-038 Appendix I] Ely Cathedral views analysis
- [REP2-038]: Settlement Design Iteration
- [REP3-021, REP7-046 and REP7-047] – Arboricultural Impact Assessment
- [REP3-022]: Environmental Masterplan
- [REP3-023]: TPOs Location Plan
- [REP6-037]: Design Principles
- [REP7-054]: Environmental Masterplan (Zoomed In)
- [REP7-063]: Landscape Mitigation Parcel Schedule
- [AS-321]: Landscape and Visual Impact Position Statement
- [AS-326]: Hedgerow Creation/Retained/Loss
- [REP8]: Position on “Parcel by Parcel” Mitigation

Methodology and Approach to the LVIA

4.10.28. The scope of and approach to the LVIA was initially set out by the Applicant in the EIA Scoping Report [APP-051] and was developed with reference to the following principal sources of guidance and information:

- Guidelines for Landscape and Visual Impact Assessment, Third Edition (Landscape Institute and Institute of Environmental Management and Assessment, 2013) (hereafter referred to as GLVIA 3);
- Visual representation of development proposals (Landscape Institute, 2017);
- Landscape Institute Advice Note 01/11: Photography and photomontage in landscape and visual impact assessment; and
- Landscape Institute Technical Guidance Note “Assessing landscape value outside national designations” (May 2021).

4.10.29. The LVIA was to be informed by preliminary desk-based studies for example in relation to landscape character, computer-generated ZTVs, and assessing views from (initially) 13 viewpoints. Following initial assessments showing that the Proposed Development might be visible beyond 5km, the Applicant decided that the effects would be less significant beyond 2km and proposed to limit assessment to within 2km. The Planning Inspectorate advised in the Scoping Opinion [APP-052] that it would be premature to limit the LVIA to within 2km and that the assessment study area should be determined with regard to the extent of the impacts and the potential for significant effects. The Inspectorate further advised the Applicant that:

- Relevant landscape planning designations, including locally important landscapes, should be considered in the assessment;
- The study area and relevant and representative viewpoints for assessment should be agreed with relevant consultation bodies;
- Consideration should be given to preparing photomontages to illustrate the effects of the scheme at Year 5, in addition to Years 1 and 15 as suggested by the Applicant; and
- Assessment of the effects on landscape features should include the loss of any existing trees, hedgerows and other vegetation.

4.10.30. The LVIA informing the documents submitted in the ES was based on a study area extending 2km from the Order limits [APP-191]. This was considered by the Applicant to cover the area which the Proposed Development might influence impacts on views and landscapes in a significant manner. Prior to determining the 2km study area, fieldwork was undertaken across a 5km radius around the Order limits, supported by ZTVs. Analysis of the landscape and visual baseline across this 5km radius led the Applicant to conclude that the intervening landform, buildings

and vegetation beyond 2km from the Order limits were such that significant landscape and visual effects would not occur.

- 4.10.31. On Unaccompanied and Accompanied Site Inspections [EV-001; EV-003; EV-064 and EV-013] the ExA noted that Ely Cathedral was clearly visible to the north of the Order limits. In the First Written Questions [PD-017] the Applicant was therefore asked why the Cathedral had been excluded from the LVIA. In response [REP2-037 Q1.7.1] and [REP2-038 Appendix I] the Applicant provided an analysis of views from the Cathedral.
- 4.10.32. The Applicant undertook LVIA for each of the individual site areas, followed by an assessment of the Proposed Development as a whole, i.e. a combined assessment of Sunnica East Sites A and B, Sunnica West Sites A and B, and the cable routes. The landscape assessment was considered to be in accordance with GLVIA 3 and identified the existing physical fabric or individual features of the landscape, including patterns of land use, land cover and aesthetic and perceptual qualities. The landscape assessment identified published landscape receptors and, where considered necessary, identified local landscape character areas to add further detail to the published studies. The landscape receptors were then assessed in terms of their landscape value and susceptibility to change, based on the criteria presented in ES Appendix 10C [APP-102], to determine their sensitivity to the Proposed development. Landscape receptor sensitivity was defined as either high, medium, low or very low, based on the combination of landscape value and landscape susceptibility.
- 4.10.33. The visual assessment undertaken by the Applicant related to the potential changes to existing views from identified visual receptors e.g. residents, public rights of way users or motorists, as a result of the addition or loss of features to their existing view. The visual receptors were identified via fieldwork and similarly assessed in terms of the value of their view and their susceptibility to change (also as set out in ES Appendix 10C [APP-102]) to determine their sensitivity to the Scheme. Visual receptor sensitivity was defined as either high, medium, low or very low, based on the combination of value and susceptibility.
- 4.10.34. Once the landscape and visual receptors had been established, the magnitude of impact (change) resulting from the Proposed Development was assessed in relation to each receptor for the assessment phases (i.e. construction, operation year 1 and year 15 and decommissioning). The magnitude of impact considered the size and scale, duration and reversibility of the Proposed Development and was determined upon a scale of high, medium, low, very low and none. The significance of landscape and visual effects was then classified by considering the relationship between the sensitivity of the receptor and the magnitude of impact, along with professional judgement, using a matrix as a guide, as set out in ES Appendix 10C [APP-102]. In addition, consideration was given to the conclusions of the Glint and Glare Assessment [APP-121].
- 4.10.35. At the request of the ExA and due to the importance of the land within and adjacent to the Order limits for racehorse training and associated equine activities, the LVIA was extended in order to include equine ZTVs [REP1-017 to REP1-022].
- 4.10.36. A total of 89 viewpoints (numbered 1 to 59 plus suffixes) were assessed for visual receptor sensitivity during Construction, Operation and Decommissioning phases with Operation at Year 1 and Year 15 [APP-107 and APP-207]. Year 1 and 15 photomontages were prepared for 12 viewpoints [APP-208] and Year 5

photomontages were submitted for four viewpoints at Deadline 2 [REP2-038 Appendix M].

Baseline Conditions

- 4.10.37. Section 10.6 of Chapter 10 of the ES [APP-042] set out a detailed description of the existing landscape and visual context of the Proposed Development site, including:
- A description of the landscape baseline across the 2km study area;
 - An analysis of the landscape features within the Order limits;
 - The visual baseline; and
 - A summary of the sensitivity of the landscape and visual receptors.
- 4.10.38. The ES Figures [APP-195 to APP-200] confirmed that the study area did not fall within a nationally designated landscape (Area of Outstanding Natural Beauty or National Park). No parts of the study area were subject to local landscape designations
- 4.10.39. Figure 10-5 of the ES [APP-195] indicated that Sunnica West fell within Natural England National Character Area (NCA) 87, East Anglian Chalk; the majority of Sunnica East fell within NCA 85, The Brecks, and a small portion of land parcel E05 in Sunnica East fell within NCA 46, The Fens. Local Landscape Character Areas were set out in ES Figure 10-10 [APP-200].

Potential Effects Identified by the Applicant

- 4.10.40. The Applicant summarised the likely impacts and effects on landscape and views in Section 10.8 and Appendices 10G and 10H of the ES [APP-042, APP-106 and APP-107], relating to the construction, operational and decommissioning phases of the Proposed development.
- 4.10.41. In terms of landscape effects, ES Appendix 10G [APP-107] set out the following conclusions:
- Magnitude of impact on NCA 46, The Fens, was considered to be “Very Low”, with “Negligible Adverse” significance of effect during Construction, Operation (Year 1 winter and Year 15 summer) and Decommissioning phases;
 - Magnitude of Impact on NCA 85, The Brecks, was considered to be “Very Low” or “None” with “Negligible Adverse” or “Neutral” significance of effect during Construction, Operation (Year 1 winter and Year 15 summer) and Decommissioning phases, apart from “Low” magnitude of impact and “Minor Adverse” significance of effect on the Intra-project cable route during the Decommissioning phase (winter);
 - Magnitude of Impact on NCA 87, East Anglian Chalk, was considered to be “Very Low” or “None”, with “Negligible Adverse” or “Neutral” significance of effect during Construction, Operation (Year 1 winter and Year 15 summer) and Decommissioning phases, apart from “Low” magnitude of impact and “Minor Adverse” intra-project effects during the Construction phase and at Operation Phase Year 1 (winter);
 - Impacts on local character areas defined in published landscape character assessments were assessed as being “None”, “Very Low”, “Low” and some “Medium” (“Neutral”, “Negligible Adverse”, “Minor Adverse” and “Moderate Adverse”);
 - Landscape effects across the Proposed Development Site were assessed as “High” or “Medium” magnitude of impact with “Major Adverse” or “Moderate Adverse” significance of effect in both Sunnica East and Sunnica West, and

variable between “High” (“Major Adverse”) and “Very Low” (Negligible Adverse) or “None” (“Neutral”) along the cable routes; and

- Landscape effects on Local Landscape Character Areas (LLCAs) defined by the Applicant were assessed as being “None” (“Neutral”) or “Very Low”/“Low” magnitude of impact (“Negligible Adverse”/“Minor Adverse”) with some “Medium” and “High” impacts (“Moderate Adverse”/“Major Adverse”).

4.10.42.

In terms of visual effects, ES Appendix 10H [APP-108] set out conclusions in relation to impacts and significant effects on views, based on the viewpoints set out in Figure 10-12, Visual Receptor Plan Overview [APP-207] and identified the following viewpoints as likely to experience “Major Adverse” effects:

Table 4.1 Views assessed as likely to experience “Major Adverse” visual effects

Viewpoint ref	Location	Assessment Phase
1	View SE from Public Right of Way (PRoW) W-398/030/0	Construction Phase, winter
5	View SE from Beck Road	Construction Phase, winter
11	View NW from PRoW W-257/007/0	Construction Phase, winter
11A	Residents in Beck Road property	Construction Phase, winter
12	Lee Farm	Construction Phase, winter & Operation Phase Year 1, winter
15A	View W from local highway U6006	Construction Phase, winter & Operation phase, Year 1, winter
15B	View SE from U6006	Construction Phase, winter
16	View NE from U6006	Construction Phase, winter
18	View NW from Elms Road	Construction Phase, winter
20	View N from PRoW W257/003/0	Construction Phase, winter
21A	View SE from Badlingham Road	Construction Phase, winter
25	View SW from Golf Links Road	Construction Phase, winter
32	View S from La Hogue Road, to the S of Chippenham Park	Construction Phase, winter
45	View NW from PRoW 204/1, north of Snailwell	Construction Phase, winter

4.10.43.

“Moderate Adverse” visual effects were anticipated by the Applicant in relation to the following viewpoints:

Table 4.2 Views assessed as likely to experience “Moderate Adverse” visual effects

Assessment Phase	Viewpoints
Construction	2A, 2B, 2C, 3, 4, 4A, 6, 9A, 14, 14A, 20, 21, 21A, 22, 23, 23A, 24, 26A, 29, 32, 33, 33A, 36, 37, 37A, 38, 41, 42, 43, 44, 45, 46, 48.
Operation Year 1	1, 2C, 3, 4, 4A, 5, 6, 9A, 11, 11A, 12A, 12B, 15B, 16, 18, 20, 21A, 22, 23, 23A, 24, 25, 26A, 32, 33, 38.
Operation Year 15	38.
Decommissioning	12, 18, 33, 38.

4.10.44. In summary, the Applicant considered that:

- construction effects would be visible to some sensitive receptors;
- whilst some receptors would experience visual effects looking towards Sunnica East and West at Year 1, these would largely be filtered by vegetation; and
- the Applicant considered that by Year 15, summertime vegetation would substantially screen solar panels and associated infrastructure, with Moderate Adverse impact being limited to Viewpoint 38, the Limekilns.

Mitigation Measures

4.10.45. The LVIA informed the iterative design process, applying design principles that the Applicant considered responded to the policy requirements, published landscape character assessments and field work analysis, in order to mitigate the likely adverse effects of the Proposed Development.

4.10.46. LVIA design principles would be secured by means of the Works Plans [APP-007] and the Outline Landscape and Ecology Management Plan (OLEMP) [APP-108] and illustrated within the Parameter Plans (ES Figures 3-1 and 3-1) [APP-135 and APP-136] and within the Landscape Masterplan (ES Figures 10-14 a to f) [APP-209 to APP-214] as subsequently amended.

4.10.47. The LVIA design principles across the Proposed Development were described by the Applicant as being based on responding positively to the published guidance and to identified environmental opportunities, by:

- Careful siting of the Proposed Development in the landscape by the structures being offset from pine lines, vegetation patterns and road networks;
- Conserving landscape, ecology and archaeological features (including below ground) across the Order limits, including the pine lines; and
- Creating new green infrastructure within the Order limits and in relation to the study area through mitigation planting and also through new permissive routes to provide linkages between Freckenham and Isleham and Red Lodge and Worlington.

4.10.48. The OLEMP and Landscape Masterplans were amended throughout the Examination in response to representations from IPs, questions from the ExA and in order to accommodate changes to the Proposed Development brought about through Change Requests 1 and 2. The final versions were [REP10-012, REP10-041, REP10-050 and REP10-051].

EXAMINATION

Relevant Representations

- 4.10.49. Of the 1360 Relevant Representations submitted, approximately one third mentioned impact on landscape or views. Many IPs mentioned the extensive scale of the Proposed Development and the effects it would be likely to have in terms of transforming a rural, largely agricultural landscape into a quasi-industrial landscape.
- 4.10.50. Natural England [RR- 1291] confirmed that no nationally designated landscapes would be impacted by the Proposed Development and made no other comments in relation to landscape and visual effects.
- 4.10.51. The local authorities in their Relevant Representations [RR-0998; RR-1178; RR-1340 and RR-1351] made the following key points:
- The Proposed Development rather than being perceived as a solar development occupying an area of land within a wider landscape, would have the potential to dominate and transform the local landscape, to alter it beyond recognition, and thus to create a new landscape altogether;
 - The fragmented layout of the proposals and their proximity to a number of settlements would have the potential to affect the sense of place, with many residents experiencing the adverse visual and perceptual effects of various elements of the solar farm as part of their daily routines;
 - The Applicant had not provided sufficient information about the impact on trees in order for a professional judgement to be made in terms of potential impacts;
 - The scale, longevity and geographical distribution of the Proposed Development would be likely to result in significant adverse impacts as a result of accumulated effects and the ES was considered to underestimate impacts; and
 - Mitigation proposals were not considered to have been sufficiently tailored across the variety of landscape character types or to be ambitious enough to deal sufficiently with the harm potentially caused by the project.
- 4.10.52. Having considered comments made in relation to landscape and visual effects in Relevant Representations and also being informed by observations made on Unaccompanied Site Inspections [EV-001, EV-002 and EV-003] the ExA identified the following key issues as set out in the Rule 6 letter (Initial Assessment of Principal Issues):
- Suitability of the study area and the viewpoints used in the LVIAs and Glint and Glare Assessments;
 - Effects on visual receptors;
 - Effects on landscape character including woodland, trees and hedgerows; and
 - Effectiveness of Outline Landscape and Ecology Management Plan and Construction Environment Management Plan.

Local Impact Reports

- 4.10.53. The local authorities in their joint Local Impact Report (LIR) [REP1-024] summarised their position in relation to landscape and visual amenity as follows:
- *“Some impacts, such as those on Landscape and Visual Amenity as well as some ecological impacts, are fundamental to the nature and geography of the scheme, and are unlikely to be capable of being dealt with without significant*

revision of the proposal to remove parts of the scheme in the most sensitive areas.”

- *“The scale, duration and geographical extent of the proposed development are likely to result in widespread and significant adverse landscape impacts, and prolonged and, in some cases, permanent adverse visual impacts.”*

- 4.10.54. The local authorities agreed with the prediction in the ES that significant effects would be likely across the Proposed Development site during construction, operation and decommissioning and that there would be significant visual effect from the proposals when viewed from the surrounding countryside. However, the Councils did not agree with the applicant that by year 15 the visual effects would have reduced to the extent that they would not be significant, but rather they considered that the accumulation of residual effects in combination would be significant.
- 4.10.55. In terms of design and mitigation, the local authorities considered that the proposals were not sufficiently tailored across a variety of landscape character types and were not ambitious enough to deal sufficiently with the degree of harm caused by the project. They expected the Applicant to demonstrate:
- How the design process achieved good aesthetics (as far as possible), including in respect of landscape and visual amenity;
 - How the landscape choices were sensitive to “place”;
 - How the siting related to existing landscape characteristics; and
 - That the design and sensitive use of materials of associated development (such as batteries and other buildings) would contribute to the area.
- 4.10.56. The local authorities considered that ES Chapter 4 did not provide sufficient evidence for the site selection made and noted that of the seven potential solar development areas identified in stage three of the site selection process, not one was within the Order limits as finally submitted and no assessment of suitability was provided of the areas that were included within the Order limits.
- 4.10.57. The local authorities commented that due to its size, scale and extent, rather than being perceived as a solar development occupying an area of land within a wider landscape, the Proposed Development would be likely to dominate and transform the local landscape, to alter it beyond recognition, and thus to create a new solar farm landscape. However, the proposals as submitted were considered by the local authorities to fall short of providing a new landscape with a positive effect on identity and sense of place. The fragmented layout of the proposals, located amidst and around several settlements, were considered to be likely to have such an impact on local character as to affect the sense of place. The expansive solar arrays, battery energy storage systems (BESS), substations, fencing, access points and other associated infrastructure were considered to have the potential to transform the existing agricultural and rural landscape into an essentially industrial landscape.
- 4.10.58. The extent, duration and nature of the likely effects were considered by the Councils to have a reasonable expectation of affecting the place attachment of the residents of the affected villages and communities as many residents would experience the adverse visual and perceptual effects of various elements of the solar farm as part of their daily routines. The initial and residual visual effects would be clustered around the settlements of Worlington, Freckenham, Isleham and Snailwell and in the Councils’ view the scheme would be likely to adversely affect the residents’ quality of life.

- 4.10.59. The following specific impacts were identified by the local authorities as likely to be negative:
- Impact on/loss of the rural character of the landscape.
 - Introduction of solar panels, BESS and other infrastructure into the countryside affecting the openness and open rural character of the landscape.
 - Impact on landscape features and their legibility;
 - Pine lines
 - Lee Brook
 - The Avenue (Chippenham Park)
 - Impacts on the historic landscape and the setting of Chippenham Park Registered Park and Garden (RPG). Due to the landform of the wider study area, this area is also highly visible from The Limekilns, an area used not only for horse exercising, but also recreational walking. The ES recognises that the adverse visual effects would not reduce by Year 15;
 - Landscape and visual impact on the U6006 (Parcel E12), green corridor of amenity value;
 - Landscape impact on Chippenham Fen;
 - Impacts on views across the landscape and to features; open views would be truncated; views to existing landmarks would be lost:
 - Viewpoint (VP)2C and others
 - View from PRoW at Snailwell
 - Impacts of BESS buildings and infrastructure on landscape character and views from viewpoints such as West Row, Elms Road, Ferry Road, the River Lark and the Limekilns;
 - Impact on landscape character west of Lee Brook and visual impact on the Ark Church;
 - Visual impact along Golf Links Road; visual and landscape impact along Elms Road;
 - Accumulation of adverse effects and intra-and inter-cumulative effects; and
 - Effect on placemaking; the scale of the proposals in geographic extent, duration and magnitude of change would result in the creation of new landscape.
- 4.10.60. The Councils expressed concerns about the Applicant's assessment and presentation of adverse effects, commenting that, due to the way evidence was presented, the ES tended to under-estimate impacts. Examples given were:
- The classification scales used by the Applicant within the assessment tables [APP-102] were considered to be biased towards low (containing very low, but not very high), with the potential result that assessed effects of the scheme were reduced; and
 - The local authorities considered that susceptibility does not depend on the criteria listed, but on how well the landscape can absorb the proposal without undue harm. The method of determining sensitivity did not adequately allow for the combination of value and susceptibility in both landscape and visual aspects.
- 4.10.61. In relation to the Applicant's visual assessments the local authorities commented that the descriptions of the existing views skipped to the detail of the views without properly setting the scene and did not explain which qualities of the landscape, if any, contribute to the view. They welcomed the considerable number of viewpoints that were assessed within the ES but suggested that some views had been omitted.

4.10.62. The local authorities commented that information submitted with the application in relation to trees and hedgerows was inadequate. The Applicant subsequently submitted an Arboricultural Impact Assessment [REP3-021] and a plan showing hedgerows created, retained or lost [AS-326].

Other Representations to the Examination

4.10.63. Other representations were submitted to the Examination in relation to landscape and visual impacts. These included:

Say No to Sunnica group (also representing the Newmarket Horsemen's Group)

4.10.64. Say No to Sunnica group (SNTS) [REP2-240b] considered that due to a flawed site selection process, the Proposed Development site included areas which were unsuitable on landscape and visual grounds because of the resulting significant, long term adverse effects and which the Applicant had not identified as unconstrained land. SNTS considered the key impacts to be in the following areas:

- Land at Lee Farm, east of Isleham (Sunnica East A)
- Land south of Worlington and north of Badlingham (Sunnica East Site B)
- Land south of Chippenham Park and north of the Limekilns Gallops (Sunnica West A)
- Land south of Chippenham Fen (Sunnica West B)

4.10.65. SNTS considered that the Proposed Development would be fragmented and dispersed across several discrete areas which they considered would result in the following cumulative impacts and landscape effects:

- The combined development footprint of the solar arrays and associated infrastructure would total 652.1 hectares and would dwarf all the surrounding settlements most of which were rural villages whose identities were intrinsically linked to the productive countryside;
- The landscape in which Freckenham, Badlingham and Chippenham were located would be surrounded on three sides by electrical development. Other settlements such as Worlington and Snailwell would also be partially enclosed by the Proposed Development. Consequently, there would be a constant awareness of solar PV development and BESS development when travelling into and between these settlements; and
- There would also be a constant awareness of electrical infrastructure throughout the western part of the Estate Sandlands and Rolling Estate Chalklands Landscape Character Types (LCTs). In total more than 450ha of the Rolling Estate Chalklands LCT would be converted from productive farmland to electrical development.

4.10.66. SNTS considered that the proposal would result in major adverse visual effects on the visual amenity of the following users due to the loss of valued, open views of the countryside as well as the introduction of large-scale industrial development:

- Sunnica East A – for people using the local PROW network at LVIA VP 11 [APP-216] (PROW 257/007/0) and for users of the local road network, including on Beck Road at VPs 5 and 11, Sheldrick's Road at VPs 5 [APP-216] and the unnamed road leading to West Row at VP 12 [APP-216];
- Sunnica East Site B – for people using the local PROW network at VPs 15 and 16 [APP-216] (PROW U6006) and VP 20 [APP-216] (PROW 257/003/0) and for users of Elms Road at VP 18 [APP-216]; and

- Sunnica West Site A – for people within the Limekilns and Waterhall Gallops, including at VP 38 [APP-218] and for users of La Hogue Road (including visitors to La Hogue farm) at VP 33 [APP-217] and Norwich Road (VP 37) [APP-218].

4.10.67. SNTS identified the following moderate to moderate/adverse visual effects which it considered would be experienced by the following users:

- Sunnica East B – for people using Freckenham Road at VP 14 [APP-216], Worlington Road at VPs 22 and 23 [APP-217] and Golf Links Road at VPs 24 and 25 [APP-217]; and
- Sunnica West Site A – for people using PROW 204/5, users of the A11/A14/A1304 junction and section of the A11 immediately north of this junction, visitors to the Railway Field (VP 39) [APP-218] and La Hogue Road at VP 32 [APP-217].

The Group considered that whilst proposed mitigation planting would, after a period of 15 years, lessen the views of the infrastructure to varying degrees, it would not restore the current visual amenity and in places the mitigation planting itself would restrict open views, for example at VP 11 [APP-216]. SNTS considered that at the Limekilns, where elevated views across the site were possible, it would not be possible to screen the development with mitigation planting.

4.10.68. SNTS considered that the Applicant's submitted LVIA [APP-042] generally underestimated the level of effects and overestimated the effectiveness of mitigation planting, due to:

- Methodological issues with the LVIA, including a failure to follow best practice guidance;
- Failure to identify the most valuable aspects of the landscape, and therefore to adequately assess the impact on these aspects;
- No consideration of the landscape impacts in wintertime;
- Failure to properly consider the cumulative (or "combined") impacts of the development overall; and
- Insufficient information regarding the BESS infrastructure, which meant that the assessment of effects in the LVIA of this component was inadequate.

Other Interested Persons

4.10.69. Submissions to the Examination were made from or on behalf of a number of IPs who had specific concerns in relation to visual effects, including:

- The Ark Church, Beck Road, Isleham, concerning effects on views from the Church [REP2-251];
- La Hogue Farm [REP2-161];
- Elms Road Travellers Site, relating to visual effects on occupiers of the permanent caravan site [REP2-257]; and
- Mr Alan B Smith, concerning visual effects on his house and the local landscape [REP2-098a].

Key Issues Examined

4.10.70. Building on the key issues identified in the Initial Assessment of Principal Issues (IAP) [PD-009] and drawing on issues raised in RR, WRs and the LIR, the following were identified by the ExA as key issues for examination:

- Existing landscape and visual context;

- Approach and methodology;
- Design;
- Proposed mitigation;
- Scale and context in relation to landscape character;
- Effects on views, amenity and recreational enjoyment;
- The scale of the Proposed Development in relation to potential impacts; and
- Permanence

Existing landscape and visual context

- 4.10.71. The extensive scale of the Proposed Development site necessitated that the ExA undertake a number of USIs [EV-001; EV002, EV003, EV-011; EV-012; and EV-064] and in addition four Accompanied Site Inspections (ASI1 to ASI4) took place [EV-013; EV-021; and EV-065]. These gave an understanding of the character, condition and quality of the existing landscape, in terms of the land proposed to be developed, land put forward to be used for mitigation, or landscape forming the wider setting. Key representative long-and short-distance views within, into and out from different parts of the site were observed.
- 4.10.72. The overriding impression gained was of a rural landscape dominated by active agricultural (mainly arable) use along with the horseracing industry associated with nearby Newmarket. The ExA were able to recognise the variations in landscape character between the East Anglian Chalklands in the southern and northern parts of the site (Sunnica West A and B, and most of Sunnica East A), the Brecks in the north-east (Sunnica East B) and the edge of the Fens to the north-west (parts of Sunnica East A) [APP-195].
- 4.10.73. In addition to general and specific landscape characteristics the Panel also observed the layout of the site as indicated on the Parameter Plans [APP-135 and APP-136] in relation to nearby settlements and key individual sites and receptors.
- 4.10.74. The ExA noted that 10 settlements were in close proximity to the Application Site: Burwell, Fordham, Snailwell, Chippenham, Freckenham, Isleham, West Row, Worlington, Red Lodge and Kennett. In-between these were scattered farmsteads and stud farms, isolated cottages and the small hamlet of Badlingham.
- 4.10.75. The Applicant subsequently submitted two change requests CR1 and CR2 [AS-243 and REP5-059], the first of which removed the proposed substation extension at Burwell from the Proposed Development, and the second which removed Sunnica West B (close to Snailwell).

Approach and methodology

- 4.10.76. Although there was general agreement between parties that the overall approach to LVIA was appropriate, there were outstanding concerns at the close of the Examination in relation to the Applicant's conclusions regarding:
- The degree of harm that would be likely in terms of the overall landscape;
 - The degree of harm that would be likely in relation to visual effects on specific land parcels, namely E05, E12, E13 and W03 to W12;
 - Data, interpretation of data and conclusions reached in relation to trees and hedgerows; and
 - The degree to which the LEMP addresses glint and glare.

- 4.10.77. Concerns had been expressed throughout the Examination in relation to some detailed aspects of the LVIA including the numbers and locations of viewpoint photographs and the presentation of visualisation photomontages. During ISH2 [EV-045] and in subsequent submissions [REP6-074] SNTS drew attention to the lack of wintertime assessments, and the superimposition of summertime planting on wintertime baseline photographs in the photomontages submitted by the Applicant. The ExA questioned the Applicant on this point [REP7-055] and their reply acknowledged that where existing deciduous vegetation is located between the viewpoint and the Proposed Development, it would be more effective in screening views in summer than is shown in the photomontage. SNTS responded [REP8-050] that mitigation planting would be “*significantly less effective in screening views of the proposed development in winter than shown in the Applicant’s photomontages.*”
- 4.10.78. In terms of the Applicant’s approach to site selection [APP-036 and APP-054], SNTS suggested [REP2-240] that the landscape and visual criteria used to identify potential development areas (PDA) for solar development were inadequate, aspects such as green infrastructure were ignored, key viewpoints were ignored and there was no consideration of the cumulative impacts of the development. SNTS maintained this position and in its final, signed Statement of Common Ground (SoCG) [REP8-040] the parties did not agree in respect of the adequacy of the criteria applied by the Applicant in its Alternative Site Assessment, or the adequacy of the photomontages in terms of supporting the assessment of landscape and visual impacts.
- 4.10.79. The local authorities commented [REP1-024] that the ES did not provide sufficient evidence for the site selection made. Whilst they acknowledged that the LVIA was based on GLVIA 3, they disagreed with the method adopted by the Applicant to interpret the Guidelines and the resulting methodology. The Applicant submitted further clarification on their LVIA methodology as Appendix L to its response to the ExA’s First Written Questions (WQ1) [REP2-038], responding to concerns raised by the local authorities.
- 4.10.80. In their final, signed SoCG [REP9-029] the local authorities stated that the application of local policy within the EIA had not been agreed in relation to landscape and visual amenity. They also did not reach agreement in terms of the data collection methods used by the Applicant, baseline data and the identification and sensitivity of relevant features and receptors and the assessment of the Proposed Development in terms of tree and hedgerow survey information.

Design

- 4.10.81. Apart from its overall size and scale, a key feature of the design of the Proposed Development was its sub-division into the four (three, following the removal of Sunnica West B in CR2) main elements of Sunnica East A and B and Sunnica West A. Superimposing a design of this nature on a landscape of dispersed but well-populated settlements would bring it into close proximity to many residents and other users of the landscape. The Applicant responded to initial, pre-application concerns by making some reductions in the extent of solar PV arrays in order to reduce visual impact in relation to nearby settlements [APP-264]. Notwithstanding these changes, the local authorities considered that the fragmented layout of the Proposed Development, located amidst and around several settlements, would be likely to have such an impact on local character to such an extent as to affect the sense of place [REP1-024].

- 4.10.82. In response to such concerns the Applicant produced a Settlement Design Iteration [REP2-038 Appendix A] explaining how landscape and visual effects had been addressed during the design of the Proposed Development.
- 4.10.83. During the Examination the ExA heard from IPs at the Open Floor Hearings (OFH1 and OFH2) [EV-033, EV-040, EV-041, EV-060 and EV-062] about the concerns they had for the impacts that the Proposed Development would have on their daily lives, in terms of the visual effects of extensive solar PV arrays and associated electrical infrastructure that would be apparent not only from their homes, places of work, recreation, education and worship, but as they travelled between these. In the Second Written Questions (WQ2) at Q2.7.4 the ExA asked the Applicant [REP5-056] and SNTS [REP5-098] both to provide a calculation as to the total length of road frontage that would pass between or alongside solar arrays. The figures given varied between the parties, from 9.4km to 15.15km.

Proposed mitigation

- 4.10.84. The scheme originally submitted provided over 30% of the Proposed Development Site as green infrastructure, utilising existing landscape and ecological features and habitats and providing mitigation for the landscape and visual impacts of the proposed development. The design of the proposed green infrastructure was intended to reduce the visual impact of the scheme in relation to nearby settlements by providing offsets and buffer zones [APP-264] with the detailed approach set out in the Outline Landscape and Ecology Management Plan (OLEMP) [APP-108].
- 4.10.85. In their joint LIR [REP1-024] the Local Authorities commented that mitigation proposals were not sufficiently tailored across a variety of landscape types and were not ambitious enough to deal sufficiently with the degree of harm that they considered would be caused by the project. They expected the Applicant to provide a more thorough presentation of the key areas of impact and to work with them to reduce the impacts on the most sensitive receptors by redesigning elements of the scheme and proposing more ambitious, robust, deliverable and properly secured mitigation proposals. SNTS [REP2-240] considered that the Proposed Development was not sensitive to place and that the mitigation measures proposed by the Applicant would do little to improve that because the fundamental issues related to the location of the key development sites.
- 4.10.86. Throughout the Examination the Applicant produced various iterations of the OLEMP along with proposing the removal of Sunnica West B in CR2. In response to concerns raised by the local authorities the Applicant produced an Arboricultural Impact Assessment [REP3-021] and a Tree Preservation Orders (TPOs) Location Plan [REP3-023] and at the request of the ExA a plan showing hedgerow creation/retained/loss status [AS-326].
- 4.10.87. The final form of mitigation offered was set out in the final versions of the OLEMP and Environmental Masterplans [REP10-012 to REP10-017; REP10-041, REP10-050 and REP10-051].
- 4.10.88. In addition to the landscape value of proposed ecological and archaeological offset or mitigation areas (discussed more fully in the relevant sections of this report) the Applicant's proposed mitigation strategy focused on strengthening or providing new hedgerow and tree planting on the boundaries of the site and individual land parcels and fields, providing arable margins around appropriate fields and creating wetland habitat alongside the River Lark.

Scale and context in relation to landscape character

- 4.10.89. The scale and context of the Proposed Development in relation to overall landscape character was a subject of discussion during the Examination, as the solar panels and associated electrical infrastructure would fall within three NCAs, spread between four (reduced to three following CR2) distinct individual sites along with the connecting cable routes. During the ISHs and OFHs there were frequent references to the Proposed Development being too big and having the potential to change the character of the landscape from rural to industrial by causing visual impacts at a landscape scale. This position was maintained by SNTS in their SoCG. One specific area where it was considered that the Proposed Development would have the potential to change the character of the landscape was in and around Sunnica West A, which is discussed more in sections below relating to views and amenity.
- 4.10.90. Due to the extensive nature of the site concerns were also expressed that the proposed mitigation itself would have the potential to change the character of the landscape, with mitigation planting enclosing characteristically open landscapes, for example in Sunnica East A at land parcel E05.

Effects on Views, Amenity and Recreational Enjoyment

- 4.10.91. In addition to the impacts on views associated with changes in landscape character caused by the Proposed Development, a number of IPs raised specific concerns about the effects on views in relation to their residential amenity or from their places of worship or work and on countryside recreation.
- 4.10.92. Representatives of The Ark Church, Isleham [RR-0135 and REP2-251], situated less than 400m from the edge of Sunnica East A, considered that the loss of rural views and green spaces would detract from the views from their building and negatively affect the physical and emotional wellbeing of all residents. The church had been recently constructed by members of the congregation and had been specifically positioned to take advantage of the far-reaching views. The ExA visited The Ark during ASI2 [EV-021] and observed that the building forms a landmark in the local area and indeed has clear views over land parcel E05 which currently forms part of the characteristic open landscape on the edge of the Brecks.
- 4.10.93. Mr A Smith [REP2-098a] explained that the distance between his property and the solar PV array on land parcel E12 of Sunnica East B would be approximately 490 metres which he considered to be too close. On visiting this part of the site during ASI2 [EV-021] the ExA observed that mitigation planting would largely screen the Proposed Development by year 15 although it would be likely that solar panels would be visible from upstairs windows.
- 4.10.94. On ASI3 [EV-021] the ExA visited La Hogue Farm, which in addition to comprising a working farm also operates a farm shop and restaurant. The owners and a number of staff from and visitors to the farm made submissions stating that the Proposed Development would have an adverse impact on the farm. Whilst other issues such as traffic and safety considerations were mentioned, the ExA also considered the landscape effects on the farm, which lies some 300 metres from the edge of parcels W11 and W12 of Sunnica West A and has a proposed cable route to the rear of the farm buildings. The Applicant had submitted visualisation photomontages from Viewpoint 33 [APP-107 and APP-229] which is La Hogue Road at the junction with the access track to La Hogue Farm. These show that at year 1 the solar panels would be clearly visible but by year 15 they would be screened by new planting. The ExA noted though that the year 15 visualisation shows summertime planting superimposed on a wintertime base photograph; in wintertime the screening effect

of the planting would not be likely to be as effective. The ExA also observed the view from the farm buildings, which are elevated above road level,

- 4.10.95. Representations were submitted in respect of the Proposed Development on land parcels E19 to E22 by the Elms Road permanent caravan site [REP2-257] and Mr John James of Brookside Stud [REP2-165 and REP7-102] and the ExA visited the site on AS2 [EV-021]. The Application as originally submitted showed a narrow line of planting on the eastern boundary of parcels E20 to E22 alongside the access track to the caravan site. There was discussion on these points at ISH4 [EV-076] and during the Examination the Applicant enhanced the proposed visual mitigation measures adjacent to the permanent caravan site [REP5-063 and [REP10-051] to include a 15m wide strip of new hedgerow and tree planting on the eastern boundary of parcels E20 to E22, with a 2.5m high environmental fence for 24 months during construction of the proposed development, followed by a security fence (deer fence) during the operational phase. However, this proposal was not welcomed by the occupiers of the caravan site [REP8-060 and REP10-082] who considered that they would feel hemmed in by the fence and would lose their rural outlook. On the boundary of parcel E19 adjoining Brookside Farm the Applicant increased the mitigation planting to a 25m wide strip.
- 4.10.96. A specific example of the potentially adverse effects on the visual amenity is in relation to the Limekilns and Water Hall Gallops, an extensive and elevated area of chalk grassland to the south of the Proposed Application site from which there are wide-ranging views northwards across Sunnica West A and Chippenham Park, with Ely Cathedral a notable feature on the horizon. Effects on the setting of and views from the Limekilns have been the subject of extensive representations and oral submissions and the Applicant has acknowledged [APP-107] that the magnitude of impact during construction work would be “High” (Moderate Adverse/significant) and “Medium” (Moderate Adverse/significant) during the Operation Phase at years 1 and 15 and during the Decommissioning phase and that even with mitigation planting the Proposed Development would remain a noticeable change in the composition of the view. During the discussion in ISH2 [EV-045] the Applicant acknowledged that there was no potential for additional mitigation to provide further screening of the impacts on views from the Limekilns.
- 4.10.97. The ExA visited the Limekilns on USIs and on ASI1 [EV-013] during both summer and wintertime and observed the extensive nature of the Gallops (some 1.5 km from east to west), to which there is permissive public access, along with the adjoining Water Hall Gallops comprising a further 1 km. The Applicant had included viewpoint photographs and a visualisation photomontage from the western end of the Limekilns [APP-230, Viewpoint 38]. SNTS also submitted viewpoint photographs from the Limekilns [REP2-240b, Figures 13-19] and there was some discussion about which viewpoints more accurately reflected the view. SNTS further submitted that there would be a direct effect (in terms of GLVIA 3) on the landscape setting and character of the Gallops and that the overall effect upon the character of the landscape would be major adverse [REP2-240]. The local authorities [REP1-024] also suggested that there would be adverse effects on the Limekilns and that these would not reduce by year 15.
- 4.10.98. Submissions of the Applicant and SNTS considered whether the Gallops constitute a “valued landscape”. Evidence was submitted [REP2-240, Figure 12] of the historic importance of the Limekilns as a horseracing training area and the ExA heard from a number of IPs at the OFHs and ISHs 2 and 4 who spoke about their regular recreational use of the Gallops and its close association with Newmarket.

The Scale of the Proposed Development in Relation to Potential Impacts

- 4.10.99. Notwithstanding their overall objections to the Application, the local authorities considered that land parcels W03 to W012 and W17 in Sunnica West B, parcel E05 in Sunnica East A and parcels E12 and E13 in Sunnica East B were incapable of adequate mitigation against landscape and visual effects and should therefore be removed from the Proposed Development (the Suffolk County Council Alternative Proposal or SCC AP). They suggested this in their joint LIR and maintained this position throughout the Examination [REP7-072 and REP7-086]. This approach was supported by SNTS [REP8-050]. The ExA asked the Applicant to respond to this in their Second Written Questions (ExQ2) [REP5-056, Qs 2.0.6 and 2.0.7]. The Applicant responded by pointing out that this would remove 328 MW of the proposed generating capacity of the project and would represent a significant loss of function. The issue was discussed at ISH4 [EV-045] and covered in subsequent submissions by the Applicant, local authorities and SNTS [REP7-072; REP8-026 and REP8-050].
- 4.10.100. Further suggestions to consider the less-extensive reduction in scale of the Proposed Development were considered through responses to Q2.0.9 of ExQ2 [REP5-084] and Suffolk County Council suggested the partial reduction in extent of solar panel coverage in land parcels E12, E13 and E05, and this was discussed in ISH4 [EV-077].

Permanence

- 4.10.101. During the OFHs several IPs spoke about the timescale of the Proposed Development, which from their personal points of view would outlive them. They therefore disagreed with the Applicant's description of the Proposed Development as being temporary.
- 4.10.102. The local authorities submitted that whilst the solar panels and associated electrical infrastructure would be removed during the decommissioning phase, trees and hedgerows would have been removed in order to implement the Proposed Development, and mitigation planting would have been carried out, so that in effect there would be permanent changes to the landscape, visual amenity and views as a result [REP4-124 and REP4-143].

CONCLUSION

Approach and Methodology

- 4.10.103. NPS EN-1 acknowledges that siting is an important factor in minimising adverse landscape and visual effects and that projects need to be designed carefully, taking account of the potential impact on the landscape. Draft NPS EN-3 advises that landscape and visual impacts should be considered carefully pre-application and that applicants will be expected to direct considerable effort towards minimising the landscape and visual impact of solar PV arrays. Whilst the ExA is satisfied that the Applicant did undertake initial investigations into site selection, the extent to which landscape and visual effects were considered pre-application was limited. Following site selection, a more rigorous process of landscape and visual impact analysis was undertaken, but deficiencies in relation to the presentation of outcomes in relation to key aspects or parts of the Application Site are relevant to the ExA's consideration and conclusions.

- 4.10.104. The ExA notes that in terms of landscape and visual constraints, the absence of nationally designated landscapes within the search area was cited but there were no other landscape and visual constraints identified.
- 4.10.105. The ExA considers that the lack of rigour in the initial site selection and design processes led to belated attempts to provide adequate mitigation and therefore did not minimise harm.

Design

- 4.10.106. Key features of the design of the Proposed Development are its overall size and its sub-division into three main areas: Sunnica East A and B and Sunnica West. Notwithstanding proposed landscape and visual mitigation, local residents and people travelling within and through the area would be aware of the Proposed development as an extended intrusion into their visual amenity, potentially on a daily basis. The ExA considers that the size, fragmented nature and proximity to residents of the Proposed Development is likely to result in a significant adverse impact on their perception of their surroundings and weighs substantially against the proposal in terms of the requirement in NPS EN-1 to minimise harm in relation to landscape effects and potential impacts and to be sensitive to place.

Mitigation

- 4.10.107. Whilst the ExA agrees that planting additional trees and hedgerows would be an appropriate form of landscape mitigation at a very localised level, the effects would be less obvious at the landscape scale in terms of mitigating an extensive change in character from rural/agricultural to an energy production landscape. There are also potentially adverse effects in terms of creating wider changes in landscape character, particularly in the more open areas that are characteristic of parts of the site and its surroundings. Whilst the proposed mitigation would to some extent mitigate the visual effects of the scheme, it would not mitigate the landscape effects.
- 4.10.108. The Proposed Development would be temporary, however IPs speaking at the Open Floor Hearings made the point that for some of them the development would be in place for the rest of their lives. Benefits to be gained from positive mitigation i.e. planting of trees and hedgerows, have not been secured on a permanent basis and so may also be regarded as temporary in nature. If they were to remain in place a permanent change to the landscape would take place due to increased enclosure. The ExA therefore concludes that the Applicant has not demonstrated adequately that the proposed mitigation is reasonable or appropriate as required by NPS EN-1 and considers that it carries little weight in terms of the overall acceptability of the Proposed Development.

Scale and Context in Relation to Landscape Character

- 4.10.109. The Applicant assessed the landscape effects of the Proposed Development, in terms of their impacts on NCAs and locally-defined character types/areas, as mainly being “none”, “Very Low” or “Low” [APP-106]. Whilst the overall effects on individual NCAs may be low or very low, the fact that three NCAs meet within the Proposed Development site would mean that effects on the local landscape could be greater, in that the changes evident in those NCAs would be concentrated in one physical area, i.e. the Order limits. Indeed, this is borne out by the Applicant’s own assessments of landscape effects within the individual parts of the scheme where it is acknowledged that some impacts could be “High”.

- 4.10.110. The scale of the Proposed Development is pertinent in that, based on the Environmental masterplans [REP10-041; REP10-050 and REP10-051] it is reasonable to estimate that the total area of land with solar PV panels and associated electrical infrastructure would comprise more than 500 hectares, spread between three distinct individual sites along with the connecting cable routes. The extensive perimeters of the different parts of the site bring it close to ten settlements as described above. The impact on communities, their daily lives and their appreciation of the landscape would therefore be more extensive than if the development were concentrated in one area, or the individual parts of it were spread further apart. In this respect the Proposed Development differs from all previously approved solar farm schemes and this weighs against the proposed development in terms of siting having not minimised harm as required by NPS EN-1.

Effects on Views, Amenity and Recreational Enjoyment

- 4.10.111. Whilst mitigation planting would reduce the visibility of the solar PV panels by year 15, the ExA considers that there would be a fundamental change in the view caused by the transition of an open landscape to a more enclosed one. This would have an adverse effect on views from The Ark church in particular and on views from Beck Road to the church and farmland beyond which are recognised as locally important in the Isleham Neighbourhood Plan. The ExA considers that although the local impact of the Scheme on The Ark would be adequately mitigated in the longer term, the wider effects in terms of the landscape-scale impacts of the Scheme as a whole would not meet the requirements of NPSs EN-1 and EN-3 in terms of good design.
- 4.10.112. In respect of effects on the visual amenity of Mr Smith's property the ExA considers that whilst the local impacts would be marginal in terms of their significance, the longer-term landscape-scale effects would weigh more against the Proposed Development.
- 4.10.113. In respect of La Hogue Farm, the ExA noted that mitigation planting would have limited effect in terms of views from the farm. Furthermore, the BESS, substation and associated electrical infrastructure would be likely to be clearly visible. The ExA concludes that there would be likely to be an adverse impact on views from La Hogue Farm.
- 4.10.114. The ExA has considered the potential effects of the Proposed Development on Brookside Stud and the Elms Road permanent caravan site and considers that whilst appropriate mitigation has been proposed in respect of the boundary of parcel E19 with Brookside Stud, the proposed mitigation along the eastern boundary of parcels E20 and E21 falls short of what is necessary to maintain the amenity of the residents of the caravan site, for whom the solar arrays would be some 40m away from their dwellings.
- 4.10.115. The ExA has carefully considered the potential effects of the Proposed Development on the Limekilns. From observations on the USIs and ASI1 the ExA concluded that the viewpoint photographs submitted by SNTS more accurately reflected the views that were observed and that the views in the photographs submitted by the Applicant appeared more distant than in reality. The ExA noted that whilst the Applicant had submitted just one photomontage from the Limekilns, taken from the western end, views were extensive and the Proposed Development would be clearly visible from the full length of the Limekilns, extending for approximately 2km to the east.

- 4.10.116. The ExA agrees with the submissions of SNTS and the Local Authorities and, from its observations, it considers that the Proposed Development would have an extensive adverse impact on the landscape character and setting of the Limekilns and Water Hall Gallops. The impacts from Sunnica West A in particular would have major adverse effects on the valued landscape of the Limekilns and the Proposed Development therefore does not meet the requirements of NPS EN-1 and NPS EN-3 in terms of good design and minimising the landscape and visual impact of solar PV arrays and would be contrary to the NPPF in terms of the potential adverse impact on a valued landscape.
- 4.10.117. The extensive change in landscape character that would result from the solar PV panels and associated infrastructure on Sunnica West A would also be apparent from the north, in particular from the area to the south of Chippenham Park and from the Avenue. This is considered in more detail under Cultural Heritage and Historic Environment above, but the ExA concludes that the adverse impact of the Sunnica West A development on the landscape would be extensive and in multiple directions.

The Scale of the Proposed Development in Relation to Potential Impacts

- 4.10.118. The ExA has considered the suggestion in NPS EN-1 that reducing the scale of a project can help to mitigate the visual and landscape effects, but that this may result in a significant operational constraint and reduction in generation output.
- 4.10.119. Whilst a reduction in solar arrays in land parcels E12 and E13 would have some benefits in the immediate vicinity, particularly for users of the U6006 highway/path, it would not mitigate the landscape-wide issues discussed above in terms of the effects of solar panels across wider areas such as Sunnica West A. Indeed, the further subdivision of individual land parcels with additional mitigation planting would have impacts of their own in terms of enclosing characteristically open landscapes, for example in relation to parcel E05.
- 4.10.120. The ExA considers that whilst the benefits to be gained from the reductions to parcels E05, E12 and E13 would be marginal, there would be significantly positive gains to be made from the SCC AP i.e. the removal of parcels W03 to W012, W17, E05, E12 and E13 from the Order, as suggested in Suffolk County Council's Alternative Proposal. The ExA acknowledges that this goes beyond the "small reduction in function" envisaged in the NPS, however it is considered that only a large-scale reduction would adequately mitigate the extensive landscape and visual effects of the Proposed Development.

Permanence

- 4.10.121. NPS EN-1 advises that ExAs should consider "*whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that (it) considers reasonable*" In this case, whilst the solar panels and associated infrastructure (apart from the underground cables) would be removed, many landscape changes would remain. Some of these would be negative, such as trees and hedgerows removed, however many would be positive, such as new planting (although as already discussed that can be considered inappropriate in an open landscape), native grassland establishment and wetland creation. There remains doubt however about the long-term safeguarding of such mitigation and the ExA does not consider that the "temporary" nature of the project outweighs the negative impacts in terms of landscape effects and on people's enjoyment of their landscape for between 25 and 40 years. Whilst the reduction in extent suggested in the SCC Alternative Proposal

would mitigate the most significant negative impacts on views and openness, there would still remain adverse effects on the local landscape for a timescale that the ExA does not consider to be reasonable.

4.10.122. Taking all relevant representations and policies into account, in summary the ExA concludes that:

- The size and fragmented nature of the Proposed Development would result in material harm to landscape character and visual amenity and does not constitute good design, which the ExA considers weighs substantially against the Order being made;
- Proposed landscape mitigation would minimise local visual impacts but would cause its own effects in terms of overall landscape character, which the ExA considers weighs slightly against the Proposed Development;
- The Proposed Development would have an extensive adverse impact on the landscape setting of and views from the Limekilns, which comprises a valued landscape, and that this weighs substantially against the Proposed Development;
- The design of the Sunnica West A element of the Proposed Development would result in general adverse effects on the landscape and falls short of the requirement to achieve good design and minimise landscape and visual impact, thus weighing substantially against the Order being made;
- The design of the Proposed Development would result in the increased enclosure of an open and expansive landscape, to the detriment of its enjoyment and appreciation by residents and other users, and that this weighs slightly against the Order being made;
- There would be material impacts on views from The Ark church, La Hogue Farm and the Elms Road permanent caravan site which weighs slightly against the Proposed Development;
- A reduction in the scale of the Proposed Development would need to be extensive in order to achieve adequate mitigation of landscape and visual effects and the current scale of the Proposed Development therefore weighs substantially against the Order being made; and
- The temporary nature of the Proposed Development does not outweigh the negative impacts in terms of landscape effects and on people's enjoyment of their landscape.

4.10.123. Given the extent of the land that would be negatively affected by adverse impacts on landscape and visual amenity, in particular in relation to the Limekilns and Chippenham Park, the ExA concludes that, in overall terms, these carry substantial weight against in the planning balance.

4.10.124. The SCC AP would remove from the Proposed Development the land parcels where the solar arrays and associated electrical infrastructure would have the greatest adverse impacts and the ExA considers that the landscape effects and visual impacts of this proposal would be reduced to minor adverse.

4.11. NOISE AND VIBRATION POLICY CONSIDERATIONS

National Policy Statements (NPSs)

4.11.1. National Policy Statement (NPS) EN-1 at section 5.11 sets out what information should be included in a noise assessment which is required where noise impacts are likely to arise from a proposed development. These include noise generating

aspects of the proposal, any distinctive tonal, impulsive or low frequency characteristics of the noise; noise sensitive premises and areas and how they may be affected; characteristics of the existing noise environment and how it would change at various stages of the development and at what times of day, evening and night; and mitigation measures. The noise impact of ancillary activities such as road traffic movements must be assessed.

- 4.11.2. Operational noise with respect to human receptors should be assessed using British Standards and other guidance, as for the prediction, assessment and management of construction noise considering other guidance which gives examples of mitigation strategies.
- 4.11.3. Applicants should consult the Environment Agency (EA) and Natural England (NE) with regard to assessment of noise on protected species or other wildlife with results informing ecological assessments. The seasonality of potentially affected species in nearby sites might also be considered). Good design should be demonstrated by selecting the quietest cost-effective plant available; containing noise in buildings where possible; laying out plant to minimise noise emissions; and use of landscaping, bunds or noise barriers to reduce noise transmission (paragraphs 5.11.7 and 5.11.8).
- 4.11.4. Development consent should not be granted unless the proposal would: avoid significant adverse impacts on health and quality of life from noise; mitigate and minimise other adverse impacts on health and quality of life from noise; and where possible, contribute to improvements to health and quality of life through the effective management and control of noise (paragraph 5.11.9). Consideration should be given to measurable Requirements in a development consent order (DCO) and mitigation measures to ensure noise levels do not exceed limits specified in the DCO. Also to be considered is whether mitigation measures are needed for operational and construction noise over and above those that are part of the application.
- 4.11.5. The draft (d)NPS EN-1 at paragraph 5.12.8 states that some noise impacts will be controlled by environmental permits and parallel tracking is encouraged where noise impacts determined by such permits interface with planning issues (i.e. physical design and location of development).

dNPS EN3 notes (paragraph 2.54.1) the specific considerations which apply to solar farms including traffic and transport noise, stating that public perception of the construction phase of solar farm will derive mainly from the effects of traffic movements. Part 13 of this Chapter (4.13) addresses the effects of traffic movements.

Other National Policy and Guidance

- 4.11.6. Paragraph 174 of the National Planning Policy Framework (NPPF) seeks to prevent new development from contributing to, or being adversely affected by unacceptable levels of air, or noise pollution; paragraph 185 expects new development to avoid noise giving rise to significant adverse impacts on health and the quality of life; protect tranquil areas undisturbed by and thus prized for their recreational and amenity value.
- 4.11.7. The Noise Policy Statement for England (NPSE) clarifies underlying principles and aims in policy documents, legislation, and guidance relating to noise, adopting definitions of 'significant adverse effects' and 'adverse effects' using concepts of No

Observed Effect Level (NOEL); Lowest Observable Adverse Effect Level (LOAEL); and Significant Observed Adverse Effect Level (SOAEL). SOAEL is the level above which significant adverse effects on health and quality of life occur. SOAEL is likely to be different for different noise sources, and where noise levels are between LOAEL and SOAEL all reasonable steps should be taken to mitigate and minimise the effects, however, that does not mean that such adverse effects cannot occur.

- 4.11.8. The Planning Practice Guidance concerned with noise (PPG) also provides guidelines designed to assist with the implementation of the NPPF. Table 2-3 in Environmental Statement (ES) Chapter 11, Appendix 11A Relevant legislation and policy for noise and vibration [APP-109] sets out the PPG noise exposure hierarchy.

Local Policy

- 4.11.9. Local policy is relevant to the assessment of the noise and vibration effects of the Proposed Development. East Cambridgeshire District Council Local Plan 2015, Policy ENV9 seeks to minimise in new development and where possible reduce all emissions and other forms of pollution, including light and noise pollution.
- 4.11.10. Further, Forest Heath and St Edmundsbury Local Plan: Joint Development Management Policies Document 2015, Policy DM2 seeks to prevent siting of sensitive development where its users would be significantly and adversely affected by noise or vibration unless appropriate mitigation can be implemented. Policy DM14 aims to secure minimisation of all emissions including light and noise pollution in new development.

Section 61 of the Control of Pollution Act 1974

- 4.11.11. Under s61 Control of Pollution Act 1974 (COPA1974) application may be made to the local authority for consent (Section 61 Consent) to carry out works, which are likely to have a significant impact on the neighbourhood due to its generation of noise and vibration. Having section 61 consent in place minimises the likelihood of a contractor's work being stopped by local authority enforcement action under COPA1974, as a mitigation plan is in place.

THE APPLICANT'S CASE

- 4.11.12. The Applicant submitted its noise assessment as part of ES Chapter 11, Noise and Vibration [APP-043]. Chapter 11 and Chapter 15: Human Health [APP-047] considered effects not significant in Environmental Impact Assessment (EIA) noise terms, but possibly so in policy terms if they were at or above SOAEL. ES Chapter 15: Human Health [APP-047] concluded that no significant adverse health impacts would arise from the Proposed Development when considering the interaction of air quality, noise and neighbourhood amenity effects reported across the ES.
- 4.11.13. For the purposes of providing an assessment of likely significant noise effects the Study Area for the ES has been determined by receptors within 500 metres (m) of the Application Site. The nearest identified noise-sensitive receptors to the Scheme (and approximate distances from the Order limits) are presented in Figure 11-1 and summarised in Table 11-1 of [APP-043]. They comprise residential properties and an hotel and were considered representative of adjacent properties. Baseline noise monitoring established the existing noise climate in the area, using British Standards (BS) guidance at locations agreed with East Cambridgeshire District Council (ECDC) and West Suffolk Council (WSC) representing the local noise environment at each of the noise-sensitive receptors (Table 11-2). The receptors, a hotel and residential properties are of high sensitivity.

- 4.11.14. Noise effects on wildlife have been assessed in conjunction with other effects on wildlife as part of the ecological assessments. Noise impacts during construction, operation, or decommissioning phases on users of Public Rights of Way (PRoW) would be managed as set out in the Framework Construction Environmental Management Plan (CEMP) [APP1-223] and the Framework Operational Environment Management Plan (OEMP) [APP-126]. Any noise experienced by PRoW users would be limited to when they are in proximity to the Proposed Development, otherwise they would not be affected by noise from construction, operation, or decommissioning phases. As such, PRoW users were not considered as sensitive receptors due to the transient nature of users and because they would not be subject to long-term noise exposure that would result in health impacts.
- 4.11.15. Criteria for magnitude of impacts for construction and decommissioning noise are set out in Table 11-4 [APP-043] and for vibration (Table 11-5). BS 5228-2 was used to assess perception of vibration within occupied buildings, and determine annoyance alongside evaluation of vibration damage, considered for plant items and vehicle movements. Construction and decommissioning traffic noise were assessed considering potential maximum total vehicle movements across the whole construction programme. Operational noise from fixed plant associated with the Proposed Development was assessed following BS 4142 guidance. Criteria for magnitude of impacts of these noise sources was set out in Tables 11-7 and 11-8. Effects determined to be negligible or minor were considered not significant in EIA terms, whereas effects classified as from moderate to major adverse were considered significant.
- 4.11.16. Main matters raised within the Scoping Opinion [APP-052] were responded to as summarised in Table 11-10 [APP-043] and Table 11-11 [APP-043]) responds to the main matters raised during statutory consultation. The salient points are as follows.
- 4.11.17. Working hours onsite would be from 7am to 7pm Monday to Saturday as set out in the Framework CEMP, secured through the DCO. The Applicant considered the construction and decommissioning noise assessment criteria adequately separated out LOAEL and SOAEL at different times of the week: weekdays (07:00-19:00); Saturdays am (07:00-13:00) and Saturdays pm (13:00- 19:00). Should the construction period be longer than the 24-month programme, the noise and vibration effects would be extended in duration but would be expected to be lower in magnitude as it would involve less traffic. No long-term significant effects on golf club users during construction and operational phases were predicted.
- 4.11.18. Further, to help reduce nuisance due to noise and vibration during construction the CEMP would include best practicable means measures such as temporary noise barriers or localised enclosures. The baseline noise survey was tailored to consider existing noise from the Burwell substation as experienced at Burwell, considered in the BS4142 assessment (as local residents regularly complained of significant background noise pollution associated with the Burwell substation). Analysis of the frequency spectrum data from long-term monitoring at Burwell was presented in ES Chapter Appendix 11C - Baseline Noise Survey [APP-111].
- 4.11.19. The Scoping Report [APP-051] mentioned potential noise from inverters and transformers as well as battery storage plant, however no specific noise mitigation measures were included for operational plant, based on the quantitative assessment that the modelled impacts associated with operational noise were not predicted to be significant (section 11.8.25 to 11.8.39 [APP-043]).

- 4.11.20. The Scoping Opinion noted the need for horizontal directional drilling among other construction techniques which might culminate in vibration effects, however the Applicant stated no major vibration sources would be introduced and therefore there would be no associated operational vibration effects (section 11.3.17 [APP-043]).
- 4.11.21. Turning to baseline conditions, the dominant noise source at most locations was road traffic from the surrounding network. Tables 11-12 and 11-13 [APP-043]) summarises respectively the long-term and short-term noise monitoring results.
- 4.11.22. Embedded mitigation was set out in section 11.7 [APP-043]. Proposed environmental enhancements were described where relevant as well as mitigation measures for construction, decommissioning and operational phases. A Section 61 Consent would be applied for which would be the mechanism for construction mitigation details to be agreed. A construction noise and vibration monitoring scheme would be agreed with appropriate stakeholders prior to commencement of construction works as part of the Section 61 Consent. Requirements for monitoring during the decommissioning stages are outlined in the Decommissioning Environmental Management Plan (DEMP) [APP-125].
- 4.11.23. The impacts and effects associated with the construction, decommissioning and operational phases of the Proposed Development were assessed following consideration of the embedded mitigation measures. A summary of the magnitude of impact and significance of effect was given in Table 11-18 [APP-043]. For all construction and decommissioning works related to noise and vibration, traffic noise and operational noise, the significance of effect was found to range from negligible to minor adverse.
- 4.11.24. As far as concerned additional mitigation or enhancement measures where excesses of the LOAEL were identified (and therefore noise should be mitigated and reduced to a minimum) the Applicant acknowledged that construction noise levels may exceed the LOAEL (but not the SOAEL) so all reasonable steps would be taken to mitigate and minimise effects through adoption of best practicable means (BPM). Operational plant noise levels might exceed the LOAEL (but not the SOAEL), so the OEMP when approved at detailed design stage would detail how design and operational plant levels had been developed to mitigate and reduce effects to a minimum, considering sound output levels, positioning of plant and if necessary and practicable, acoustic barriers.
- 4.11.25. The DCO would be flexible as to the location of infrastructure in accordance with the Works Plans but due to the distances to receptors and the predicted noise levels for a reasonable worst-case scenario the conclusions of the operational noise assessment remained unchanged. Potential increases in noise levels due to relocating infrastructure would be offset by procuring equipment with lower sound power levels, silencers or acoustic barriers, to be reflected in the OEMP.
- 4.11.26. No other additional mitigation, enhancement, or monitoring measures for the construction/decommissioning and operational phases are considered to be required given that no significant adverse impacts that have been predicted. Table 11-19 [APP-043] summarised the residual noise and vibration effects of the Proposed Development in construction and decommissioning phases as negligible to minor adverse, not considered significant.
- 4.11.27. Table 11-21 considered several cumulative developments within 500m of the Proposed Development. Schemes: ID 271 (SCC/0063/19F), 375 (20/00316/FUL), 562 (DC/21/0217/FUL) and 716 (DC/21/1510/FUL) might result in some interactive

construction noise if constructed at the same time as the Proposed Development, but due to their relatively small scale and nature, no significant adverse construction noise effects were predicted.

- 4.11.28. As to Schemes: ID 95 (17/02205/FUL), 96 (19/00155/FUL), 348 (20/00557/ESF), 746 (21/01276/SCOPE) and 756 (21/00816/FUL), they comprised the construction and operation of battery storage facilities and solar farms near Burwell Substation and Burwell village. If all four developments were constructed at the same time then cumulative effects from construction noise affecting the nearest receptors at Burwell might be up to moderate adverse, but temporary with no permanent effect. This scenario was unlikely but to minimise such risk the Proposed Development would have a designated site manager who would liaise with other developments to identify measures that could minimise disruption and noise effects. Otherwise and overall, there was no predicted change to the residual effects as shown in Table 11-20 [APP-043].

EXAMINATION

- 4.11.29. The host local authorities' joint Local Impact Report (LIR) [REP1-024] responded to the Application by noting that the nature, size and duration of the construction phase of the Proposed Development would be likely to cause adverse effect on nearby sensitive receptors, therefore impacts should not be underestimated and monitored to ensure the mitigation reduces as far as practicable the impact on those affected.
- 4.11.30. Due to the inevitable noise disturbance caused by construction operations and traffic movements, the LIR did not support construction works or deliveries outside the hours of 0800 and 1800 Monday-Fridays and 0800 and 1300 on Saturdays. Further, any Section 61 Consent applied for should only be after extensive pre-application discussions and agreements were in place. There was a preference for a dynamic construction noise management plan agreed through the planning process rather than submissions under COPA1974.
- 4.11.31. The LIR noted that extensive piling could cause adverse impacts and the CEMP should therefore contain a Piling Method Statement to be agreed with the relevant local authorities with controls on piling operations to be only between 0900 – 1700 hours Monday - Friday with no piling outside these hours or at weekends, Public Holidays or Bank Holidays.
- 4.11.32. During the operational stage, there were potential negative impacts including low frequency hum from the proposed fixed plant that required further consideration; baseline background data should be reviewed as lower frequency noise impacts were not recognised in an LAeq measurement under BS4142.
- 4.11.33. If individual transformers were now proposed (i.e. "Option 3" as a result of change requests accepted into the Examination and described in Section 4.5 of this Report) to infrastructure at Sunnica West A, Sunnica East A and Sunnica East B, a shunt reactor would also be introduced at Sunnica East Site B and the connection to Burwell Substation would be via a 400 kilovolt (kV) underground cable. There was no detail as to the potential environmental noise or vibration impacts of the change.
- 4.11.34. The LIR noted that at decommissioning stage a revised CEMP should be agreed to account for changed circumstances in the local environment, regulations and guidance then applicable. Deconstruction tools, extraction of piles, equipment moving machinery, landscaping etc at decommissioning might all produce noise

impacts. Additional sensitive developments might then be in place that should be accounted for.

- 4.11.35. The Applicant's response to the LIR [REP3-019] reiterated that core construction working hours were proposed to run from 07:00 to 19:00 Monday to Saturday. IT confirmed that a Piling Method Statement would be included in the CEMP, the method to be adopted to be dependent on the results of the geotechnical survey. Further, the Applicant pointed out that low frequency noise could be very difficult to predict as it could be generated by unexpected interactions between system components and amplified by the geometry of sites and receptor buildings. Low frequency noise would be appropriately mitigated through isolation and attenuation measures as part of the design principles.
- 4.11.36. As to Option 3, the Applicant accepted there would be an increase in noise from combined solar infrastructure plant at receptors nearest the substation and battery storage areas (R5, R6, R8, R9, R10, R11) of no greater than 2 decibels (dB), a difference not perceptible to the average human ear, resulting in no worse than a Low impact, with no significant adverse effects. The proposed transformers and the shunt reactors would be subject to detailed design to determine the plant manufacturer and final layout of the area to be included in the final OEMP based on the Framework OEMP [REP2-030] to mitigate and reduce effects as far as reasonably practicable.
- 4.11.37. The construction programme for the substations associated with Option 3 was reviewed and was expected to be up to 50 weeks to account for the additional complexity of the 400kV electrical configuration. Although noise and vibration effects would obtain for longer, the construction methods would not change from those assessed in the ES and were predicted to be lower in magnitude from construction traffic due to less traffic movements over a longer period. Therefore, the conclusions of the construction traffic impact assessment remained valid as the worst-case situation, whilst noise and vibration from onsite activities would remain as assessed in the ES.
- 4.11.38. The Applicant accepted that community engagement was key to successful management of concerns around dust and air quality emissions in construction and decommissioning phases. Contact details of those accountable for such emissions would be readily available and advertised, not just displayed at the entrance to the site, as committed to in section 2.4 of the Framework CEMP [REP2-026].
- 4.11.39. Say No to Sunnica (SNTS) stated at Deadline (D)8 in its Comments on D7 Submissions, Comments on the Report on Implications for European Sites (RIES), and Summary of Position [REP8-050] that issues of noise (among other matters) were significant matters raising weighty issues for locals, particularly those living or working close to the Application Site. Whilst it raised generalised concerns SNTS acknowledged its lack of expertise on such issues.
- 4.11.40. A key issue for SNTS however was the lack of consideration in the noise and vibration assessment of noise impacts on non-motorised users (NMU) of PROWs, including horses and riders, and users of permissive paths. The Examining Authority (ExA) in its Third Written Questions (ExQ3) [PD-025] asked at ExQ3.9.10 whether the Applicant would now accept that NMUs should be assessed as noise receptors, and this was confirmed in the Applicant's Response to the ExA's Third Written Questions [REP7-055]. The Applicant clarified that noise limits, monitoring and any additional mitigation measures to control noise impacts on NMUs would be agreed with the host local authorities and secured through the Section 61 process.

- 4.11.41. The ExA notes in this connection that the district authorities are responsible for administering the Section 61 Consent process whilst the county authorities are principally responsible for asserting PRow and promoting the welfare of users of the PRow network. The Applicant maintained nonetheless that given the linear nature of PRows, the range of noise impacts along them and the transient usage of a PRow by NMUs, no material changes in the experience of using the PRows, which could affect NMUs' health or quality of life, was anticipated.
- 4.11.42. SNTS strongly disagreed with the Applicant's "*unevidenced position that noise impacts on users of PRow and other recreational routes are 'transient'*". The point was reiterated by Cambridgeshire County Council (CCC) in [REP7-091]. SNTS went further and noted that for residents "*one of the greatest pleasures (particularly for users of the U6006), is the feeling of being in nature and listening to various bird calls, etc. What is currently a much valued tranquil, rural area would be no more*" (Comments on D7 Submissions, Comments on RIES, and Summary of Position [REP8-050]).
- 4.11.43. SNTS also stated that the Human Health Chapter of the ES referred to in [REP7-056] omitted the travelling community at Elms Road as close receptors to Sunnica East Site B.
- 4.11.44. At close of the Examination the completed Statement of Common Ground (SoCG) with the host local authorities [REP8-029] recorded two outstanding matters. Firstly, that agreement had not been reached on the potential noise impacts of the Option 3 substation, in relation to noise and the acceptability of receptor locations. Secondly, in relation to whether the proposed construction working hours were appropriate.
- 4.11.45. They had agreed in their D7 Comments on the Revised/Updated Statement of Common Ground (SoCG) [REP7-071] for the baseline noise monitoring undertaken in accordance with guidance in BS 4142, the method applied during measurement and assessment of noise data provided confidence that it was robust. However, they were then also waiting for further information on the modelled operational noise impacts, including low frequency noise, because of the introduction of Option 3. Also, they suggested construction hours could be clarified as to whether proposed construction hours, including piling working hours, were appropriate.
- 4.11.46. Federated Hermes Property Unit Trust (FHPUT) is an Affected Person whose tenant operates bioanalytical facilities at land (Campus) where the DCO would authorise temporary possession powers to install cables and associated works with maintenance and access rights over an existing access through the Campus. FHPUT operate through HPUT A Limited and HPUT B Limited (referred to collectively in this Report as HPUT). (Bryan Cave Leighton Paisner LLP on behalf of HPUT - Written Representation dated 11 November 2022 [REP5-104]).
- 4.11.47. FHPUT's tenant at the Campus operates specialist equipment around the clock which is highly sensitive to vibration. A single heavy goods vehicle (HGV) movement could significantly disrupt its activities. Negotiations between HPUT's solicitors and the Applicant continued during the Examination and by the close of the Examination they had agreed protective provisions to be contained in Part 12 of Schedule 12 to the DCO [REP11-029]. These included that no part of any consented development on the Campus works area could commence until a detailed noise and vibration management plan was approved by HPUT, such approval not to be unreasonably withheld or delayed (paragraph 138 of Part 12). In addition, no vibrating rollers or impact-driven or vibro-hammer piling rigs could be used within 300m of the Campus. Maximum noise levels were specified as well as

construction hours. Save for exceptions including emergencies, construction hours were to be between 0700 and 1900 Mondays to Saturdays, and no construction would be permitted on Sundays or public holidays.

4.11.48. In their D7 submission Comments on the Revised/Updated Statement of Common Ground (SoCG) [REP7-071] the host local authorities noted, with regard to the assessment of low frequency 'hums' from transformers at the previously proposed Burwell substation extension, that due to acceptance of non-material changes to the Application the proposed Options 1 and 2 Burwell Substation extension no longer formed part of the Proposed Development and as such, they agreed that noise conditions would be unchanged at receptors affected by noise emissions from the Burwell Substation.

4.11.49. In its End of Examination Summary Position Paper [REP10-032] the Applicant confirmed that Table 3-6 of the Framework CEMP [REP7-032], further updated at Deadline 10 [REP10-014] now included a requirement that, where noise complaints were received from NMUs, noise monitoring was to be undertaken to assess noise levels. NMUs were also added to the list of parties with whom engagement was required to be undertaken as part of the Communications Strategy. Table 3-6 was updated also to include a requirement to engage with equestrian groups on scheduling of construction activities that could generate high levels of noise in the vicinity of PRoWs, or other highways frequently used by horse riders.

4.11.50. In the Applicant's final preferred DCO [REP10-005] certain provisions relate to noise and/or vibration:

- Article 7 (defence to proceedings in respect of statutory nuisance) provides that no person can bring statutory nuisance proceedings under the Environmental Protection Act 1990 (EPA1990) in respect of noise created during construction, maintenance or decommissioning stages of the authorised development, for which notice has been given under s60 or consent obtained under s61 or 65 COPA1974 or which cannot be reasonably avoided as a consequence of the authorised development. Article 7 is a model provision, in recognition that such noise will arise and that provision to define its consequences in an appropriate and balanced manner will be needed; and
- Requirement 17 (operational noise) stipulates that no phase of the authorised development may start until an operational noise assessment, with details of embedded mitigation to ensure noise rating levels in the ES would be met, has been submitted to and approved by the Relevant Planning Authority(ies).

4.11.51. The ExA further notes that the updated CEMP Rev 07 dated 24 March 2023 [REP10-014] that the BPM to be applied (Table 3-6) as far as reasonably practicable during construction works, includes that:

- The Piling Method Statement will include suggested working hours for piling works; and
- Noisy works will not be undertaken until after 1000 hours in the Work Areas close to Snailwell Gallops in Sunnica West Site A, specifically parcels W03, W04 and ECO5.

CONCLUSION

4.11.52. The ExA notes the outstanding issue relating to the desired limit on hours of construction of the Proposed Development, set forth by Interested Parties (IPs) including the host local authorities. The ExA considers that residents would be more amenable to higher levels of noise if assured that such levels of noise would be

relatively short in duration. The ExA further considers therefore, that where the SOAEL is likely to be exceeded during this period, for example in relation to substantial groundworks near to noise sensitive habitable accommodation, consideration should be given to excluding the Saturday pm period. The ExA recommends that the Framework CEMP is amended so that this mitigation is considered as part of the CEMP.

- 4.11.53. It is unlikely in the ExA's view that the controls on piling operations finally (and eventually) set out in the Piling Method Statement, would justifiably permit such operations to be carried out other than as requested by the host local authorities, namely only between 0900 to 1700 hours Monday to Friday, with no piling outside these hours or at weekends, public holidays or bank holidays.
- 4.11.54. The ExA agrees with SNTS that use of PRowS by NMUs should be characterised as more than just "transient" since noise impacts for a user moving along a route could accumulate. However, it disagrees that valued and tranquil rural areas "*would be no more*" and sees no reason to disagree with the Applicant's overall conclusions that the significance of effects from the Proposed Development would range from negligible to minor adverse, over the temporary construction period as well as in the operation and decommissioning phases.
- 4.11.55. The ExA considers that the Section 61 Consent process could operate effectively alongside the planning related measures in the Framework OEMP, CEMP and DCO, so as to control noise impacts on NMUs in a reasonable manner by agreement with the host local authorities. The Section 61 Consent process would provide for all construction activities which are required to be undertaken an additional level of control exercisable by the relevant local planning authority in consultation with potentially affected residents.
- 4.11.56. The ExA notes further that compliance with consents under s61 does not mean that nuisance action cannot be taken under s82EPA1990 (subject to any restrictions on action imposed by the method by which planning approval is granted) in respect of statutory nuisance, nor is it an absolute defence to injunctive proceedings.
- 4.11.57. Apart from the specific issue of the now-discarded Burwell substation extension proposal, the Applicant appears not to have made any rejoinder to the general issue raised concerning evaluation of low-level noise, beyond asserting, correctly in the ExA's view, that such noise can be difficult to predict. The ExA notes that transformers are installed at many substations and can generate low frequency hum. As the NPS EN-5 states, whether the noise can be heard outside a substation depends on several factors, including transformer type and the level of noise attenuation, and – as the Applicant stated, could be amplified by the geometry of sites and receptor buildings.
- 4.11.58. This highlights the need for a very careful evaluation at detailed design stage of the potential impacts on receptors of the configuration and layout of the relevant infrastructure. The ExA notes that the Design Principles contain no specific reference to noise as a design issue. It could have been made clearer how such principles would incorporate a robust assessment of the potential for low frequency noise emanating from any or any combination of infrastructure comprised in the Proposed Development, and how any residual predicted effects can reasonably and effectively be mitigated against. That said the ExA notes that the elements of the Framework CEMP include reduction of potential adverse impacts through design and other mitigation measures.

- 4.11.59. However, it is less confident that at detailed design stage the relevant local authorities would be in a position to scrutinise, before approval, the extent to which the then specific design of the infrastructure within the operational sites at each phase of the authorised development would have taken due account of noise as a design issue. Therefore, the ExA recommends that the DCO is altered to add a sub-paragraph to Article 6 (1) to clarify that each phase of the authorised development shall contain such details.
- 4.11.60. Overall, therefore the Applicant's noise and vibration assessment assesses those matters required to be assessed in NPS EN-1 and operational noise with respect to human receptors was properly assessed using BSs and other guidance as appropriate. Consultation took place as required with the Environment Agency (EA) and Natural England (NE) about assessment of noise on protected species or other wildlife with results informing ecological assessments. The assessment has adopted the NPSE principles and aims relating to noise, including definitions of 'significant adverse effects' and 'adverse effects' using the NOEL, LOAEL and SOAEL concepts, and had regard to PPG guidelines.
- 4.11.61. The ExA considers that the Proposed Development would avoid significant adverse impacts on health and quality of life from noise and mitigate and minimise other adverse impacts on health and quality of life from noise through effective management and control of noise as set out in the Framework CEMP. Where required, for example in relation to HPUT, measurable requirements have been inserted in the DCO to ensure noise levels do not exceed limits specified in the DCO. The Applicant has described proposed embedded mitigation measures, and additional measures for operational and construction noise that may be encountered over and above those predicted.
- 4.11.62. The ExA notes that the dNPS EN-1 encourages control of some noise impacts by environmental permits and the ExA considers that its view on parallel tracking of the s61 Consent process and the planning related controls, is in line therewith.
- 4.11.63. The measures set out in the Application and amplified through iterations of the DCO, Framework CEMP and Framework OEMP would in the ExA's view minimise and where possible reduce noise pollution, and the infrastructure would be capable of being appropriately sited where its users and receptors would not be significantly adversely affected by noise or vibration, in compliance with the key local plan policies cited above in this Chapter, and as reflected in the aims of the NPPF.
- 4.11.64. Based on the evidence before the ExA the Applicant's assessment of the noise and vibration impacts likely to arise from the construction, operation and decommissioning of the Proposed Development would meet the requirements of NPS EN-1, NPS EN-5, dNPS EN-1, dNPS EN-3 and dNPS EN-5. Furthermore, the noise resulting from the construction, operation and decommissioning of the Proposed Development would remain below the significance thresholds as set out in the NPSE and NPPF.
- 4.11.65. The inclusion in the dDCO of Requirement 6 (Detailed Design), Requirement (CEMP), Requirement 15 (OEMP), Requirement 16 (CTMP), Requirement 17 (Operational Noise), and Requirement 22 (Decommissioning), would provide sufficient safeguards to ensure that the adverse impacts resulting from the Proposed Development would be minimised. Accordingly, the ExA concludes that the Application would accord with the Government's policy on noise and vibration as set out in NPS EN-1 and NPS EN-5, the NPSE and NPPF. It would also accord with

the dNPSs as well as local planning policy. The effect would carry slight negative weight in the overall planning balance.

4.12. SOCIO-ECONOMICS AND LAND USE

INTRODUCTION

- 4.12.1. This Chapter addresses the impacts of the Proposed Development related to the effects on the local and wider economy including the horse racing industry, farming circumstances, soil quality, loss of best and most versatile (BMV) agricultural land, and public rights of way (PRoW).

ECONOMIC AND EMPLOYMENT EFFECTS (INCLUDING HORSE RACING INDUSTRY)

INTRODUCTION

- 4.12.2. This section addresses the economic and employment effects on the local and wider economy in the construction operational phases with particular reference to the horse racing industry (HRI).

POLICY CONSIDERATIONS

National Policy Statements

NPS EN-1

- 4.12.3. Paragraph 5.12.2 states that where the project would be likely to have socio-economic impacts at local or regional levels, applicants should include an assessment of these impacts as part of the ES. This should cover:

- creation of jobs and training opportunities;
- improvements to services and local infrastructure such as educational and visitor facilities;
- effects on tourism;
- the impact of a changing influx of workers; and
- cumulative effects.

- 4.12.4. Furthermore applicants should describe existing socio-economic conditions surrounding the proposed development and how the socio-economic impacts correlate with local planning policies.

- 4.12.5. The decision maker should consider what mitigation would be necessary to mitigate adverse socio-economic impacts of the development, and take into account positive proposals to mitigate impacts (for example through planning obligations) and legacy benefits that may arise as well as any options for phasing development in relation to the socio-economic impacts.

- 4.12.6. Paragraph 5.10.15 states that the decision-maker should ensure that applicants do not site their scheme on the best and most versatile (BMV) agricultural land without justification. Little weight should be given to the loss of poorer quality agricultural land (in grades 3b, 4 and 5), except in areas where particular agricultural practices may themselves contribute to the quality and character of the environment or the local economy.

Draft National Policy Statement EN-1

- 4.12.7. Draft National Policy Statement (dNPS) EN-1 reflects the provisions of the extant NPS EN-1, however it encourages applicants where possible, to ensure local suppliers are considered in any supply chain, considering accommodation strategy as appropriate for construction workers.

Other National Policy and Guidance

- 4.12.8. Paragraph 81 of the National Planning Policy Framework (NPPF) places significant weight on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach should allow each area to build on its strengths, counter any weaknesses and address future challenges, particularly where Britain can be a global leader in driving innovation, and in areas with high levels of productivity, to capitalise on performance and potential.
- 4.12.9. By paragraphs 84 and 93, planning decisions should among other things enable sustainable growth and expansion of all types of business in rural areas, and help develop and diversify agricultural and other land-based rural businesses. Decisions should also take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community, and guard against unnecessary loss of valued facilities and services, particularly where this would reduce the community's ability to meet its day-today needs.
- 4.12.10. The Government's Industrial Strategy White Paper (referenced in 2.2.10 of [APP-114]) aims to increase productivity and drive growth across the whole country including by leading the world in the development, manufacture and use of low carbon technologies. A key tenet is the upgrading of infrastructure to support productivity, focussed among other things on providing clean and affordable energy.

Local policy

- 4.12.11. The range of local policies that touch upon economic issues including employment growth, tourism and rural employment, climate change, and clean or green economic growth are set out in Table 3-1 of Appendix 12A of ES Chapter 12 [APP-114]. These are elaborated on in section 12 of the joint Local Impact Report (LIR) [REP1-024]. Key policies are:
- West Suffolk Local Plan 2010, Policy CS6 (sustainable economic and tourism development), seeks to deliver jobs and employment land and support the development of the local economy with particular priority given to key sectors including the equine industry and tourism, including developing the District's skills base and supporting the development of growth sectors and infrastructure investment to aid economic development;
 - The East Cambridgeshire Local Plan (2015) (ECLP) Policy EMP6 (Development affecting the horse racing industry) states:
 - *“Any development which is likely to have an adverse impact on the operational use of an existing site within the horse racing industry, or which would threaten the long term viability of the horse racing industry as a whole, will not be permitted”.*
 - ECLP “COM5 - seeks to ensure a strong green infrastructure including for recreation and site specific policies that promote economic growth:
 - *“Proposals which would cause loss of or harm to existing strategic green infrastructure will not be permitted, unless the need for and benefits of the development demonstrably and substantially outweigh any adverse impacts*

on the green infrastructure... New development will be expected to contribute towards the establishment, enhancement and ongoing management of strategic green infrastructure by contributing to the development of strategic green infrastructure network within the district, in accordance with Policy GROWTH 3.”

- Forest Heath and St Edmundsbury Joint Development Management Policies Document (2015) Policy DM48 (Development affecting the horse racing industry) states:
 - *“Any development within or around Newmarket which is likely to have a material adverse impact on the operational use of an existing site within the Horse Racing Industry (such as noise, volume of traffic, loss of paddocks or other open space, access and/or servicing requirements), or which would threaten the long term viability of the horse racing industry as a whole, will not be permitted unless the benefits would significantly outweigh the harm to the horse racing industry”*

THE APPLICANT’S CASE

- 4.12.12. There is no statutory guidance on methodology to assess socio-economic and land use effects. The impacts of the Proposed Development were considered at varying spatial levels, consistent with the Homes and Communities Agency (Homes England) guidance: “Additionality Guide, A Standard Approach to Assessing the Additional Impact of Projects, 4th Edition”. The Applicant determined the environmental conditions, resources and sensitive receptors in the study area, ie the baseline conditions. Potential economic impacts from the Proposed Development, i.e. employment and Gross Value Added (GVA), were considered in relation to a 45 minute travel study area based on drive time. This is illustrated in Figure 12-1 ES Chapter 12 [APP-237], which shows the main labour market catchment area for the Proposed Development in terms of drive time in the absence of a functional economic market area in local policy.
- 4.12.13. Table 12-1 in ES Chapter 12 [APP-044] presents the different components of the socio-economic and land use effects assessment and the geographical scale at which each component is assessed. Broadly speaking, consideration was given to the Proposed Development in terms of effects on the following:
- agricultural land, soils and farm businesses;
 - employment generation;
 - GVA;
 - Public Rights of Way (PRoW); and
 - local amenities and land use (residential properties, business properties, community facilities and development land).
- 4.12.14. The submitted Outline Skills, Supply Chain and Employment Plan (OSSCEP) [APP-268] notes that a large variety of roles and skills would be required, particularly skilled electrical engineers and solar photovoltaic (PV) panel assemblers. The main equipment requirements would be electrical and landscaping equipment.
- 4.12.15. The employment/GVA assumptions related to travel area and “leakage” (ie the benefits to those outside the effect area) are based on employment in the 45 minute travel area, derived from census data. A map of the travel area is at Figure 12-1 of Drive Time to and from the Order Limits Analysis [APP-237].
- 4.12.16. Total employment is presented in ES Chapter 12 [APP-044]. The main impacts on local amenities were considered based on findings in other assessments presented

in ES Chapter 10: Landscape and Visual Amenity [APP-042], Chapter 11: Noise and Vibration [APP-043], Chapter 13: Transport and Access [APP-045] and Chapter 14: Air Quality [APP-046].

- 4.12.17. For tourism effects on the local economy, the Applicant's EIA Scoping Report [APP-051] did not assess effects on tourism as no specific receptors such as visitor attractions, were identified in the study areas and the Scoping Opinion [APP-052] did not request such an assessment. The LVIA [APP-042], assesses effects on visual amenity, including recreational users of the PRoW network.
- 4.12.18. An Outline Skills, Supply Chain and Employment Plan (OSSCEP) was submitted [APP-268] and updated at Deadline 3 [REP3-017]. It sought to secure the potential improvements, mitigation and compensation to local communities that could be implemented as part of the Proposed Development.
- 4.12.19. "Additionality" considers the overall impact of job gains to the area, the level of leakage (benefits to those outside the effect area), numbers of displaced jobs and multiplier effects, such as supply chains and worker-spending related jobs. Table 12-2 ES Chapter 12 [APP-044] described additionality values for the construction, operation, and decommissioning phases, to calculate net additional employment and economic impacts. These were used to assess significance criteria using professional judgement (with other available assessments and relevant national standards) in terms of the scale and nature of effects of the Proposed Development against baseline conditions. A significance of effect matrix based on receptor sensitivity and impact magnitude is set out in Tables 12-3 to Table 12-14 and Table 12-15 of ES Chapter 12 [APP-044].
- 4.12.20. Various primary mitigation measures were embedded in the Proposed Development to reduce other construction and operational effects such as noise, air quality, transport and landscape which in turn would mitigate the effects on the local community and existing facilities from a socio-economic and land use perspective (referenced in Table 12-25, ES Chapter 12 [APP-044]).
- 4.12.21. The Applicant assessed potential temporary impacts on development land, as detailed in Table 12-18 and Table 12-19 of ES Chapter 12 [APP-044].
- 4.12.22. Unimplemented planning permissions and development allocations in development plans were assessed, including in particular an application for the Potable Water Pipeline Crossing Grid Connection Route A. There were no approved applications within the Order limits whilst applications nearby included applications for 130 dwellings, a caravan park extension, water pipeline crossing cable route, commercial polyhouses and the construction of an industrial/warehouse facility. These proposals are adjacent to or located away from the Order limits and as such no direct impacts or effects on access to them are anticipated. Therefore, there are no effects arising from the Scheme on these planning applications during construction, which results in a negligible effect, and this is not considered significant.
- 4.12.23. There were no development allocations in the Order Limits whilst adjacent thereto is an existing quarry and recycling facility. Within 1km of the Order limits is land for 125 dwellings; a mixed used development; land for 140 dwellings; and land for 382 dwellings. It was not anticipated that there would be any effect from the Proposed Development on these receptors which resulted in a negligible effect, not considered significant.

Construction phase

- 4.12.24. In terms of assessment of likely impacts and effects, as derived from ES Chapter 12 [APP-044] the Applicant suggested that the Proposed Development would support, on average, 1,685 total net jobs per annum during the construction period. It was assumed that 1,483 jobs (around 90%) p.a. would be taken up by residents within 45 minutes of the Application Site as home-based workers, and 202 workers from outside the 45-minute study area, with the worst-case impact scenario being based on these numbers.
- 4.12.25. Whilst displacement would occur, (where benefits are off-set by reductions in output or employment elsewhere) additional demand for labour could displace workers from other positions and so the net benefit is reduced to that extent. The Applicant assumed that construction labour force displacement would be low and following the HCA Additionality Guide, a low displacement factor for 25% was applied, giving a total net direct employment figure of 723 jobs per year in the construction period.
- 4.12.26. The Applicant assessed that there would be local employment from indirect and induced effects of the construction activity. This multiplier was a composite figure which took into account the indirect jobs created across the Functional Economic Market Area (FEMA) based on supply chain activity, and the induced employment created through increased spending across the study area. (An indirect job is created when an applicant, or its associated supply chain, purchases goods or materials from a company and an induced job is created through workers spending their money).
- 4.12.27. The Applicant referred to The Centre for Economics and Business Research (CEBR) report entitled Solar powered growth in the UK – the macroeconomic benefits for the UK of investment in solar PV: CEBR (report for the Solar Trade Association), September 2014, cited in Table 12-2 of ES Chapter 12 [APP-044]).
- 4.12.28. The CEBR report provided an employment multiplier for large-scale solar PV investments of 2.33, such that for every job supported on-site, 1.33 indirect/induced jobs are supported in the wider economy. Applying the multiplier to the total net direct employment figure of 723 workers results in net indirect and induced employment of 962 jobs per annum during the demolition and construction period, together generating 1,685 total net jobs per annum. On this basis, the Applicant concluded that the Proposed Development would give a medium-term temporary moderate beneficial effect, considered significant.
- 4.12.29. Applying the average GVA per construction worker in the study area to the gross number of construction jobs generated from the Proposed Development, the construction phase would contribute £58 million to the economy, of which £51 million is within the 45-minute travel study area, as shown in Table 12-27 of ES Chapter 12 [APP-044], which results in a temporary moderate beneficial effect, considered significant.
- 4.12.30. The construction of the Proposed Development would not require demolition of residential or business premises or community facilities in the study area or require land temporarily from these properties. The Applicant concluded that, considering the results of the air quality, noise, traffic and visual assessments, there would be no effects on these local amenities during construction, which results in a negligible effect, not significant.

- 4.12.31. The assessment was done for the whole Proposed Development. The Applicant stated that the effects accounted for any cumulative effects, therefore there were no combined effects on receptors related to socioeconomic, land resources, soil resources or farming circumstances in the construction phase [APP-044, paragraph 12.8.40].

Operational phase

- 4.12.32. The Applicant stated that the total net employment would be 29 jobs, possibly more as part-time staff would be needed to maintain works from time to time. The impacts were assessed as permanent, “very low” beneficial, with a permanent negligible effect, not significant.
- 4.12.33. There were no assessed significant effects on local amenities, impacts on development land including combined effects on receptors related to socio-economic effects in the operational phase.

Decommissioning phase

- 4.12.34. A Framework Decommissioning Environmental Management Plan (DEMP) was included in Appendix 16E of ES Chapter 12 [APP-044], the full plan to be approved by the relevant planning authority and implementation secured by the dDCO (see Requirement 22 in rev 05 DCO [REP10-005]. The Proposed Development would be decommissioned after 40 years operation, assumed to be no earlier than 2065, when “*it is expected*” all infrastructure would be removed, generating jobs (paragraph 12.8.61 [APP-044]). Overall, the long-term impact on employment loss and the local economy in the decommissioning phase was assessed as permanent “very low” adverse, with a permanent negligible effect, not considered significant.

Residual effects

- 4.12.35. The Applicant concluded [APP-044, paragraph 12.9.2] that apart from temporary significant adverse residual effects assessed on users of two PRowS during construction and decommissioning phases, there would be no other potentially significant adverse socio-economic effects during the construction, operational or decommissioning phases of the Scheme and no additional mitigation measures would be required. The Applicant proposed no additional mitigation measures above those stated in the other technical chapters to avoid or minimise the socio-economic effects described in ES Chapter 12 [APP-044].
- 4.12.36. On the basis of its assessment the Applicant concluded that the construction phase residual effects would be due to employment generated during the construction phase. There would be no significant socio-economic residual effects in the operation phase, as shown in Table 12-34 ES Chapter 12 [APP-044], as the employment generated during the operation phase is considered minor beneficial. The Applicant considered that decommissioning-phase residual effects in socio-economics terms would be similar to those during the construction phase.

Cumulative effects

- 4.12.37. The Applicant assessed the potential effects of the Proposed Development cumulatively with other development schemes (“cumulative schemes”) in the surrounding area, described in ES Chapter 5: EIA Methodology [APP-037]. The existing developments in the Order limits were already considered to form the baseline of the assessment.

- 4.12.38. The Applicant considered that overall cumulative effects from generation of construction workers would remain temporary, medium-beneficial effect on the economy of the study area, resulting in a temporary “moderate” beneficial effect, considered significant. The overall cumulative effect from the generation of GVA from construction would also remain temporary “medium” beneficial, ie a temporary minor beneficial effect, which was not considered by the Applicant to be significant.
- 4.12.39. The Applicant assessed that in the construction phase the overall cumulative effect on residential properties, business premises and community facilities was likely to remain as a negligible effect, not considered significant as there were no cumulative schemes adjacent to the Proposed Development or in close proximity.
- 4.12.40. The overall combined cumulative effect from the generation of workers during operation was considered to stay at permanent “low” beneficial, ie a permanent negligible effect, not considered significant. There would be no significant cumulative effects on residential properties, business premises and community facilities.
- 4.12.41. At decommissioning stage, the effects of cumulative schemes were considered by the Applicant not to alter the employment effects, and medium-term job creation would stay as a “moderate” beneficial temporary effect, considered significant. The permanent loss of employment within the Order limits would also remain as a negligible effect, not considered significant. Overall cumulative effects during decommissioning on residential properties, business premises and community facilities would stay as negligible, not significant as there are no cumulative schemes adjacent to the Proposed Development or in close proximity.

EXAMINATION

- 4.12.42. The Statement of Common Ground (SoCG) with the host Local Authorities [REP8-029] records an outstanding dispute as to the correctness of the methodology used to make assumptions on the employment/GVA and other economic effects of the Proposed Development.
- 4.12.43. As summarised in the joint LIR [REP1-024] the host local authorities considered it highly unlikely that the study area could supply 90% of workers needed for construction. ONS statistics used by the Applicant suggested that the 45-minute study area had approximately 4,900 workers currently employed in construction. 1,483 jobs taken up by local residents would be around a third of the locally available construction workforce, considered unlikely, given also that there was a very high demand for local construction workers, and the high number of other large infrastructure projects expected to be built in the construction phase of the Proposed Development. The Councils considered many more construction workers would not be home-based.
- 4.12.44. Further, the Applicant assumed the creation of indirect and induced opportunities for 962 jobs in total but did not detail the split between indirect and induced. Of the 962 total jobs posited, the assessment stated that only 115 were outside the 45-minute study area, suggesting that the Applicant and its associated supply chain would be buying most goods and materials needed within the 45-minute study area. The lack of assessment on the local supply chain and its ability to supply goods or materials to the project, prevented the Councils from verifying these numbers and they were unaware of companies in the study area that were part of a solar supply chain. Thus, there was an inaccurate assessment, implying there would be no positive

impact from indirect and induced labour creation from hosting the Proposed Development.

- 4.12.45. The host authorities assessed the impact on visitor views in the vicinity of the Proposed Development and the loss of long-distance views as relevant and were concerned that the Proposed Development would negatively impact on tourism within the locality. Relevant conclusions on landscape and visual amenity impacts are set out in Chapters 4 and 6 of this Report.
- 4.12.46. In the joint LIR [REP1-024] it was stated that up to 10 large solar farm developments were expected to be constructed in the next five years so a developed local supply chain, experienced in construction of large-scale solar PV and battery energy storage system (BESS) could export their expertise nationally. Thus, the host authorities expected the Applicant to work with local stakeholders to develop programmes to support local businesses to grow and offer their services to supply the Proposed Development and other related projects in and outside the region. They saw the East of England as now strategically important in the UK's drive to deliver Net Zero goals with a unique blend of infrastructure, expertise, skills and innovation to play an important role in meeting the UK's transformational ambition to net zero greenhouse gas emissions. The region had unique geographical conditions suitable for large scale solar and other renewable energy projects, but so many projects presented challenges in terms of impacts on tourism, the HRI, and labour market. The negative impacts for supply chain and economic development matters, included:
- Newmarket is a premier location for horse breeding/training and the horse racing industry (HRI), customers/investors might see the area as uncondusive for breeding/training horses due to potential environmental disturbances and transport disruption during construction, reducing HRI investment;
 - likely negative impact on workforce availability to local/regional businesses and supply chain due to workforce displacement and churn; and
 - the impact of other major energy projects in the region requiring some of the skills and workforce needed for the Proposed Development were not assessed, or their cumulative impact on the local and regional workforce availability; and
 - workforce accommodation bookings would replace regular customers.
- 4.12.47. Disruption to traffic along the A142 due to increased construction traffic, is considered in Section 4.13 of this Report.
- 4.12.48. The host local authorities considered that, so far as community impacts were concerned, the scale and nature of the Proposed Development would change the sense of place and attachment of residents, and recreational amenities of affected villages and communities and that the in-combination effect of these residual impacts on local communities and their wider wellbeing had not been considered, mitigated against or compensated for.
- 4.12.49. For the operational phase the key negative impact was seen by the host local authorities as the failure to assess likely effects of the Proposed Development adequately on employment, skills and education, therefore all such conclusions were "*null and void*." Allied to this was the alleged failure to consider impacts on the HRI within the Applicant's assessment of effect on local amenities and land use, business premises and future development of land. The particular concern was that there would be an impact on stud farms due to loss of agricultural land or impact on stud lands adjoining the Application Site. Generally they feared a negative impact

on the local economy, as significant numbers of local businesses rely on the HRI in Cambridgeshire and Suffolk.

- 4.12.50. A further criticism was that the lack of long-term operational roles would suddenly precipitate multiple losses of employment at the same time when construction ends. The most recently submitted OSSCEP Rev 04 [REP10-024] noted that decommissioning would be expected to take between 12 and 24 months and would be undertaken in phases. Once the full plan was finalised, the document would be reviewed every six months, so it could be continuously refined and adjusted.
- 4.12.51. Mitigation measures were sought by the Councils to train, attract and employ those entering work and who are under-employed, therefore not impacting existing employment numbers. Measures were also sought due to the perceived effect on the visitor economy sector, and to address “*intangible but real residual impacts on the community and locality*”, “*in addition to any potential community benefits*” from the Proposed Development, including any that may derive from the Government’s British Energy Security Strategy. Furthermore, several requirements and obligations were sought to mitigate impacts and maximise opportunities of, and from the Proposed Development.
- 4.12.52. The Applicant and the Councils could not resolve their differences regarding the baseline and impact assessment, so focussed on an appropriate approach to mitigation by means of the OSSCEP [APP-268] revised at D2 [REP2-034], D3 [REP3-017] and D7 [REP7-043]. Comments received at D8 resulted in revisions submitted at D10 [REP10-024].
- 4.12.53. The final OSSCEP submitted at D10 [REP10-024] made it clear that all outcomes would be measured using a methodology agreed with the relevant local authorities, and documented through evaluations undertaken at various intervals during the life of the Proposed Development. The full SSCE plan would include a review and evaluation process and agreed in collaboration with the relevant local authorities, utilising the skills coordination function of the authorities. The plan would be submitted and approved in advance of development commencing in accordance with Requirement 20 of the dDCO.

Horse Racing Industry (HRI)

- 4.12.54. Several representations were received on the HRI including for example the National Horseracing Museum [RR-0557] who stated Newmarket was one of very few single industry towns where the major employer is the racing industry. It stated that the Proposed Development would surround the heathland of Newmarket, preserved for the past 350 years for the training of racehorses, and the impact would be “*devastating for the future of the heathland*” and “*in turn the racing industry and the heath should be a protected site for future generations to enjoy*”.
- 4.12.55. Others were concerned at the lack of assessment by the Applicant, such as Munro Consultants Ltd on behalf of SNTS [RR-1128] who stated “*the impact and harm of the proposal to the unique and world-renowned Newmarket equestrian industry has neither been recognised nor assessed and will be significant.*” The joint LIR stated that there would be a “*potential loss in local economy due to change in investor perception of area as a destination for horseracing business, during operational life of project*”.

- 4.12.56. The Applicant responded by submitting its consultant's HRI Impact Assessment at D2 [REP2-039] (Lichfields report). The report deals with issues in respect of the impact of the scheme on the HRI in Newmarket.
- 4.12.57. The Lichfields report reached two main conclusions, firstly that the impacts of the Proposed Development did not adversely impact the operational use of an existing HRI site. They found no adverse highways impacts, glint and glare impacts, or noise impacts on any HRI site. Whilst there would be some adverse landscape visual impacts – primarily related to the Limekilns Gallops – these would not adversely impact its operational use by the HRI. Secondly, Newmarket had a “*strong and robust HRI*” making it unlikely they would relocate their existing investment.
- 4.12.58. The Lichfields report [REP2-039] also found at paragraph 7.8, for solar farm schemes near existing HRI clusters:
- Newmarket is already the location of five solar farms all within 5km of the wider HRI cluster, operational in a period in which Newmarket has thrived and in respect of which the Newmarket HRI raised no objections; and
 - no example could be found where the HRI had objected to a solar farm on the basis that it would threaten the viability or operation of their industry.
- 4.12.59. At D3A SNTS submitted a response to the Lichfields report from its own consultants (Popham report) [REP3A-070]. Other IPs supported SNTS such as Godolphin Management Company [REP3A-066] saying its position was aligned with SNTS.
- 4.12.60. The Popham report's approach considered what use was made of relevant HRI sites, what impacts on them would be caused by the Proposed Development, and whether the impact would be adverse. Sites considered were:
- the Limekilns gallops;
 - Godolphin's Chippenham/Snailwell Gallops;
 - stud farms; and
 - on roads and PROWs used by the HRI.
- 4.12.61. The Popham report concluded that the impact on the operational use of these sites would be adverse or “high adverse”. The Limekilns as a showcase of the HRI would be “high adverse”. It noted that the HRI considered that the industry's viability is vulnerable, despite acknowledging its pre-eminence. It added that “*the evidence points to increased vulnerability not the reverse*”. Such were the reported views of “*the HRI and numerous members of the HRI*” (page 17 et passim) and there was “*no evidence to the contrary.*”
- 4.12.62. Key to the Popham report's claims was its assertion (paragraph 31) that there was no evidence that the growth of HRI locations such as Ireland “caused other than a decrease in the comparative standing of Great Britain and Newmarket and an increase in Great Britain's and Newmarket's vulnerability.” The ExA notes the justification for this assertion was the statistical information found in the Lichfields Report at paragraph 3.32, whilst that latter report extrapolates from the same figures that Great Britain maintained a consistent position amongst world rankings in recent years, suggesting Great Britain (and Newmarket) were not at threat from change or growth elsewhere in the world.
- 4.12.63. The Applicant made a further response to the comments received at D4 (Applicant's response to comments on 8.10 Horse Racing Industry Impact Assessment) [REP4-039]. SNTS submitted at D5 [REP5-098] its Response to ExAQ2.7.4, Comments on Applicants ISH3 Submissions and Comments on Hatchfield Farm.

- 4.12.64. Other relevant submissions received included:
- [PDB-022] Tattersalls Ltd on behalf of Newmarket Horsemen's Group Procedural Deadline B Submission - Response to the Examining Authority's letter of 28 July 2022;
 - [REP2-066] Sunnica Ltd Deadline 2 Submission - Statement of Common Ground with Say No to Sunnica & Newmarket Horsemen;
 - [REP4-128] Christian Wall on behalf of The Newmarket Horsemen's Group Deadline 4 Submission - Post hearing submission;
 - [REP4-129] John Morrey on behalf of The Newmarket Horsemen's Group Deadline 4 Submission - Post hearing submission;
 - [REP6-078] Tattersalls/Newmarket Horsemen's Group Deadline 6 Submission; and
 - [REP6-079] The Jockey Club Deadline 6 Submission - Comments on any Additional Submissions accepted at Deadline 5.
- 4.12.65. The joint LIR [REP1-024] alleged a failure to consider impacts on the HRI within the Applicant's assessment of effect on local amenities and land use, business premises and future development of land. There would be an impact on stud farms due to loss of agricultural land or impact on stud lands adjoining the Application Site. More generally there was feared a negative impact on the local economy as the equine cluster, estimated in 2014 as worth £200million, accounted for 3000 direct FTE jobs. Significant numbers of local businesses relied on the HRI in Cambridgeshire and Suffolk.
- 4.12.66. The agenda for ISH3 [EV-035] provided an opportunity to hear from, among others, the two main protagonists arguing that preference should be given to the Popham report over the Lichfields report. The key issues were:
- whether the scheme would be likely to have an adverse impact on the operational use of an existing site within the horse racing industry; and
 - whether the scheme would threaten the long-term viability of the horse racing industry.
- 4.12.67. During the second Open Floor Hearing (OFH2) [EV-060 and EV-061] a number of IPs spoke about their concerns in relation to the potential negative impact of the Proposed Development on the HRI in Newmarket. Matt Hancock, one of the local Members of Parliament, referred to the dependency of the HRI, specifically the training of racehorses, on those who wish to own horses. Sir Mark Prescott, who had 54 years' experience of being a trainer in Newmarket, explained that there are 2,500 racehorses and 81 trainers in Newmarket and that previous major infrastructure such as the railway and the by-pass, had avoided the gallops. The Newmarket Horseman's Group explained that the quality and character of the landscape and the importance of the gallops are what make Newmarket special; the spend on the HRI (in terms of owners and trainers choosing to be based in Newmarket) is discretionary. Mr John James described international aspects of the HRI and supporting activities, such as "horse hotels", and the sensitivity and care needs of racehorse breeding. Mr Liam MacGillivray, an equine veterinary surgeon, spoke about the human aspects of the HRI in Newmarket and explained that his veterinary practice alone employs approximately 150 people.
- 4.12.68. The Applicant drew attention in its Written Summary of Applicant's Oral Submissions at ISH3 [REP4-032] to the Hatchfield Farm (2020) appeal decision letter (DL) (Appendix G to [REP4-032]). The Inspector's conclusions on the impact of the HRI (referred to in the SoS's decision letter at paragraphs 16 to 19), assessed the impacts of increased traffic on HRI operations and whether this might lead to

relocation of trainers. The Inspector and SoS found that the limited increase in journey times across the modelled network would not result in any actual harm to HRI operations and there was no evidence to suggest that any trainers would move, or owners would remove their horses out of Newmarket. The objectors to the Proposed Development considered the appeal decision irrelevant mainly as it dealt with a different development, namely a new housing proposal.

- 4.12.69. A completed SoCG with SNTS and Newmarket Horsemen [REP8-040] was submitted at D8.
- 4.12.70. The support given to the HRI through the local plan policies cited above is an important and relevant matter in the Examination. The pre-eminence of the HRI in Newmarket is not in question. The apprehension expressed by the host authorities in the joint LIR [REP1-024] is a legitimate concern which was supported by evidence presented by IPs with involvement in and deep experience of the HRI in Newmarket and beyond.
- 4.12.71. IPs described the sensitive nature of the industry and indeed of the horses themselves. They considered the emerging competition from other HRI centres (especially abroad) to present a particular challenge which made the maintenance of an attractive and safe setting for the HRI in Newmarket of vital importance. A loss of confidence in these aspects would, in their opinions, result in owners and trainers relocating away from Newmarket with consequent negative effects on the industry locally and therefore the local economy. In view of the economic value of the HRI both in Newmarket and within the country as a whole, the ExA considers that the Proposed Development does not meet the requirements of the NPPF in terms of supporting a strong, competitive economy. As the adverse visual effects on the Limekilns are unable to be adequately mitigated, the Proposed Development fails to include mitigation for the potential adverse socio-economic impacts that could therefore be cause and is therefore in conflict with NPS EN-1.
- 4.12.72. The SCC AP would remove solar arrays and associated electrical infrastructure from the main areas of concern in relation to the HRI and would therefore to some extent mitigate potential adverse effects on the industry. There would still remain extensive areas within the Proposed Development and minor adverse impacts of these on the HRI cannot be ruled out.

CONCLUSION ON ECONOMIC AND EMPLOYMENT EFFECTS (INCLUDING HORSE RACING INDUSTRY)

- 4.12.73. The Applicant's assessment has considered the impacts if any, on creation of jobs and training opportunities; improvements needed to services and local infrastructure; effects on tourism; changing influx of workers; and cumulative effects, in accordance with NPS EN-1. Furthermore, the Applicant has described existing socio-economic conditions surrounding the Proposed Development and how the socio-economic impacts correlate with local planning policies.
- 4.12.74. Agreement has not been reached between the Applicant and the host local authorities on the baseline employment information used in the assessment [APP-044] to determine the baseline employment figures used in the ES, or with the employment assumptions related to travel area and leakage proportions used, or with the assessment of tourism effects on the local economy. (Statement of Common Ground with Cambridgeshire County Council, Suffolk County Council, Document Index East Cambridgeshire District Council and West Suffolk Council - Revision: 03 [REP8-029]).

- 4.12.75. The ExA notes the host local authorities' view (paragraph 12.24, LIR) that the overall impact of the proposal on the local economy is expected to be negative. The ExA's view is that the methodology employed by the Applicant in these matters could have been improved had it engaged with the local authorities and other parties earlier to benefit from their combined expertise and experience of the local labour market, particularly in respect of the numbers and nature of permanent jobs in the HRI, rather than relying mainly on standard formulae to arrive at the estimated overall employment, and hence GVA, figures.
- 4.12.76. That said, although some criticisms by the host local authorities may be well-founded, they relied on their experience in doubting the figures saying that they were "unlikely" without putting forward calculations of their own to counter those submitted. This does not make the Applicant's assessment "null and void" although it lessens the confidence with which the ExA can be assured that the full extent of jobs created in the various stages during the life of the Proposed Development would materialise as assessed, particularly in respect of the relatively small numbers of jobs during the operational phase when set against the very real possibility of the loss of a great many jobs in the HRI. It is not therefore clear that there is an overall net benefit in respect of the potential for jobs to be created by the Proposed Development within the study area by comparison to the potential loss of jobs in the HRI, both within the study area and, in view of the pre-eminence of Newmarket in the HRI, from outside the study area.
- 4.12.77. The lack of assessment of the local supply chain and its ability to supply goods or materials to the project, did prevent the host local authorities from verifying these numbers, however the ExA notes that the main parties have now agreed measures outlined in the updated OSSCEP and is satisfied that the measures would secure in a reasonable manner the potential improvements, mitigation and compensation to local communities in connection with the Proposed Development, as confirmed in the SoCG Update Note for Combined LPA [REP10-033].
- 4.12.78. The ExA also notes that in the updated OSSCEP the outputs or indicators relevant to the opportunities that the full plan would seek to achieve are now specifically geared to the local area and in this respect would also reflect the aim of dNPS EN-1 and the extant NPS EN-1, in encouraging applicants, to ensure local suppliers are considered in any supply chain.
- 4.12.79. Moreover, paragraph 5.4.2 OSSCEP sets out the measures the Applicant will implement, working with local partners to communicate opportunities for purchasing and contracts arising from the Proposed Development to local businesses, building on relationships with chambers of commerce, and Orbis Energy, a unit in Suffolk County Council (SCC) promoting clean energy growth in the East of England Energy Zone which can provide links to the local supply chain and help organise supply chain events. The ExA considers that the mitigation set forth in the updated OSSCEP would be necessary to mitigate adverse socio-economic impacts of the development, but also provide positive benefits for the local and regional area.
- 4.12.80. The ExA has considered the representations made concerning tourism in the area, however it finds the evidence insufficiently robust to substantiate the claim that workforce accommodation bookings would replace regular customers to the extent that there would be a material adverse effect on tourism within the local economy.
- 4.12.81. As the Proposed Development is considered in this Examination under s105 PA2008 the ExA takes note of the local planning policies that relate to the HRI as important and relevant matters to consider in relation to the wider socio-economic

effects of the Proposed Development, and to the requirements of the NPPF. It considers that insufficient evidence has been presented to give confidence that the highly-sensitive HRI would not be adversely affected and that this would not present a long-term threat. In view of the value of the HRI to Newmarket and to the nation this carries substantial negative weight in the planning balance.

BMV AGRICULTURAL LAND AND FARMING CIRCUMSTANCES

POLICY CONSIDERATIONS

National Policy Statements

- 4.12.82. NPS EN-1 states that applicants should seek to minimise impacts on BMV agricultural land (defined as land ALC grades 1, 2 and 3a) and preferably use land in areas of poorer quality (ALC grades 3b, 4 and 5) except where this would be inconsistent with other sustainability considerations. Applicants should minimise impacts on soil quality considering any mitigation measures proposed. Proposals should not be sited in areas of BMV agricultural land without justification, but little weight should be given to the loss of poorer quality agricultural land.
- 4.12.83. Similarly, dNPS EN-1 states that applicants should minimise impacts on BMV agricultural land except where it would be inconsistent with other sustainability considerations. It states that the SoS should ensure that applicants do not site their scheme on BMV agricultural land without justification and that little weight should be given to the loss of poorer quality agricultural land (ALC grades 3b, 4 and 5).
- 4.12.84. In relation to solar energy generation, dNPS EN-3 states that solar is a highly flexible technology that can be used on a wide variety of land types. However, where possible, ground mounted solar PV projects should utilise previously developed land, brownfield land, contaminated land, industrial land, or agricultural land preferably of classification 3b, 4, and 5 (avoiding the use of BMV agricultural land where possible).

However, dNPS EN-3 emphasises that land type should not be a predominating factor in determining the suitability of the site location. Whilst development of ground mounted solar arrays is not prohibited on sites with BMV agricultural land, applicants should explain their choice of site, noting the preference for development to be on brownfield and non-agricultural land.

Other National Policy and Guidance

- 4.12.85. The NPPF states that planning decisions should contribute to and enhance the natural and local environment by, amongst other things, recognising the intrinsic character and beauty of the countryside and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of BMV agricultural land. It advises that planning decisions should promote an effective use of land. The revised draft NPPF published in December 2022, indicates that the availability of agricultural land for food production should be considered alongside other policies in the NPPF in deciding what sites are most appropriate for development.
- 4.12.86. The Written Ministerial Statement of the former Secretary of State for Communities and Local Government dated 25 March 2015 (WMS) made clear that any proposal involving BMV agricultural land needed to be justified by the most compelling evidence. However, the WMS relates to applications under TCPA1990. It provides context to the Government's historical approach to siting of solar farms on BMV

agricultural land, but is of some age and stands alone in requiring “compelling” evidence to justify a solar farm “involving” BMV agricultural land. A more consistent theme runs through the NPPF, NPSs and the dNPSs in seeking to protect BMV agricultural land generally whilst recognising that a balance needs to be struck between any such use and wider sustainability considerations.

4.12.87. Section 5 of the PPG lists factors to consider in relation to renewable and low carbon energy including:

- encouraging the effective use of land by focussing large scale solar farms on previously developed and non-agricultural land;
- whether the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and
- whether the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays.

Local Policy

4.12.88. The West Suffolk Council (WSC) Joint Development Management Policies Document 2015, Policy DM8 (Low and Zero Carbon Energy) requires development proposals to demonstrate that soil quality will not be adversely affected by construction, operation or decommissioning.

4.12.89. In relation to whether a source of irrigation should influence the grading, the Ministry of Agricultural Food and Affairs (MAFF) 1988 guidance at section 3.4 stated:

“Irrigation can significantly enhance the potential of agricultural land, especially in drier areas, and should therefore be taken into account in ALC grading where it is current or recent practice. In determining the effect of irrigation on ALC grade, the following factors should be taken into account:

- *adequacy of irrigation water supply*
- *the range of crops to which water is usually applied; and*
- *climate and soil factors”.*

4.12.90. Natural England (NE) is an executive non-departmental public body, sponsored by the Department for Environment, Food & Rural Affairs and is the government’s adviser on environmental matters, providing information on Agricultural Land Classification (ALC). Its guidance NE TIN049 (2012) states that:

“Classification is concerned with the inherent potential of land under a range of farming systems. The current agricultural use, or intensity of use, does not affect the ALC grade.”

THE APPLICANT’S CASE

ALC

4.12.91. The Applicant’s case is set out in ES Chapter 12, Socio-Economics and Land Use [APP-044], Appendix 12A - Relevant Legislation and Policy for Socio-Economics and Land Use [APP-114], Appendix 12B - Soils and Agricultural Baseline Report [APP-115]. The Application submitted the ALC for Sunnica East [APP-238] and Sunnica West [APP-239].

4.12.92. The six farming enterprises within the Sites are shown on Annex A, Figure 1 of Appendix 12B Soils and Agricultural Baseline Report [APP-115]. They are mainly

arable dry land units with rotations that include high margin crops dependent on irrigation (potato, sugar beet and onion) with combinable crops such as wheat. The volume of irrigation water available to each farm is subject to abstraction licences. Some units have given over agricultural land for reservoirs to store water abstracted over winter for use during the following growing season. Crops such as potato and onion require specialist cultivation and harvest equipment as well as storage and grading facilities, whilst arable rotation crops such as wheat and barley can use the same seed drill, combine harvester and grain store.

- 4.12.93. At paragraph 12.4.21 of ES Chapter 12 [APP-044] the Applicant states that at the time of the survey, MAFF's approach was to lower soil drought limitation to allow for the availability of reliable irrigation. All MAFF surveyed land in the Order Limits was limited to grade by drought and had the ALC grade accounted for irrigation this would have been a single grade enhancement (e.g., ALC grade 3a to grade 2). However, this practice was discontinued as reflected in the 1997 version of PPG7.
- 4.12.94. In ALC terms droughtiness refers to the soil type and climate factors which limit water availability for crop growth. During pre-application consultation, NE advised the Applicant that it was appropriate to revert to the grading imposed by the inherent soil droughtiness limitation (email submitted as Annex C of Appendix 12B of the ES [APP-115]). The grades for the area of land surveyed by MAFF reported in the ES were lowered in consequence.
- 4.12.95. Paragraphs 12.4.22-23 of ES Chapter 12 [APP-044], refer to an additional area of ALC survey work by Reading Agricultural Consultants (RAC) for the Worlington Quarry planning application (Annex A to Appendix 12B of the ES [APP-115]). A detailed ALC assessment of the remaining agricultural land within the Order limits was undertaken by Baird Soil for the Applicant (Figures 12-2 and 12-3 of the ES). No survey work or data are provided for some cable routes which the Applicant considered to be a temporary, narrow area that would be quickly restored.
- 4.12.96. Overall, taking all three sources of survey data and assessment together, grade 3a land was found at three locations, a total area of 37.3ha. (paragraph 12.6.14). The largest block (28.5ha) lay to the east of the A11 in the area surveyed by MAFF. MAFF described light textured soils over rootable chalk rubble, with impenetrable chalk below. Soil droughtiness was the main limiting factor, placing this land in grade 3a. Given the practice at the time, the MAFF assessment upgraded this area to grade 2 owing to the reliable availability of irrigation. The ES removed the allowance for irrigation and returned it to grade 3a, as advised by NE.
- 4.12.97. At paragraph 12.6.15 ES Chapter 12 [APP-044] it was noted that two smaller areas of grade 3a land were found, one near Worlington and one near Foxburrow Plantation, described as similar to the grade 3b land surrounding it, limited by soil droughtiness, but with sufficient additional clay or depth to reduce the soil droughtiness limitation to the extent that it was considered to achieve grade 3a. Table 12-20 of the ES summarised the extent and percentage occurrence of the various grades identified, ie grades 3a, 3b and 4, and non-agricultural land.
- 4.12.98. At paragraph 12.8.27 ES Chapter 12 [APP-044] the Applicant's assessment found that some 31.4ha of the 37.3ha of grade 3a BMV land would be used for solar infrastructure. Some 5.9ha would be used for native grassland planting whilst the land used for solar infrastructure would not be lost or degraded, as the soil resource would remain undisturbed below and between solar panels. The Applicant concluded there would be a very low magnitude of change for a low sensitivity receptor, and therefore a negligible effect, not considered significant.

- 4.12.99. The Applicant suggested that the soil would benefit from the extended fallow period under permanent grassland over the 40-year life of the Proposed Development, considered a medium magnitude of change for land having medium sensitivity to such a change, resulting in a moderate, significant, beneficial effect (paragraph 12.8.53). Decommissioning was considered to lead to a very low magnitude of change for a low sensitivity soil, resulting in a negligible effect that was not considered significant (paragraph 12.8.79 ES Chapter 12 [APP-044]).

Farming circumstances

- 4.12.100. Baseline data for assessing the farming circumstances of the six agricultural businesses occupying land within the Order limits was gathered using interviews and questionnaires in 2020, added to by the Applicant's own observations when carrying out ALC field work. Questionnaire replies from agricultural landowners on the proposed cable route in 2020 were limited, only two were received for land in agricultural production along the cable route. Other returns were for non-commercial equestrian and an outdoor activity park.
- 4.12.101. Land has an associated soil resource that could be degraded or lost through contamination, including potential loss of functional capacity of soil for agricultural production. The CEMP includes a Soils Management Plan (SMP) to conserve soil volume and functional capacity for beneficial reuse, from the small areas where soil will be stripped and would establish a permanent green cover when arable cropping is suspended for the operational phase of the Proposed Development.
- 4.12.102. At paragraph 12.7.3 of ES Chapter 12 [APP-044] it is noted that in addition to protecting the soil surface from damage, the green cover would be a forage crop for grazing by livestock. The composition of seed mix could vary to deliver specific yield and biodiversity aims appropriate to the location, as detailed in ES Chapter 10, Appendix 10I Landscape and Ecology Management Plan (LEMP) [APP-108] (final update Rev 04 [REP10-012] and Framework Construction Environmental Management Plan (FCEMP) ES Chapter 16, Appendix 16C [APP-123] (last updated Rev 07 [REP10-014]). The development of farmland for solar power generation would involve little disturbance of the soil and enable retention of the land resource for future use.
- 4.12.103. Construction work would involve little displacement of soil material, the main impact would be due to tracking of delivery and construction vehicles, similar to the current baseline of arable land use and heavy farm machinery. Construction effects on the occupying farm businesses are therefore considered to be negligible and not significant.
- 4.12.104. Operationally, suspension of a farm enterprise for the agricultural occupants would be a medium magnitude of change but a new diversified enterprise for the landowners as the site is leased to the undertakers of the Proposed Development. The overall magnitude of change is therefore considered low and the sensitivity of the arable enterprises to the loss of this land would be low as the farm businesses that carry out their own land work also manage additional land not affected by the Proposed Development.
- 4.12.105. The Applicant has concluded that the agricultural land resource could return to supporting agricultural production, grazing sheep and so would not be lost or degraded, therefore the magnitude of change would be very low with sensitivity of the receptor being low, resulting in a negligible effect, not considered significant.

- 4.12.106. The Applicant states that, for the 40-year duration of the Proposed Development the soil resource would benefit from an extended fallow with permanent grassland cover, allowing return to a higher equilibrium for soil organic matter, benefiting soil health, fertility, retention of moisture and structural stability. Given the light textured topsoil, the latter would also improve rainfall infiltration, reduce wind and water erosion and cut discharge of sediment to surface waters where detrimental to water quality and flood risk. The Applicant's assessment finds that the magnitude of change over the 40-year suspension of ploughing over a substantial area of land will be medium, with the land having medium sensitivity to this change resulting in a moderate beneficial effect, considered significant.
- 4.12.107. The Applicant states that agricultural landowners would benefit from income from a diversified enterprise, which over 40 years would displace existing enterprises from the land but free up farm resources for application on other land, including the limited volume of water that can be abstracted under licence. The magnitude of beneficial change would be medium and the sensitivity of the receptor low, resulting in a minor beneficial effect, not significant.
- 4.12.108. In terms of soil resources, farming circumstances, combined effect on receptors, local amenities and land use, and impacts on development land, there were no effects arising from the Proposed Development during decommissioning as assessed which resulted in a negligible effect, not considered significant.
- 4.12.109. A solar farm would be temporary with little or no loss of agricultural land or soil resource, therefore there would be no cumulative construction effect for soil and agricultural land resource. The brief period of construction would limit significant farming circumstances cumulative effects with other developments.
- 4.12.110. There would be no significant cumulative effects on residential properties, business premises and community facilities, or on farm businesses. The dominant limiting factor for producing high margin crops was not suitable land but the volume of irrigation water available, therefore the Applicant maintained that freeing up of abstraction licence volume from the Proposed Development and any other realised schemes would "negate the reduction in currently used land area" (paragraph 12.11.11 of ES Chapter 12 [APP-044]). Furthermore, rotations of irrigated crops could be increased on remaining agricultural land instead of rain-fed arable crops such as wheat. Cumulative operation effects on farm businesses would therefore be temporary negligible, not considered significant.
- 4.12.111. Following decommissioning, the Application Site could return to arable management subject to market conditions and agricultural support policy at the time, with no cumulative decommissioning effect for soil or agricultural land resource. Decommissioning work would be unlikely to interrupt agricultural management for more than one growing season, and so cause no significant farming circumstances cumulative effects with other developments.
- 4.12.112. Whilst the impacts on agriculture and farming operations constitute an issue for consideration by the ExA, including in relation to compulsory acquisition or temporary possession of interests in land, the consequential effect on UK food security due to potential loss of agricultural land is not itself a policy issue relative to the determination of the Proposed Development.

EXAMINATION

- 4.12.113. The following IPs illustrate the main contributions to matters relating to agriculture and the Applicant's approach to the ALC assessment in the RRs and WRs:
- Say No To Sunnica (SNTS) [RR-1128], [REP2-240] and [REP2-240n];
 - AG Wright & Son [REP2-097] to [REP2-097af];
 - Individual members of the Wright family (e.g. Nick Wright [RR-1102]);
 - Bruce Knight [RR-0501] and [REP2-111];
 - Anne Noble [RR-0593] and [REP2-103];
 - Paul Fishpool [RR-0582];
 - Elizabeth Garget [RR-0568], [REP2-133] and [REP2-133a];
 - Jack Smith [RR-0651] and [REP2-152];
 - Joanna Reeks [RR-0881];
 - Nicole Langstaff [RR-0024] and [REP11-032].
- 4.12.114. These representations came mainly from experts and affected or neighbouring farmers who disputed the Applicant's ALC findings based on evidence that they had achieved better yields and quality of arable produce from their land than the Applicant suggested was possible. They asserted that the land in each case was comparable in nature, quality and grading due to its proximity. For example, the WR from AG Wright [REP2-097] noted that, "*AGW farm within quarter of a mile of Sunnica East site B... We are therefore well placed to comment on [the] agricultural conclusions.*"
- 4.12.115. Dr Anne Noble ([REP2-103]) contended there would be a loss of over 1000ha of prime agricultural land, when food sustainability was a major consideration and versatile land was at a premium, and the range of crops grown, and yields achieved on land in the Application Site were not consistent with this being low quality land.
- 4.12.116. AG Wright [REP2-097] concluded that the assumption made in the Baird report that the soil grade was primarily due to the irrigation available could be challenged as much of the area would fit the criteria for BMV land without irrigation.
- 4.12.117. Several submissions alleged differences between the Applicant's reported ALC findings and those on the MAGIC maps, an interactive mapping system that holds maps and data on the natural environment, apparently without acknowledging the procedural change relating to droughtiness and irrigation in relation to the MAFF surveys on which those maps were based. (e.g. SNTS [RR-1128]). Some WRs included unsubstantiated claims, such as AG Wright [REP2-097] who asserted "*the damage to soils will make it unlikely the land will ever be returned to agriculture.*"
- 4.12.118. SNTS in its submission [REP2-240] and Annex C [REP2-240d] concerning NE's advice that the availability of irrigation should no longer influence ALC grading, cited a historical and unconnected letter from MAFF to Reading Agricultural Consultants (2000) which noted that irrigation could significantly affect the productivity of the land and in accordance with PPG7 was a factor to consider in planning decisions.
- 4.12.119. Appendix A of the SNTS Comments on Written Representations [REP3A-063] was an October 2022 update of Patrick Stephenson's report Appendix 6 [REP2-097f] which confirmed his opinion that the area surveyed, which was all adjacent to the Proposed Development site, included a significant amount of grade 2 and 3a land, and much of the area would fit the criteria for BMV land without irrigation.
- 4.12.120. The Applicant's Response to SNTS D2, D3 and D3A Submissions [REP4-036], defended its approach in the ES, noting that three professional surveys on the Application Site found no material differences in ALC gradings. It made submissions

at ISH3 [REP4-032] on the adequacy of ALC surveys and the relevance of irrigation needs, and whether the assessment of BMV agricultural land accorded with planning policy, rebutting criticisms from various IPs and criticised the Patrick Stephenson report for AG Wright as unsuitable from which conclusions on ALC could be drawn. It included at Appendix A, a technical note on the assumptions made in the ALC assessment, as sent to NE at its request.

- 4.12.121. NE submitted a position statement at ISH3 [AS-314], advising that the overall impact of a temporary solar development on soil health was unknown, and it was not possible to conclude that it would have a beneficial impact on the soil resource during operation, as claimed in the ES. NE's soils specialist met with the Applicant's consultants and in addition to the issues set out in [RR-1291] and [REP2-090], noted discrepancies between the ALC grades identified by the soil core data in Appendix 12B [APP-115], and the mapped ALC Grades in Figures 12-2 and 12-3 ([APP-238] and [APP-239]). NE noted the lack of discussion of assumptions and approach for determining droughtiness and as to whether the soil pits were located to reflect the distribution of soil types. It was unclear to NE whether the soil pit data had been used in verifying soil structure and stone descriptions for the wider area.
- 4.12.122. NE's position statement found that the Applicant's consultant had provided a clear justification for the assumptions made and demonstrated competence in delivering an ALC assessment. NE requested the Applicant to submit a technical note to the Examination to allow scrutiny from IPs and the ExA.
- 4.12.123. The Applicant's Peer Review of SNTS ALC Report (Patrick Stephenson report) by LRA (Land Research Associates) [REP5-065] criticised a lack of general information on soil depths in the auger sample logs, making it difficult to see how the land could be graded accurately, discrepancies between auger and soil pit analyses, which could have implications for the droughtiness conclusion, noting that information on structural condition and rooting depth was largely absent from the pit records, suggesting it was impossible to verify the findings for droughtiness limitations.
- 4.12.124. NE [REP8-057] sought clarity over the droughtiness calculations provided in Appendix 12B of the ES [APP-115] that was provided by the Applicant at Appendix A to the Technical Note, Clarification Requested by Natural England on Agricultural Land Classification' [REP4-032] and an email of 28/02/2023. The Applicant's assumptions included a contingency of an extra 20cm depth and an additional 20% volume of stone for material below where roots were found. Following checks, NE remained satisfied that the results of the ALC surveys were reliable. The completed SoCG between the Applicant and NE [REP8-031] agreed that:

"an assessment of ALC grade should not lessen a soil droughtiness limitation to grade where irrigation water can be applied to crops. In cases where existing MAFF ALC survey work between 1988 and 1997 originally applied such an allowance for irrigation, that ALC grading of drought limited land should be reviewed without irrigation."

- 4.12.125. NE also agreed that the Proposed Development was unlikely to lead to significant permanent loss of BMV agricultural land, and ALC surveys could be carried out post-consent and pre-construction along the cable route where no access had been possible, as secured through the Construction Environmental Management Plan (CEMP) [REP10-014]. NE was satisfied that the methodology and results of the soil surveys were reliable, based on additional information provided during the Examination.

- 4.12.126. SNTS and other IPs maintained and substantiated their concerns about the Applicant's ALC findings throughout the Examination. SNTS and other IPs alleged that NE as the statutory advisor and independent regulator had failed to perform its function as set out in law, leading to "errors in its reasoning and conclusion which cannot be relied upon" (e.g. [REP10-078a] and [REP10-057]).
- 4.12.127. The host local authorities [REP7-095] suggested that if doubts remained in respect of the Applicant's assessment, a reasonable worst case approach should be applied to assessment of all the evidence in a "Rochdale envelope" type approach.
- 4.12.128. SNTS [REP11-033] submitted a statement by Reading Agricultural Consultants on communications between the Applicant and NE, claiming that the application of fundamental scientific principles to the grading of agricultural land remained unaddressed, calling into question the veracity of the baseline survey and the weight to be given to its conclusions despite NE's position. It supported the host local authorities' proposal to use a Rochdale envelope approach and for the ExA and SoS to use a worst-case baseline in their considerations:
- "In this case, the reasonable worst case should be based on the strategic scale Natural England (NE) Predictive BMV map [Appendix 5 & REP2-097u] which shows that 82% of the scheme area is 60% or more likely to be BMV."*
- 4.12.129. Consequently, at the close of the Examination, there remained disagreement between the Applicant and NE on the one hand, and SNTS and other IPs on the other, in respect of BMV agricultural land and farming circumstances.
- 4.12.130. By the close of the Examination the Applicant clarified that the full version of the Framework Decommissioning Environmental Management Plan (DEMP) [REP8-012] would make clear:
- there was no requirement to retain any grassland planting post decommissioning works; and
 - where owners and successors in title of land subject to the DEMP remove grassland (or other measures that would have a landscape/ ecological function after decommissioning) will not be a breach of the DEMP.
- 4.12.131. In its End of Examination Summary Position Paper [REP10-032], the Applicant defended its position that landscape and ecological mitigation measures put in place to mitigate this temporary project could not thereafter remain in place in perpetuity. The ExA agrees that otherwise landowners would lose a large amount of farmland that would no longer be able to be farmed. Accordingly, there is no compelling case for permanent retention of grassland, even if it is of county scale importance, given also it would require a different assessment of socio-economic impacts given the loss of economic land use, and involve a permanent loss of active farmland, against the interests of objectors to the Proposed Development.

CONCLUSION ON BMV AGRICULTURAL LAND AND FARMING CIRCUMSTANCES

ALC

- 4.12.132. The IPs' submissions on this matter are mainly by affected farmers who disputed the ALC findings; however the evidence suggests they obtain good yields of high-quality arable produce from the same or similar grade land because they are all using irrigation. The MAFF 1988 ALC methodology allowed incorporation of a factor for the availability of reliable irrigation, in effect providing their land with an upgrade.

The Applicant assumes rather that this factor is no longer Government policy or NE policy and so followed NE's pre-application consultation advice in making ALC conclusions that broadly speaking were a grade lower in each case.

- 4.12.133. The MAFF report used by the Applicant to inform the desk assessment for the baseline confirmed that each soil type ALC result had been upgraded, wherever droughtiness was a limiting factor and reliable irrigation was evident. Although the Applicant may have assumed that all grade 3a land had thereby been upgraded to 2, and similarly all 3b to 3a, the ExA finds no clear evidence that the irrigation factor always resulted in MAFF making a change of one grade. It is also possible that the allowance was applied and whilst soil quality increased, the threshold to the next grade up was not passed. Furthermore, stoniness was often the main limiting factor rather than droughtiness in the MAFF report and it is unclear whether grade 4 had been upgraded to 3b which the Applicant's assessment seems to suggest.
- 4.12.134. NE's pre-application consultation email at [APP-115] Annex C confirms the availability of irrigation to upgrade land was in effect removed from the ALC guidelines in 1997. Whilst acknowledging that it would be correct to review the gradings in the MAFF survey, NE does not say this would result in automatic reduction of one ALC grade, although the ExA considers that that would be a reasonable interpretation.
- 4.12.135. Therefore, there is a slight uncertainty over the validity of the Applicant's blanket reversal of the upgrading of all 3a samples to 2, and 3b samples to 3a. Whilst there may be more uncertainty over its reversal of the upgrading of grade 4 samples to grade 3b, that does not concern BMV land which is reached only at grade 3a.
- 4.12.136. NE, whilst acknowledging that technically the MAFF guidance still includes an allowance for upgrading for irrigation in droughty soils, has advised, and specifically in the context of this application, that it was always the Government's intention to remove this at the next revision (which is outstanding), and that it should not be included in ALC assessments.
- 4.12.137. NE was also content with the approach and the outcome of the ALC studies, as reflected in the final, signed SoCG. There were recognisably technical differences in approach to ALC by the various parties and their experts, which belied the more fundamental question whether or not the availability of irrigation should be included in the calculations. On this, the current and consultation draft NPS EN-1 provide little policy guidance. dNPS EN-3 notes that:
- "the Agricultural Land Classification (ALC) is the only approved system for grading agricultural quality in England and Wales and should be used to establish the ALC", and that, "Criteria for grading the quality of agricultural land using the Agricultural Land Classification (ALC) of England and Wales is decided by Natural England and considerations relating to land classification are expected to be made with reference to this guidance".*
- 4.12.138. The draft policy in dNPS EN-3 seems to be to use the 1988 MAFF guidance in carrying out an ALC assessment, but in accordance with NE advice. rdNPS EN-3, published the day after the close of the Examination, omitted the reference to NE.
- 4.12.139. And yet, the NPPF does not, as suggested by SNTS in Annex C of its WR [REP2-240d] make clear that irrigation should be retained as a factor when considering the impact of development on agriculture. NE's TIN049 (2012) is high-level advice, not detailed technical guidance, not referring to irrigation. It rather

confirms that ALC assessment concerns the inherent potential of land in a range of farming systems, and agricultural use, or intensity of use, does not affect the ALC grade. Thus, ALC grading is deliberately designed to be insensitive to good or bad land management.

- 4.12.140. As the Government apparently intended to remove the correction factor for available irrigation to focus assessment and grading on the intrinsic properties of the soil and the site, the reliable source of irrigation water that in effect increases the impact of the Proposed Development on agricultural productivity, should be considered as a separate matter, leaving technical assessment a matter for NE. Reliable availability of irrigation is a factor impacting agricultural land and productivity and has been taken into account by the ExA in its consideration of agricultural issues in the overall planning balance.
- 4.12.141. The ALC grade outcome is marginal in places due to the transition between soil types. For example, the ADAS report behind the MAFF survey data shows some boreholes considered to be grade 2 assimilated into wider areas of grade 3a. It would not be unreasonable for the Applicant to merge its own individual survey data points in this way. Direct local comparisons between adjacent farms and adjacent fields could therefore be unreliable and the ExA cannot assume the accuracy of some IPs' extrapolations of ALC surveys from neighbouring land onto land in the Application Site.
- 4.12.142. dNPS EN-3 does state that soil surveys should be extended to the underground cabling and access routes (paragraph 2.48.14) and the ExA considers that further evidence on this should have been provided.
- 4.12.143. The ExA has considered the implications of the Applicant not undertaking ALC survey for parts of the cable routes or the substation site. The substation site was removed from the application as explained in Chapter 2 of this Report. In respect of the cable route the full width allowing for stockpiling and vehicle routes would be significant, and excavation, temporary stockpiling and replacement of topsoil can lead to significant effects, possibly including a downgrading in ALC. That said, the Proposed Development is temporary and NE clearly states it is content with the arrangements to carry out the ALC surveys post-consent. However, the residual possibility of an adverse effect on soil quality would remain.
- 4.12.144. Although there was criticism from IPs and their experts, NE was content with the Applicant's ALC after follow-up discussions with the consultants and the receipt of additional technical information about the approach taken to the ALC field surveys, and the ExA and the SoS must have proper regard to advice from the statutory advisor.
- 4.12.145. However, bearing in mind the results consistently achieved by the farmers, the ExA concludes that valid differences in position on the ALC issue remain between the Applicant and NE on the one hand, and SNTS and other IPs on the other, and finds some merit in the "Rochdale envelope" approach put forward by the local authorities, on the basis that 82% of the Proposed Development could be 60% or more likely to be BMV.

Farming circumstances

- 4.12.146. The ExA does not agree that development of farmland for solar power generation would involve little disturbance of the soil and enable retention of the land resource for future use.

- 4.12.147. The ExA agrees that construction work in respect of the solar panels would involve little displacement of soil material, but does not agree that this is true of the installation of BESS, substations or the cabling.
- 4.12.148. The ExA agrees that the main impact of construction of the solar PV infrastructure, as distinct from the cabling, would be due to tracking of delivery and construction vehicles, but that this is not similar to the current baseline of arable land use and heavy farm machinery. The ExA therefore considers that construction impacts could be significant.
- 4.12.149. In terms of the operation of the Proposed Development, the ExA does not agree that suspension of a farm enterprise for the agricultural occupants for the duration of the Proposed Development would be a medium magnitude of change, as it could effectively result in the loss of the farming enterprise. The change could be large and fundamental, because
- the period of operation would be for 40 years, so such loss would be for a period of at least 45 years including construction and decommissioning, that is to say two generations;
 - the benefit of extended fallow for 40 years is not demonstrated, in particular the soil condition at the end of the operational period;
 - the benefit of diversified enterprise is not demonstrated;
- 4.12.150. The overall magnitude of change is therefore considered to be high and the sensitivity of the arable enterprises to the loss of this land would be medium as, although the farm businesses that carry out their own land work also manage additional land not affected by the Scheme, the loss is effectively permanent and may constitute a significant proportion of the farming enterprise.
- 4.12.151. The ExA hence concludes that issues relating to BMV, agricultural land and farming circumstances carry moderately negative weight in the planning balance.

PUBLIC RIGHTS OF WAY

POLICY CONSIDERATIONS

National Policy Statements

- 4.12.152. Paragraph 5.10.24 of NPS EN-1 states that rights of way and other rights of access to land are important recreational facilities for example for walkers, cyclists and horse riders. Applicants must take appropriate mitigation measures to address adverse effects on rights of way and where this is not the case the ExA should consider what appropriate mitigation requirements might be attached to any grant of development consent. dNPS EN-1 elaborates on this policy by requiring applicants:

“where appropriate, to consider what opportunities there may be to improve or create new access [sic]. In considering revisions to an existing right of way, consideration should be given to the use, character, attractiveness, and convenience of the right of way (paragraph 5.11.30).”

- 4.12.153. dNPS EN-1 also supplements the policy of consideration of appropriate mitigation requirements by stating:

The Secretary of State should consider whether the mitigation measures put forward by an applicant are acceptable and whether requirements or other provisions in respect of these measures should be included in any grant of development consent (paragraph 5.11.31).”

NPS EN-1 and dNPS EN-1 both refer to green infrastructure which may include rights of way and where affected, envisages that requirements may be needed to ensure the functionality and connectivity of the network is maintained in the vicinity of the development and necessary works undertaken to mitigate adverse impacts and, where appropriate, to improve that network including public rights of way. The SoS should also consider if any such adverse effects would be adequately mitigated or compensated by planning obligations.

Other National Policy and Guidance

- 4.12.154. Paragraph 100 of the NPPF requires development to protect and enhance public rights of way and access, including new links. Paragraph 98 recognises the importance of attractive, well-designed, clear and legible pedestrian and cycle routes.

Defra Rights of Way Circular Guidance (2009) [REP1-024p] sets out Defra's policy on public rights of way, setting out advice to local authorities on recording, managing and maintaining, protecting and changing public rights of way.

Local Policy

- 4.12.155. Suffolk Local Transport Plan 2011-2031 (Suffolk LTP) encourages improvements to the access network focussed on the needs of non-motorised users (NMU) including people with limited mobility or sensory disabilities, promoting healthier lifestyles and sustainable travel options. It notes that use of the network supports local economies.
- 4.12.156. WSC's Joint Development Management Policies Document (2015), Policy DM44 states that development that would adversely affect the character of, or result in the loss of existing or proposed rights of way, will not be permitted unless alternative provision or diversions can be arranged "*which are at least as attractive, safe and convenient for public use.*"
- 4.12.157. Suffolk Green Access Strategy (2020-2030) [REP1-024g] is the statutory Rights of Way Improvement Plan, providing direction as to how the rights of way and access network is managed, maintained, and improved to meet the needs of all users.
- 4.12.158. The Cambridgeshire Rights of Way and Improvements Plan (2016 Update) (RoWIP) [REP1-024h] provides a statement of action to protect and bring about improvements to the rights of way network and enhance countryside access.
- 4.12.159. The Cambridgeshire County Council (CCC) Development and Public Rights of Way - Guidance for Planners and Developers [REP6-056] supplements the CCC RoWIP by among other things stating that PROW should also remain unenclosed where possible and noting development proposals may have to be re-assessed to ensure that sufficient area within the site is allowed for affected paths.
- 4.12.160. Policy S6 of the East Cambridgeshire District Council (ECDC) Core Strategy and Policy COM7 of ECDC emerging Local Plan seek to protect the existing public rights of way network from being adversely affected as a result of development. Renewable energy development schemes will be expected to incorporate existing public rights of way without the need for existing routes being diverted. Where such developments adversely affect the public rights of way network, provision should be made to offset the disadvantages to the public. Any proposed diversions need to be agreed with CCC.

- 4.12.161. Both the East Cambridgeshire and West Suffolk Local Plan documents emphasise the importance of ensuring existing PRoWs are kept and minimise disruptions of PRoWs during the construction phase of development.

THE APPLICANT'S CASE

- 4.12.162. There are several PRoWs on or abutting the Scheme, as set out in ES Chapter 12 [APP-044] and illustrated in Figure 12-4, Public Right of Way and Roads within the Scheme [APP-240]. Three PRoWs are within the boundary of Sunnica East Site A. PRoWs (W-257/002/X, W-257/002/0 and W-257/007/0) run from Mortimer Lane in the south to Beck Road in the north, crossing the south-west part of the site.
- 4.12.163. There is one PRoW located within the boundary of Sunnica East Site B. PRoW (W-257/003/0) runs along the south-western boundary from Turnpike Road at Red Lodge in the south-east to Badlingham Manor in the northwest. An unclassified road (U6006), which is a publicly accessible route, including for equestrians, extends northwards from Elms Road to Worlington.
- 4.12.164. To the west of Sunnica East Site B the B1102 provides a footway for a section along the northern carriageway, alongside vehicles travelling eastbound, which is approximately 2m wide between North Street and East View. To the north, on Newmarket Road, footways are provided on both sides of the carriageway between the B1102 and The Paddocks.
- 4.12.165. There are no PRoWs situated within the boundary of the Sunnica West Site A. Adjacent to Site A there is Snailwell 5 bridleway (PRoW 204/5) which runs along the south-west boundary of the Site. Snailwell 1 footpath (PRoW 204/1) crosses the land to the north-west of the Sunnica West Site A boundary.
- 4.12.166. Intersecting Grid Connection Route A there is one footpath 49/7 located to the south of the Sunnica East Site B, which is accessed by users making local journeys between Chippenham and Red Lodge. Six PRoWs intersect with Grid Connection Route B. Towards Snailwell footpath PRoW 204/1 connects Snailwell with Chippenham Park. Heading west from Sunnica West Site B, footpath 92/19 runs from through agricultural fields between Fordham and Snailwell. Footpath 35/10 and 35/11 runs between Wicken and Burwell passing through agricultural fields. Two PRoWs 35/6 and 35/17 run between Burwell and Reach, through agricultural land.
- 4.12.167. These PRoWs are mainly used for recreational purposes as part of a wide network of PRoWs in the surrounding area providing residents with alternative routes. There would be some short-term road closures due to the Proposed Development, however with alternative routes provided, these paths were not assessed as there were no anticipated significant effects on users of PRoWs. There are no on or off-road cycling facilities in the vicinity of the Order limits (paragraph 2.2.45 of the Design and Access statement [APP-264]).
- 4.12.168. The Application submission documents were:
- [APP-008] Access and Rights of Way Plans;
 - APP-194 Figure 10-4 - Public Right [sic] of Way and Other Access;
 - APP- 240 Figure 12-4 - Public Right [sic] of Way and Roads within the Scheme;
 - [APP-241] Figure 12-5 - Public Rights of Way Affected by Construction;
 - [APP-242] Figure 12-5 - Public Rights of Way post Construction;
 - [APP-243] Existing Public Rights of Way;
 - APP-244 Figure 13-2 - Public Rights of Way Affected During Construction; and;

- APP-245 Figure 13-3 - Public Rights of Way Post Construction.

4.12.169. The Applicant revised its plans during the Examination as follows:

- [AS-005] Applicant's response to s51 advice, Access and Rights of Way - Rev 1;
- [REP2-006] Access and Rights of Way Plans - Rev 03;
- [REP3A-003] Access and rights of way plans - Rev: 04;
- [REP6-007] Access and Rights of Way Plans - Rev: 05; and
- [REP10-004] Sunnica Ltd Deadline 10 Submission - Access and Rights of Way Plans - Rev: 06.

4.12.170. The assessment of effects on users of PRow considered those resources likely to be affected by closures and diversions of routes. The study area therefore encompassed all PRow located in or within 500m of the Order Limits. All temporary PRow closures would be avoided as far as possible including along the cable routes; however, as a worst case scenario it was assumed that each PRow would be closed for up to three weeks during the construction phase (paragraphs 12.3.3 and 12.4.14, ES Chapter 12 [APP-044]). Tables 12-11, 12-13, 12-14 [APP-044] identified the sensitivity criteria used to inform the PRow assessment, together with the magnitude criteria to establish the significance of the identified effects.

4.12.171. Changes to journey times, local travel patterns, and certainty of routes for users would arise from temporary closures and diversions of PRow, and the effects during construction on relevant routes were shown in Figure 12- 5 [APP-044] and set out in paragraph 12.8.16 et seq. and summarised as follows.

Sunnica East Site A

4.12.172. Temporary disruption to users on bridleways W257/007/0, W-257/002/X and W-257/002/0 between Freckenham and Isleham would arise as these conjoining routes would be temporarily severed, preventing access. Users could use an alternative route via Beck Road (c1km in extra length) although this route is also used by traffic. Impacts on user journeys were assessed as temporary, high adverse, and effects on users temporary, moderate adverse effect, considered significant.

Sunnica East Site B

4.12.173. Temporary disruption to users on the unadopted bridleway (U6006) that cuts diagonally from Worlington to Elms Road would be due to the entire route being temporarily severed, preventing access. Users could use an alternative route via Freckenham Road (c1.8km in extra length) although there would be traffic using it. Although U6006 is not a right of way through which access is assured, the impacts arising from this on user journeys were assessed as temporary, medium adverse and effect on users, temporary minor adverse effect, considered significant.

4.12.174. South of the East Site B is footpath W-257/003/0 where temporary disruption to users between Freckenham and Red Lodge would be due to the route being temporarily severed within the cable corridor only, preventing access. Users could use an alternative route via Mildenhall Road (c1.2km in extra journey length), and impacts were assessed to be temporary medium adverse, the effect on users temporary minor adverse effect, not considered significant.

Sunnica West Site A

4.12.175. The bridleway west of the Site (204/5) would not be closed during construction so no expected effects were envisaged during this phase. (For Sunnica West Site B ,

now removed, there were no PRowS adjacent or in the Site and so there were no expected effects during the construction phase).

Grid Connection Route A

- 4.12.176. This route intersects footpath 49/7, and temporary disruptions to users between Chippenham and Red Lodge would be due to the route being temporarily severed. Users could use an alternative route via Dane Hill Road (some 300m in extra journey length with minimal disruption, thus impacts are assessed to be low adverse which results in a negligible effect and not considered significant.

Grid Connection Route B

- 4.12.177. This route intersects footpath 204/1 between Snailwell and Chippenham where this point would be managed in the construction phase to ensure the PRow will not be closed or diverted. Impacts on users are assessed as low adverse with a negligible effect, not considered significant.
- 4.12.178. Temporary disruptions to users on footpath 35/10 between Burwell and Reach would arise due to a small section being temporarily severed. Users could take an alternative route via First Den Drove which although traffic would use them, should result in minimal disruption, thus impacts on users were assessed as low adverse resulting in a negligible effect, not considered significant. Temporary disruptions to users on footpath 92/19 between Fordham and Snailwell would obtain due to a small section of the route being temporarily severed. Users could take an alternative route via the pedestrian route on the A412 with minimal disruption, so assessed impacts were low adverse with negligible effect, not considered significant.

Permissive routes

- 4.12.179. The application proposed new permissive routes as shown in the Environmental Masterplan [REP5-011] to enable increased public access across the landscape of the local area and respond positively to local green infrastructure strategies and local planning policies related to PRowS, all expected to have a permanent minor beneficial effect on users in the operation phase. The paths proposed were:

- A new permissive path adjacent to Beck Road at Sunnica East Site A, increasing recreational value across Sunnica East Site A and increasing connectivity between Freckenham and the southern edge of Isleham;
- A new permissive path across Sunnica East Site B, to provide access from the existing unclassified road (U6006) across the north of Sunnica East Site B to connect with Golf Links Road; and
- A new permissive path adjacent to Elms Road and around the perimeter of Sunnica East Site B, to connect U6006 with PRow W-257/003/0, which runs to Red Lodge (Design and Access Statement, paragraph 5.3.3 [APP-264])

- 4.12.180. The overall cumulative effect on PRow was assessed as temporary medium adverse as there are no cumulative schemes adjacent to the Proposed Development or in close proximity. It is unclear which, if any, PRow could be impacted by the Potable Water Pipeline (currently at pre-application stage). The closest two cumulative schemes are 50m south from the Burwell National Grid Substation Extension which will not impact any PRow, or those located within the Application Site. Therefore, the overall cumulative assessment on PRow and land use remains moderate adverse / minor adverse / negligible effect. The moderate adverse effect which is considered significant would be on users making local

journeys on bridleways W-257/007/0, W-257/002/X, and W257/002/0 between Freckenham and Isleham (paragraph 12.11.13, ES Chapter 12 [APP-044]).

EXAMINATION

- 4.12.181. Concerns raised by the host local authorities in the joint LIR [REP1-024] were:
- the local PRow network has important recreational and amenity value, and would be negatively impacted by the development;
 - PRow users are visual and noise receptors in the landscape, therefore, the proposals would have, where insufficiently obscured by vegetation, a negative impact on users, particularly important in several locations, therefore temporary (while hedges grow) and permanent mitigation measures are required;
 - numbers of disruptions of PRows during construction, including closures;
 - possible noise impacts in the operation phase, however, the information in the ES is not detailed to consider impacts;
 - permissive paths inadequately mitigated or compensated for disruption to the PRow network. Opportunities for PRow improvements, and new PRow/permissive paths during operation were not maximized and there would be limited benefit from the Proposed Development; and
 - missing data on the Access and Rights of Way (ARoW) Plans.
- 4.12.182. Relevant IPs included Peter Goodyear on behalf of Fordham (Cams) Walking Group which submitted a Position Statement in lieu of participation at ISH3 - Accepted at the discretion of the Examining Authority [AS-315].
- 4.12.183. In response to a request by the ExA the Applicant submitted at D7 a Context overlay - Rights of Way and Access Plans [REP7-065]. This was revised at D10 (Context Overlay - Rights of Way and Access Plans - Rev: 01) [REP10-029].
- 4.12.184. At D6 the Applicant submitted an Issues Paper: Public Rights of Way Experience Note [REP6-035] which explained how people's journeys on existing PRow would change due to the Proposed Development. It described improvements from the proposed permissive paths and how such new routes would integrate with and enhance the existing PRow network. Figure 1 showed the location of existing PRow, proposed permissive paths and representative viewpoints.
- 4.12.185. The Applicant in [REP6-035] viewed the PRow network across the study area as generally sparse and fragmented. No PRow would be located within the Scheme and there would be no permanent alteration of any existing routes. A small number of PRow are located close by and adjacent to boundaries of the Proposed Development which was designed to avoid impacts on the existing PRow network where possible by careful siting of solar farm development in existing fields so that existing PRow are outside the Order Limits and behind existing vegetation.
- 4.12.186. Part 10 of this Chapter (4.10) notes particular effects in landscape and visual amenity terms on five PRows for which "significant effects" at year 1 are predicted:
- small section of W-257/002/0 Mortimer Lane between Freckenham and Beck Road;
 - small section of River Lark footpath W-398/030/0;
 - small section of U6006;
 - small section of W-257/003/0 between Freckenham and Red Lodge; and
 - small section of footpath W-128/001/0 south of Mildenhall/ west of Barton Mills.

- 4.12.187. These effects would only occur over small sections of the PRow and gradually reduce as proposed planting matures. Views of solar farm development from some routes would obtain which would be largely screened or filtered by existing vegetation or proposed planting by year 15 of operation. Management of existing vegetation and establishment of proposed planting in line with the OLEMP [REP5-011] was predicted to reduce all visual effects for PRow users to not significant by year 15 of operation.
- 4.12.188. WSC in its Post ISH3 Submission [REP4-132] stated that the Applicant should avoid closures of PRow during construction, providing alternative routes where closure was unavoidable with appropriate signage, to be agreed beforehand with the local highway authorities (LHAs) and all PRow to be restored to their existing condition if damage was caused during construction. The Applicant should review the provision of permissive paths and seek to deliver further routes in an area which does not benefit from an extensive PRow network.

Public Rights of Way Closure Note

- 4.12.189. On PRow closures, the Applicant's position was confirmed in its D5 submission Public Rights of Way Closure Note [REP5-068]. It provided further information on the closure of PRows and the U6006 (unclassified road) due to construction of the Proposed Development, following a request from the ExA at ISH 3 [REP4-032] to provide further detail on the closure and programme of the PRows and publicly accessible routes 9U6006). The routes to be closed were:
- U6006;
 - W-257/002/X;
 - W-257/007/0;
 - W-257/003/0;
 - W-257/002/0;
 - 49/7;
 - 204/1;
 - 92/19; and
 - 35/10.
- 4.12.190. Consideration of the impact on PRows was informed by the cable construction programme to be undertaken in two concurrent phases over a 50 week period, firstly from the Burwell National Grid Substation to the onsite substation in Sunnica West Site A and the second from that substation to the substation in Sunnica East Site A. The route would have 15 sections (Figures 3-22a [APP-164] and 3-22b [APP-165]). It was not expected that the sections would be laid at the same time.
- 4.12.191. Where trenchless techniques such as Horizontal Directional Drilling (HDD) are required, they would be scheduled individually to ensure efficient completion, decided at the detailed planning and pre-construction phase. No PRows or the U6006 would be impacted by trenchless techniques. Cable installation would follow excavation in the same sequence with an overlap of up to two weeks between sections as individual jointing bays became available and the completed bays were backfilled and reinstated.
- 4.12.192. Table 1-1 in [REP5-068] provided information on the cable construction section, the likelihood of an overlap of closures and connectivity between PRows and publicly accessible routes. Each route is located in different construction sections and therefore the closures would not overlap with no connectivity between the routes apart from the U6006 and W-257/003/0.

4.12.193. As outlined in the Framework Construction Traffic Management Plan and Travel Plan (CTMP) [REP3A-004] the Applicant agreed with the LHAs' preference to avoid PRow closures, and to use marshals (banksmen/banks persons) to enable users to cross where the closure is required. However, the contractor would make the final decision as to whether marshals could be used on a case-by-case basis, based on health and safety considerations and PRow users. Additional controls were set out in the Framework Construction Environmental Management Plan (CEMP) (latest update Rev 07) [REP10-014] to minimise disruption to users.

Bridleways

4.12.194. [RR-0751] British Horse Society (BHS) stated the following PRow legally utilised by equestrians will be either directly, or indirectly affected by the development:

- Burwell Byway 15
- Burwell Byway 16
- Burwell Byway 4
- Snailwell Bridlepath 5
- Redlodge Bridlepath 005
- Freckenham Bridlepath 002X
- Freckenham Bridlepath 001
- Freckenham Restricted Byway 002
- Green Lane, Freckenham USRN 14601287

4.12.195. BHS sought clarity over the proposed permissive routes which would be created and sought mitigation for all PRow directly affected during the construction phase, and reinstatement post construction, and indirectly affected to ensure equestrians could use routes safely with construction works nearby. It noted historic routes affected by the Proposed Development did not currently appear on the definitive map. Definitive Map Modification Orders would be submitted for these routes immediately, which must be considered.

4.12.196. The Applicant's End of Examination Summary Position Paper [REP10-032] set out the Applicant's commitments:

- to undertake condition surveys of the local highway network, including PRow and fund proportionate measures to limit damage to the highway due to construction of the Proposed Development if considered beneficial following analysis of the survey findings pursuant to the Framework CTMP [REP7-017];
- to include a new Requirement in the final version of the dDCO, providing that the Applicant cannot exercise its powers under article 11(1) or article 11(3) of the dDCO until a reinstatement plan has been submitted and approved by the relevant county authority or authorities;
- under the Framework CTMP [REP7-017] to closing temporarily PRow only where no reasonable alternative that would enable the works to be carried out safely and expeditiously in the limits of deviation for that work. Alternative proposed methods such as use of marshals would be included in the Framework CTMP;
- to consult the relevant local highway authority or authorities on PRow management or closures in accordance with article 11 of the dDCO.

4.12.197. The Applicant undertook additional surveys on the PRow network, as presented in the Technical Note: Transport and Access [REP2-041]. The findings substantiated the conclusion in ES Chapter 13: Transport and Access [APP-045]) that there would be no significant impact on NMUs due to temporary closures of relevant PRows during the construction phase.

- 4.12.198. In addition, the Applicant's End of Examination Summary Position Paper [REP10-032] confirmed that a Deed of Obligation (s106 Obligation) was agreed by the Applicant, SCC and CCC, with a view to being completed before the end of the Examination. It included the PRow and Connectivity Contribution, a contribution of £500,000 (£250,000 for each of SCC and CCC) set out at paragraphs 1.10.6 to 1.10.12 and in summary provides for::
- enhancements to existing PRow;
 - creation of new PRow or permissive paths;
 - upgrades or new connectivity points/ancillary facilities for PRow and permissive path users;
 - preparatory, legal, administrative or compensation costs related to the above points above outside the Application Site to improve connectivity and health in the vicinity; and
 - to defray costs of any orders, agreements, works or maintenance and related expenses and administration.
- 4.12.199. The contribution would be payable to the Councils prior to commencement of the Proposed Development or Permitted Preliminary Works (whichever earliest). If any Order authorising the Proposed Development did not include all the parcels contained in the Proposed Scheme as applied for, there might be a deduction in the amount of the contribution but the contribution could not be lower than £410,715.
- 4.12.200. The Deed sets out specifically what the deduction would be in three scenarios (those being, if all of E05 was not included; all of W03, W04 and W05 was not included; or all of W06, W07, W08, W09, W10, W11 and W12 was not included), and requires the parties to reach agreement as to any other deduction.
- 4.12.201. There remained disagreement between the parties as to how the contribution could be expended by the County Councils. Due to the terms of the voluntary option agreements secured by the Applicant, as required by landowners in order for agreement to be reached, the Applicant has had to put some restrictions on where the contribution can be spent. Attached to the Deed is a plan (attached to this document at Appendix B). The plan shows land that is included within the Sites, and the land owned by those landowners that is outside the Order limits – that land is shaded yellow. The plan also shows land where negotiations are at an advanced stage with landowners along the cable route (meaning a restriction on PRow on those landowners' land has already been agreed with those people as part of negotiations), and land owned by those same landowners outside of the Order limits – that land is shaded blue. Under the terms of the Deed, the Councils are not restricted from providing PRow on this land (coloured yellow and blue), however they cannot utilise the contribution without the consent of the relevant freehold owner. The Councils are free to use the contribution monies for PRow connectivity measures anywhere on the plan coloured either white (i.e. no shading) or purple, with or without the consent of the relevant landowners.
- 4.12.202. The Applicant is required to provide an update on this plan prior to the earlier of the commencement of the Development and the carrying out of any Permitted Preliminary Works. As part of that update the plan will either remain the same, or the areas of land shaded yellow or blue will be reduced (that is, there is no possibility for those areas of the plan to increase) in circumstances where: (i) any Order ultimately made reduces the size of the Scheme meaning identified landowners' land where a voluntary agreement has been reached is not required as it is no longer within the Order limits and so the Applicant does not need to draw down the lease; or (ii) the Applicant has not been granted a lease or rights over

such land, meaning it needs to use compulsory acquisition powers, in which case such land is no longer required to have the same protections as the land shaded yellow or blue. The effect of any such update to the plan is clearly to allow the Councils to spend the contribution over an increased area.

4.12.203. Responding to comments from other interested parties, there is an obligation in the Deed on the Councils to use reasonable endeavours to consult with local organisations who represent users of the existing PRoWs before deciding how to use the contribution for the public access mitigation strategy measures.

4.12.204. The Councils criticised restrictions on use of the contribution [REP8-051]. The Applicant rejected the criticism as there were considerable areas over which the contribution can be used and the Councils could use their own money on other areas. The Applicant defended seeking agreement with landowners on these matters (paragraphs 57 and 58 of [REP8-051]) as the rights of landowners and CA guidance had to be observed, including a duty to negotiate voluntary agreements, which precludes simply imposing terms on landowners, such as insisting they take on PRoW. As the Applicant reached terms the landowners' ability to negotiate terms should be respected as part of that process.

4.12.205. The Applicant noted the Proposed Development would be decommissioned after 40 years and after decommissioning works there would be no ongoing effects to mitigate.

CONCLUSION ON PUBLIC RIGHTS OF WAY

4.12.206. The public rights of way are particularly important recreational facilities for walkers, cyclists and horse riders in the area within and surrounding the Proposed Development, the effects of which the Applicant has assessed, providing information sufficient to appreciate the significance of those impacts that would be adverse to such users. The assessment appropriately assesses effects on users of PRoWs focusing on the impact of severance of existing routes and the resulting changes in journey lengths and times and local travel patterns, from which it is clear that there would be some disruption to the enjoyment of public footpaths and bridleways during the construction phase.

4.12.207. The Applicant acknowledges the emphasis given in the ECDC and WSC local plan documents of the importance of ensuring existing PRoWs are kept and minimal disruptions of PRoWs during the construction phase. The Applicant also confirmed to the ExA that it acknowledged the importance and relevance of both ROWIPs of the county councils. It is somewhat surprising therefore that it should maintain a dispute as to the proper application of local policy which in this matter the ExA should be considered as important and relevant matters alongside the NPSs.

4.12.208. That said the primary focus in an application of this nature where adverse impacts are identified to the PRoW network, should be on the mitigation measures proposed to address those adverse effects and whether appropriate mitigation requirements might attach to any grant of development consent as provided for in NPS EN-1.

4.12.209. In addition to the mitigation described in the application as submitted and after some prolonged entreaties to engage meaningfully with the host local authorities and PRoW network user groups, the Applicant did recognise the position of the host local authorities as set out in the joint LIR, that the permissive paths proposed as part of the Scheme would not adequately mitigate or compensate for the disruption to the existing PRoW network, and that therefore opportunities for PRoW

improvements, and new PRow/permissive paths during operation of the Scheme should be further explored.

- 4.12.210. The Applicant has committed to further measures which now include undertaking condition surveys of the PRow network, funding proportionate measures to limit damage due to construction of the Proposed Development “if considered beneficial” following analysis of the survey findings pursuant to the Framework CTMP [REP7-017], and to include a new Requirement in the DCO not to close any PRow until a reinstatement plan has been submitted and approved by the relevant local authorities. Under the Framework CTMP [REP7-017] it has also committed to close temporarily PRows only where no reasonable alternative exists that would enable the works to be carried out safely and expeditiously in the limits of deviation for that work. Consultation would take place with the relevant local highway authority or authorities on PRow management or closures in accordance with article 11 of the dDCO.
- 4.12.211. The ExA considers that the mitigation measures put forward by the Applicant would be acceptable. As to whether requirements or other provisions in respect of these measures should be included in any grant of development consent, the ExA is mindful of the Deed of Obligation which has not in fact been completed at the close of the Examination. Nevertheless, the ExA considers that it would be necessary for the parties thereto to complete such an obligation which would give reasonable effect to opportunities to improve or create the PRow user experience through permissive paths, having regard to the use, character, attractiveness, and convenience of the particular rights of way (paragraph 5.11.30).
- 4.12.212. Whilst complying with NPS EN-1 in this respect, the ExA is also satisfied that the alternative provision and diversions could be arranged at least as attractively, safely and conveniently for public use, considering the temporary nature of the diversions, and the difficulties of securing more than a permissive mechanism to compensate for adverse effects described above. In this way, local plan requirements to minimise disruption to PRow users during the construction phase of development would be met, as would the requirements of Policy S6 of the ECDC Core Strategy, by making reasonable provision by the proposed diversions and permissive paths in light of the predicted adverse effects, to offset the disadvantages to the public, secured in the CTMP and DCO.

OVERALL CONCLUSIONS ON SOCIO-ECONOMICS AND LAND USE

Economic And Employment Effects (Including Horse Racing Industry)

- 4.12.213. Embedded mitigation measures would secure in a reasonable manner potential improvements and benefits to local communities in connection with the Proposed Development, as confirmed in the SoCG Update Note for Combined LPA [REP10-033]. The updated OSSCEP if implemented in full would gear those measures specifically to the local area, reflecting the aim of dNPS EN-1 and the extant NPS EN-1, in encouraging applicants, to ensure local suppliers are considered in any supply chain. The updated OSSCEP would be necessary to mitigate adverse socio-economic impacts of the development but would also provide positive benefits for the local and regional area. However, the ExA is not persuaded that there would be an overall net benefit to the local economy or that a significant number of jobs would be filled from within the local area.
- 4.12.214. As the Proposed Development is considered in this Examination under s105 PA2008 the ExA takes note of the local planning policies that relate to the HRI as important and relevant matters to consider in relation to the wider socio-economic

effects of the Proposed Development. The ExA considers that the Proposed Development has the potential to cause adverse effects on the HRI and that this could have knock-on effects on the local economy and local employment which would be likely to last beyond the temporary timescale of the Proposed Development.

- 4.12.215. In overall terms the ExA concludes that the Proposed Development could cause harm to the local economy and this carries moderate negative weight in the planning balance.
- 4.12.216. The SCC AP would remove the parts of the Proposed Development that have the greatest potential to cause adverse impacts and would therefore mitigate potential harm, especially in relation to the HRI.

BMV Agricultural Land and Farming Circumstances

- 4.12.217. The ExA cannot assume the accuracy of some IPs' extrapolations of ALC surveys from neighbouring land onto land in the Application Site. The IPs' submissions on this matter are mainly by affected farmers who disputed the ALC findings, however the evidence suggests they obtain good yields of high-quality arable produce from the same or similar grade land because they are all using irrigation. The ExA finds no clear evidence that the irrigation factor always resulted in MAFF making a change of one grade. Stoniness was often the main limiting factor rather than droughtiness in the MAFF report used by the Applicant to inform the desk assessment for the baseline conditions of soil types.
- 4.12.218. The Applicant has sought to minimise impacts on BMV agricultural land by giving preference to use of land in areas of poorer quality (ALC grades 3b, 4 and 5). It has sought to minimise impacts on soil quality considering the mitigation measures proposed. To the extent that part of the Application Site lies within areas of BMV agricultural land, such areas are relatively small in comparison to the areas of poorer quality and justified on the basis of the wider sustainability considerations considered in this Report.
- 4.12.219. Despite criticisms from IPs and their experts, the ExA and the SoS must have proper regard to advice from the statutory advisor, NE was content with the Applicant's ALC after follow-up discussions with the consultants and the receipt of additional technical information about the approach taken to the ALC field surveys. ALC assessment concerns the inherent potential of land in a range of farming systems, and agricultural use, or intensity of use, does not affect the ALC grade. Thus, ALC grading is deliberately designed to be insensitive to good or bad land management. Accordingly, the ExA finds no compelling reasons to question the validity of the Applicant's ALC survey and report, which was appraised and endorsed by NE.
- 4.12.220. The availability of agricultural land for food production was a factor considered by the Applicant alongside other policies in selecting the Application Site as being appropriate for development given the objective needs set out in national policy. Consideration was given to factors influencing renewable and low carbon energy development and whilst clearly the Proposed Development is not on previously developed or non-agricultural land, the proposed use of the agricultural land represents a reasonable choice for the reasons stated. Poorer quality land has been used in preference to higher quality land and the ExA is satisfied that allowance could be made for the resumption of such use after decommissioning.

- 4.12.221. However, bearing in mind the results consistently achieved by farmers and the effects of suspension and temporary loss of farming enterprises, the ExA finds that valid differences in position on the ALC issue remain and that the loss could effectively be permanent. Consequently the ExA concludes that BMV Agricultural Land and Farming Circumstances issues carry moderately negative weight in the planning balance.
- 4.12.222. In terms of the SCC AP, similar considerations would apply although the overall amount of land taken out of agricultural use for the purposes of the Proposed development would clearly be less.

Public Rights of Way

- 4.12.223. The Applicant acknowledged the emphasis given in the ECDC and WSC local plan documents of the importance of ensuring existing PRoWs are kept and minimal disruptions of PRoWs during the construction phase. However, the primary focus in an application of this nature, where adverse impacts are identified to the PRoW network, should be on the mitigation measures proposed to address those adverse effects and whether appropriate mitigation requirements might attach to any grant of development consent as provided for in NPS EN-1.
- 4.12.224. The Applicant has committed to further measures including inserting a new Requirement in the DCO not to close any PRoW until a reinstatement plan has been submitted and approved by the relevant local authorities. Under the FCTMP [REP7-017] it has also committed to close temporarily PRoWs only where no reasonable alternative exists that would enable the works to be carried out safely and expeditiously in the limits of deviation for that work. Consultation would take place with the relevant local highway authority or authorities on PRoW management or closures in accordance with article 11 of the dDCO. However, the ExA considers that the Deed of Obligation [REP11-011] would need to be completed which would give reasonable effect to opportunities to improve or create the PRoW user experience through permissive paths, having regard to the use, character, attractiveness, and convenience of the particular rights of way.
- 4.12.225. The ExA is satisfied that the alternative provision and diversions could be arranged at least as attractively, safely and conveniently for public use, considering their temporary nature. Local plan requirements to minimise disruption to PRoW users during the construction phase of development would be met, as would the requirements of Policy S6 of the ECDC Core Strategy, by making reasonable provision by the proposed diversions and permissive paths in light of the predicted adverse effects, to offset the disadvantages to the public, secured in the CTMP and DCO, and overall the Proposed Development would comply with the requirements in regard to PRoW set out in paragraph 5.11.30 of NPS EN-1.
- 4.12.226. Taking both the permissive paths to be provided as part of the Proposed Development, as well as a reasonably significant contribution towards new or improved PRoW and permissive paths in the vicinity, the ExA is satisfied that the proposals would achieve reasonable enhancements to the PRoW network in connection with the Proposed Development, and adverse impacts of the Scheme on PRoW users and the network would be appropriately mitigated. The ExA places moderate weight on the benefits to be delivered by the proposed permissive paths and contribution set out in the Deed of Obligation, assuming it is completed in due course before any eventual development consent is granted.

- 4.12.227. The ExA hence concludes that the negative impacts on PRow during construction are to some extent offset by the mitigation proposed during the life of the Proposed Development and overall carry slight negative weight in the planning balance.

4.13. TRAFFIC, TRANSPORT AND HIGHWAY SAFETY

INTRODUCTION

- 4.13.1. This section considers and assesses the effects of the Proposed Development on traffic, transport and highway safety in relation to policy requirements. The Examining Authority (ExA) identified traffic, transport and highway safety, particularly in respect of increased heavy goods vehicle (HGV) and abnormal indivisible load (AIL) vehicle movements and unscheduled operational traffic movements, as principal issues in its initial assessment [PD-009]. There is also some overlap with the Air Quality and Human Health and the Socioeconomics and Land Use parts of this Chapter.
- 4.13.2. There are two trunk roads in the area, the A11 and the A14. The A14 is a grade-separated dual carriageway and the A11, also a dual carriageway, is partly grade separated but also with at-grade junctions close to the Proposed Development between Newmarket and Barton Mills.
- 4.13.3. The remainder of the highway network consists of single carriageway rural roads of varying widths and standards.
- 4.13.4. The following chapters of the Environmental Statement (ES) are relevant:
- Chapter 3 Scheme Description [APP-035]
 - Chapter 13 Transport and Access [APP-045]
 - Chapter 18 Summary of Significant Environmental Effects [APP-050].

POLICY CONSIDERATIONS

National Policy

- 4.13.5. The applicability of national policy, and in particular the National Policy Statements (NPS) EN-1, EN-3 and EN5 and emerging NPSs, is discussed earlier in this report.
- 4.13.6. Currently NPS EN-1 is the overarching national policy statement for energy. NPS EN-3 is the national policy statement for renewable energy infrastructure and does not cover solar energy generation.
- 4.13.7. NPS EN-1 (EN-1) recognises that the transport of materials, goods and personnel to and from a development during all project phases can have a variety of impacts on the surrounding transport infrastructure (paragraph 5.13.1). The consideration and mitigation of transport impacts is an essential part of Government's wider policy objectives for sustainable development as set out in EN-1 paragraph 5.13.2.
- 4.13.8. EN-1 says that, if a project is likely to have significant transport implications, the applicant's ES should include a transport assessment (paragraph 5.13.3) and the applicant should provide a travel plan (paragraph 5.13.4).
- 4.13.9. EN-1 goes on to state that the decision-maker should ensure that the applicant has sought to mitigate these impacts, including during the construction phase of the development. Where the proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, requirements should

be considered to mitigate adverse impacts on transport networks arising from the development (paragraph 5.13.6).

4.13.10. With regard to mitigation, EN-1 states that water-borne or rail transport is preferred over road transport at all stages of the project (paragraph 5.3.10) and advises at paragraph 5.13.11 that, where there is likely to be substantial HGV traffic, requirements may be attached to a consent that:

- control numbers of HGV movements to and from the site in a specified period during its construction, and possibly the routing of such movements;
- make sufficient provision for HGV parking, either on the site or at dedicated facilities elsewhere, to avoid overspill parking on public roads, prolonged queuing on approach roads and uncontrolled on-street HGV parking in normal operating conditions; and
- ensure satisfactory arrangements for reasonably foreseeable abnormal disruption, in consultation with network providers and the responsible police force.

4.13.11. The Department for Transport Water Preferred Policy: Guidelines for the movement of abnormal indivisible loads says that AIL should be off the road network as far as possible by using the nearest coastal port, and that where a water-based option exists it must be considered.

Draft National Policy

4.13.12. NPS EN-1 and NPS EN-3 were undergoing revision during the Examination. Of particular significance is that solar energy generation is expected to come within the remit of the revised NPS EN-3.

4.13.13. Relevant paragraphs relate to draft NPS EN-1 and are:

- paragraph 5.14.4 (5.13.4 in current version) which has additional drafting in respect of the need to consider disruption to services and infrastructure, such as road, rail and airports;
- new draft paragraph 5.14.8 which says that the Secretary of State (SoS) should only consider refusal on highway grounds if there would be an unacceptable impact on highway safety, or that the residual cumulative impacts on the road network would be severe; and
- paragraph 5.4.11 (5.3.10 currently) which now directs applicants to the Department for Transport (DfT) water preferred policy guidelines.

Local Policy

4.13.14. The Cambridgeshire and Peterborough Local Transport Plan (LTP) (January 2020) is the current LTP until the new Local Transport and Connectivity Plan is adopted. Its ambition is to

- Provide a world class transport network;
- Support sustainable growth; and
- Support access to jobs, services and education for all.

4.13.15. The five objectives of the Suffolk County Council (SCC) Suffolk LTP are

- Better accessibility to employment, education and services;
- Encouraging planning policies which reduce the need to travel;
- Maintaining the transport network and improving its connectivity, resilience and reliability;

- Reducing the impact of transport on communities; and
- Supporting SCC's ambition of Improving broadband access.

Of particular relevance in the SCC LTP are improvements to both the A14/A142 junction at Newmarket and the A11 Fiveways junction at Barton Mills.

4.13.16. East Cambridgeshire District Council (ECDC) Local Plan (2015) policy COM 7 on transport impact is relevant, particularly in respect of

- Safe and convenient access to the highway network;
- Routes giving priority to walking and cycling;
- Detriment to the local highway network;
- The need for a transport assessment.

4.13.17. West Suffolk Council (WSC) Joint Development Management (DM) Policies Document (last updated February 2015) policy DM2 is relevant as it requires development proposals to produce designs in accordance with standards which maintain or enhance the safety of the highway network; and WSC policy DM45 says that a transport assessment and travel plan are required for developments which are likely to have significant transport implications.

4.13.18. Forest Heath District Council (FHDC) Core Strategy (CS) (adopted 2010) policy CS12 on strategic transport improvement and sustainable transport are also relevant, particularly in respect of

- Improvement of the A14/A142 junction; and
- Relieving adverse impacts of traffic in Newmarket

THE APPLICANT'S CASE

Application Documents

4.13.19. Volume 1 Chapter 3 of the ES (the Scheme Description) [APP-035] sets out the main components of the Proposed Development. Of particular relevance to traffic, transport and highway safety are the sections on construction and decommissioning of the solar infrastructure, the transport of AIL, and operation of the panels and the battery energy storage system (BESS).

4.13.20. Volume 1 Chapter 13 of the ES [APP-045], supporting Figures 13.1 to 13.11 [APP-243 to APP-253] and Appendices 13A [APP-116], 13B [APP-117] and 13C [APP-118] present the results of the Applicant's Environmental Impact Assessment of the potential impacts of the Proposed Development on transport and access. The Transport Assessment is at Appendix 13B and the combined Framework Construction Traffic Management Plan and Travel Plan is at Appendix 13C.

4.13.21. The main matters raised during statutory consultation on transport and access matters are summarised in Table 13-4 [APP-045]. The main consultation issues identified by the Applicant were:

- The need for speed surveys where there is a proposal to change the speed limit;
- The need for a Stage 1 road safety audit of the alternative Golf Links Road site access due to its proximity to the A11; and
- Use of the B1102/Newmarket Road junction in Worlington

4.13.22. The Applicant addressed these issues in the combined Framework Construction Traffic Management Plan and Travel Plan at Appendix 13C [APP-118].

- 4.13.23. Volume 1 Chapter 18 of the ES [APP-050] summarises what the Applicant considers to be the significant environmental effects during the construction, operational and decommissioning phases of the Proposed Development. Table 1 shows that the Applicant considers that there are no significant residual effects in respect of transport and access.

Legislation, Policy and Guidance

- 4.13.24. The Applicant has considered relevant national and local legislation and policy and also industry guidance (IEMA Guidelines for the Assessment of Road Traffic (GEART)) in Appendix 13A [APP-116].
- 4.13.25. While acknowledging that the *“proposed energy generating technology is not currently specifically referenced by a National Policy Statement”* [APP-116], the Applicant takes account of the relevant paragraphs of NPS EN-1, EN-3 and EN-5 as matters which *“are considered to be important and relevant to the Secretary of State’s decision...”* and sets out the relevant NPS requirements in Table 2-1 [APP-116].
- 4.13.26. The Applicant has also taken account of the draft NPSs EN-1, EN-3 and EN-5 in Table 2-2 [APP-116] and concludes that the only relevant paragraphs relate to draft NPS EN-1, namely:
- paragraph 5.14.4 in respect of disruption to services and infrastructure; and
 - paragraph 5.14.8 in respect of highway safety.

Measures to address these issues are included in the combined Framework Construction Traffic Management Plan and Travel Plan at Appendix 13C [APP-118].

Baseline Conditions

- 4.13.27. The Proposed Development is located in a rural area with limited pedestrian and cycle facilities, and the local roads are “assumed to be lightly trafficked” (paragraph 13.6.3 of [APP-045]). The existing highway network is described in section 3.4 of the Transport Assessment [APP-117].
- 4.13.28. At paragraph 13.3.1.c of Chapter 13 of the ES [APP-045], the Applicant states that *“No baseline data was available regarding the local pedestrian and cycle usage. Given the nature of the local routes and area, it is expected the pedestrian and cycle flows to be generally low.”*
- 4.13.29. There are limited local bus and rail services: these are described in Annex B of the Transport Assessment [APP-117].
- 4.13.30. The nearest bus stops are around 1km away from the Proposed Development and services are summarised in Table 13-5 [APP-045].
- 4.13.31. The two closest rail stations are at Newmarket and Kennett, several miles from the Proposed Development. The service is summarised in Table 13-6 [APP-045].
- 4.13.32. The A11 and A14 run close to the Proposed Development and form part of the Strategic Road Network operated by National Highways. The A14 runs from west to east and to the south of the Proposed Development. The A11 runs from south-west to north-east, mostly to the east of the four sites which make up the Proposed Development, with part of the Sunnica West Site A site to the east of the A11 and accessed via Dane Hill Road.

- 4.13.33. Baseline traffic information has been obtained for 2019 at various locations on the A11 and A14 and is shown in Table 13-7 [APP-045]. A comparison with 2020 data was carried out and it was agreed with Suffolk County Council (SCC) and Cambridgeshire County Council (CCC) that, due to the Covid-19 pandemic, undertaking surveys during 2020 and 2021 would not be relevant (paragraph 3.4.49 of the Transport Assessment [APP-117]).
- 4.13.34. Baseline traffic information for the local highway network has been obtained from the Forest Heath District Council Site Allocation Plan Cumulative Impact Study (August 2016) supplemented by information from various subsequent planning applications. This information has then been aggregated to a base year of 2023 using TEMPro growth factors as described in the Transport Assessment [APP-117] and is summarised in Tables 13-14 and 13-15 [APP-045].
- 4.13.35. The Transport Assessment [APP-117] acknowledges at paragraph 3.4.20 that there are gaps in traffic data on the local road network at La Hogue Road (to be used for access to Sunnica West) and Elms Road (to be used for access to Sunnica East) as well as along Freckenham Road between Freckenham and Worlington (for access to Sunnica East) or west of the A142 towards Burwell (to be used for access to Grid Connection Route B). The Applicant considered that these omissions did not limit its ability to draw conclusions in respect of the traffic effects resulting from the Proposed Development.
- 4.13.36. Personal injury collision (PIC) information was obtained from SCC and CCC for the period January 2014 to August 2019 and is summarised in Table 13-9 [APP-045].
- 4.13.37. The Applicant concluded [APP-045] that
- the available data did not show incidents occurring frequently at any particular location (paragraph 13.6.50);
 - driver error was the main contributory factor (table 13-11); and
 - the available data did not show high proportions of incidents involving vulnerable users at any particular location (paragraph 13.6.56).
- 4.13.38. No links or junctions particularly sensitive to geometric or capacity restraints were identified (Table 13-16).

Assessment Methodology

- 4.13.39. In paragraph 3.4.16 of the Transport Assessment [APP-117] the Applicant has assumed that the peak hours for the Proposed Development will be 0600-0700 and 1900-2000, rather than the traditional network peak hours of 0800-0900 and 1700-1800.
- 4.13.40. In paragraphs 13.3.4 and 13.3.5 of Chapter 13 of the ES [APP-045], the Applicant considers that the worst case is the construction phase, based on a 24-month construction period with the Proposed Development *“built out in full, which has been the basis of the assessment.”*
- 4.13.41. The methodology used for the assessment is based on the Guidelines for the Environmental Assessment of Road Traffic (GEART) (Institute of Environmental Management and Assessment (IEMA) 1993) (the IEMA guidance), and in particular:
- Rule 1: Include highway links where traffic flows are predicted to increase by more than 30% (or where the number of HGVs is predicted to increase by more than 30%); and

- Rule 2: Include any other specifically sensitive areas where traffic flows are predicted to increase by 10% or more (or where the number of HGVs is predicted to increase by 10% or more).

4.13.42. GEART also says that *“It is generally accepted that accuracies greater than 10% are not achievable. It should also be noted that the day to day variation of traffic on a road is frequently at least some + or -10%. At a basic level, it should therefore be assumed that projected changes in traffic of less than 10% create no discernible environmental impact ... a 30% change in traffic flow represents a reasonable threshold for including a highway link within the assessment.”*

4.13.43. The Applicant has then used Rule 1 to identify links to be included in the study area, and has assumed that changes in traffic flows below the GEART thresholds will result in no discernible or negligible environmental effects and has not assessed these further, either for the project alone or cumulatively.

4.13.44. In accordance with GEART, the significance of effects has been assessed by considering the interaction between the magnitude of the change and the sensitivity of the receptor in respect of:

- Severance;
- Driver delay;
- Pedestrian delay;
- Pedestrian and cyclist amenity;
- Fear and intimidation;
- Accidents and safety; and
- Hazardous loads.

Table 13-1 shows the matrix used to determine the significance of effect, as

- Major adverse;
- Moderate adverse;
- Minor adverse;
- Negligible;
- Minor beneficial;
- Moderate beneficial; and
- Major beneficial.

4.13.45. The impact on local bus services has been considered and assessed qualitatively with reference to

- Frequency and capacity of services;
- Potential changes to journey times; and
- Change in access to bus services.

4.13.46. The impact on local rail services has not been assessed as it is considered unlikely that staff will travel to the Proposed Development by rail.

4.13.47. The Applicant has assumed for the purposes of the ES that the peak construction year is 2023, as the maximum number of trips is expected to occur in the early stages of construction, and has assessed likely changes and effects after considering embedded mitigation measures, including

- Managed HGV and staff arrival and departure times to avoid peak hours;
- Adequate space to avoid queuing of HGV and AIL on the highway;
- Routing of HGV, AIL and cranes to the Strategic Road Network (SRN);
- Staff car sharing, directed to use the SRN; and

- Minibus transport around the sites, using internal routes where possible.

4.13.48. The construction delivery trips have then been assigned to the future base year 2023 equally over the 10-hour daily construction delivery period, and the significance of effects assessed. The Framework Construction Traffic Management Plan and Travel Plan (CTMP) [APP-118] shows the proposed delivery routes, which are in accordance with the route options given in the SCC and CCC freight management plans.

4.13.49. The Framework CTMP also includes brief details of junction work areas and a review of proposed site accesses based on a 16.5m articulated lorry. A brief review of crane routes to the following specific crane site access locations was also undertaken:

- Sunnica East Site A - Ferry Lane and Beck Road;
- Sunnica East Site B - Elms Road;
- Sunnica West Site A - La Hogue Road; and
- Burwell National Grid Substation Extension

and the proposals for these particular accesses modified as necessary. There is no substation proposed for Sunnica West Site B and consequently no need for crane access.

4.13.50. The assessment is for vehicle travellers, non-motorised users (NMUs), public transport users and combined effects on receptors in respect of construction of Sunnica East sites A and B, Sunnica West sites A and B, the grid connection routes (A and B) and the extension to the National Grid substation at Burwell. The Applicant concludes in Tables 13-21, 13-26, 13-27, 13-28 and 13-33 [APP-045] that the residual effects are minor adverse or negligible, and therefore not significant.

Abnormal Indivisible Loads

4.13.51. The substation transformers are large and heavy indivisible items which will have to be delivered by road. Their size and weight means that they are classed as Special Order Abnormal Indivisible Loads (AIL) requiring use of the Electronic Service Delivery for Abnormal Loads (ESDAL) process, which applies to all abnormal loads, including loads transported on standard HGV which are abnormal by virtue of size and/or weight. The Applicant confirmed in paragraph 5.4.1 of revision 5 of the Framework CTMP that *“AILs are abnormal indivisible loads, which include cranes and vehicles used to transport transformers.”*

4.13.52. The Framework CTMP [APP-118] makes reference to the need for junction and access improvements to accommodate cranes. In paragraph 5.4.5 the Applicant states that *“The route review identifies feasible routes for the cranes. A review of the route will be carried out by an experienced contractor prior to the crane(s) requirement on-site. The requirements for the cranes along the routes will be discussed with the relevant local highway authorities, National Highways and police.”*

4.13.53. The Framework CTMP [APP-118] also makes brief reference to AIL: paragraph 7.2.18 says that *“Before the movement of the cranes and AILs the police will be given advanced notification under the Road Vehicle Authorisation of Special Types Order 2003.”*

Cumulative Impacts

4.13.54. Cumulative impacts are not explicitly considered in the Transport Assessment [APP-118]. At paragraph 13.11.1 of Chapter 13 of the ES [APP-045] the Applicant states that the 2023 baseline already includes forecast development growth and that due to Covid-19 restrictions it has not been possible to collect representative new data.

Mitigation

4.13.55. Embedded mitigation measures include

- Managed heavy goods vehicle (HGV) and staff arrival and departure times to avoid peak hours;
- Adequate space to avoid queuing of HGV and AIL on the highway;
- Routing of HGV, AIL and cranes to the SRN;
- Staff car sharing, directed to use the SRN; and
- Minibus transport around the sites, using internal routes where possible.

4.13.56. The Applicant has assessed the impacts of the Proposed Development after taking account of embedded mitigation and has concluded in paragraph 13.9.1 of Chapter 13 of the ES [APP-045] that *“No significant adverse effects are anticipated during construction and therefore no additional mitigation, other than the embedded mitigation outlined in Section 13.7, is proposed.”*

Residual Effects

4.13.57. The residual construction phase effects on vehicle travellers and NMUs are summarised in Table 13-34 [APP-045] as negligible or minor adverse.

EXAMINATION

Joint Local Impact Report (LIR) [REP1-024]

4.13.58. The four relevant local authorities submitted a Joint LIR at Deadline 1 [REP1-024]. Traffic, transport and highway safety issues are addressed in Chapter 13 Transport (Highways) and in Annexes D, E and F.

4.13.59. The main concerns raised in the Joint LIR were:

- Assessment methodology;
- Lack of information;
- Unclear information;
- HGV movements and route controls;
- AIL impacts not fully assessed;
- Highway safety;
- Changes to limit the impacts to those assessed in the ES and Transport Assessment (TA); and
- The need for protective provisions.

4.13.60. The LIR sets out the methodological issues in Annex D to the LIR. This annex is a lengthy document. The main issues and concerns are:

- No updated ES or TA provided with the 30 August 2022 (first) change request;
- Lack of Saturday data may lead to unassessed impacts;
- Scoping out of operational phase may lead to unassessed impacts;
- Links have been scoped out without consideration of the Guidelines for the Assessment of Road Traffic (GEART) Rule 2 (10% in sensitive areas);
- Cumulative increases in traffic flows;

- HGV impacts on pedestrian and cycle amenity on links with low existing flows;
- Driver delay methodology eg at A11 off slip to Elms Road;
- Sensitivity of local road network links may underestimate impacts;
- Assessed car occupancy figure of 1.5;
- Use of generic conversion factors increases uncertainty of conclusions;
- Lack of information on HGV movements during network peak hours;
- Minibus movements - not assessed in the ES and no information on numbers and practicality;
- Dismissal of impacts of HGV movements on grounds of relatively small peak hour increase and no assessment of peak hour changes which would represent a significant proportional increase on Elms Road;
- Use of a flat distribution profile for HGV traffic; and
- Underestimation of NMU impacts along Warren Road, Red Lodge.

4.13.61. Annex D to the Joint LIR also commented on the Transport Assessment at Appendix 13B of the application [APP-117] and raises the following issues and concerns:

- Use of relatively old single day traffic survey data leading to significant risk of variance;
- Lack of information on the development peak hour traffic flows as distinct from the network peak hour traffic flows resulting in uncertain conclusions about resulting impacts at a number of locations;
- Certainty around the assessed 0600-0700 and 1900-2000 Proposed Development peak hours, which are derived from an assumed working day of 0700-1900;
- The need to clarify the definition of light goods vehicles (LGV) and HGV; and
- Flat profile means no slippage of staff and delivery times.

4.13.62. Annex D to the Joint LIR also comments on the Framework CTMP at Appendix 13C of the application [APP-118] and raises the following issues and concerns:

- The county councils as local highway authorities should approve the final plan through the DCO;
- Lack of information and visibility in respect of action in case of a breach of the Delivery Management System;
- Suitability of some local roads for HGV deliveries;
- HGV deliveries during unsociable hours;
- HGV should comply with Euro VI emission standards;
- Communications strategy must be external as well as internal;
- Staff movements and controls, including enforcement of parking permit scheme and monitoring of average vehicle occupancy (1.5);
- Staff arrival/departure times not being spread evenly over a one-hour period, leading to underestimated impacts;
- Likely significant staff trips through Red Lodge leading to underestimated impacts;
- Lack of detail of how the minibus service would work;
- Lack of detail on the proposed Travel Coordinator and Transport Coordinator; and
- No requirement for regular reporting to the local highway authorities.

4.13.63. Annex E to the Joint LIR is a review of the Applicant's Site Accesses Review, which is in chapter 5 of the Framework CTMP at Appendix 13C of the application [APP-118]. It raises the following general issues and concerns:

- A lack of basic information on map bases and access plans to aid identification and assessment;
- Visibility and road widths at HGV accesses;
- Departures from design standards and justification;
- Swept path analysis;
- Parking and manoeuvring on the highway;
- Impacts on existing drainage and vegetation, including overrunning; and
- Stage 1 road safety audits needed, including risks to vulnerable road users and designer's response.

and provides detailed comments on each of the proposed site accesses.

- 4.13.64. Annex F to the Joint LIR comments on DCO-related matters including alteration of streets, access and rights of way plans, permanent and temporary speed limits, temporary road closures and temporary traffic signals. A common thread is the lack of and inconsistency of information.
- 4.13.65. Chapter 13 of the Joint LIR summarises these concerns by saying that “... *these issues in combination result in the assessment not being able to adequately assess the likelihood or severity of a number of likely impacts.*”.
- 4.13.66. The Applicant responded to the Joint LIR at [REP3-019], and further in respect of Annexes E and F at [REP3A-034].

Relevant Representations

- 4.13.67. The four relevant local authorities all made relevant representations (RR) [RR-0998, RR-1178, RR-1340, RR-1351] expressing the same concerns as those in the Joint LIR.
- 4.13.68. The East of England Ambulance Service made a relevant representation [AS-013], highlighting AIL movements and other transport effects on its operations and asking for a s106 agreement or a deed of obligation.
- 4.13.69. National Highways made a relevant representation [AS-014] but did not raise any issues.
- 4.13.70. Traffic, transport and highway safety impacts were also mentioned in around 600 other RR, mainly in relation to
- Routeing and access;
 - adequacy of assessment;
 - public rights of way (PRoW);
 - impacts on the road network and infrastructure;
 - safety on local roads due to additional traffic;
 - disruption to journeys and difficulty getting around the local area due to the size of the Proposed Development;
 - negative impacts on the horseracing industry, including transport of horses.
- 4.13.71. The Applicant commented on all RR [REP1-016], standing by the level of detail and its approach to assessment and stating that following consultation feedback the construction access on Golf Links Road had been removed. The Applicant acknowledged that eight PRoW will have to close but this is temporary and only for three weeks. The Applicant also referred to various application documents, including the Framework CTMP [APP-118], the Framework Construction Environmental Management Plan (CEMP) [APP-123], the Framework Operation

Environmental Management Plan (OEMP) [APP-126] and Appendix B of the Design and Access Statement [APP-264].

Written Questions [PD-017, PD-021, PD-025]

- 4.13.72. The ExA considered the application documents, the LIR and relevant representations, and put written questions about traffic, transport and highway safety matters in three rounds of written questions.
- 4.13.73. These written questions were directed at the Applicant and the relevant planning and highway authorities, and resulted in a great deal of new and improved information, mainly from the Applicant, which assisted the ExA in understanding the relevant issues and the positions of the various parties.
- 4.13.74. The ExA sought clarification of a number of matters of presentation in order to aid its understanding and also inquired [PD-017] into various substantive matters including
- baseline conditions;
 - abnormal loads and use of ports;
 - site accesses, routes and timings for AIL and HGV;
 - traffic management;
 - staff travel;
 - road and PRow closures;
 - forecast peak HGV movements; and
 - the assessment methodology used by the Applicant.
- 4.13.75. The Applicant responded [REP2-037, REP2-038] by reference to various updated documents, including
- A technical note on transport and access [REP2-041]; and
 - a major revision of the Framework CTMP which was submitted alongside the first change request [AS-278, AS-279, AS-300, AS-301] and included an AIL route review.
- 4.13.76. Following its assessment of the Applicant's responses to its First Written Questions (ExQ1), the ExA decided to issue a second round of written questions (ExQ2) [PD-021]. In its response [REP5-056] to these further questions, the Applicant clarified various documentation and presentation queries and in respect of substantive matters said in response
- to ExQ2.10.3 about the main access to Sunnica East Site B on Elms Road, that the Framework CTMP had been updated further (revision 3 [REP3A-004]) to show that HGVs could pass each other at passing bays and that SCC accepted this [REP4-141];
 - to ExQ2.10.4 that *"The Applicant can confirm that the route successfully used by National Grid to deliver a new transformer from Ipswich Docks to the Burwell substation is the same route as assessed by the Applicant."*;
 - to ExQ2.10.9 and ExQ2.10.10 that HGVs currently using La Hogue Road are 2-axle lorries with a maximum weight of 18 tonnes, whereas the construction HGVs would all be 4- or 5-axle articulated lorries of 36 tonnes or 40 tonnes, but that the absolute increase in HGV traffic would be low so this would nevertheless not result in significant noise and air quality impacts on La Hogue Road;
 - to ExQ2.10.10 that a longer construction period would result in lower overall impacts in respect of social, mental health and wellbeing issues;

- to ExQ2.10.13 that AIL would not necessarily follow the routes proposed but that any alternative proposed would have to be agreed with the relevant authorities; and
- to ExQ2.10.16 that a daily staff vehicle cap has been set assuming a figure of 1.3 in respect of staff car occupancy but that the daily staff vehicle cap will be recalculated using 1.5 as originally proposed to accord with the assessment in the ES [APP-117].

4.13.77. In the event, both options 1 and 2 to connect to the National Grid at Burwell were removed from the application during the Examination, so the issue of transporting a transformer to the existing Burwell substation was no longer material or relevant.

4.13.78. The ExA considered all the responses to ExQ2 and revision 4 of the Framework CTMP submitted with the further changes at Deadline 5 [REP5-015] and decided that it was necessary to ask a third round of questions [PD-025] to establish clarity and obtain further information. In its response [REP7-055] to these further questions, the Applicant clarified various documentation queries and in respect of substantive matters said in response

- to ExQ3.10.2 that “*there will be no routine requirement ... to utilise any of the cable route accesses during the operational phase.*”; and
- to ExQ3.10.3 that vegetation clearance will be required at the main access (A) to Sunnica West Site A on La Hogue Road as this access will be used during construction and throughout the life of the project so temporary traffic management as used at construction-only accesses will not be used;

Written Representations

4.13.79. Notwithstanding the Applicant’s explanation of its position in respect of traffic, transport and highway safety matters, both in its response to RR [REP1-016] and its response to the ExA’s ExQ1 [REP2-037, REP2-038, REP2-041] [AS-278, AS-279, AS-300, AS-301], the ExA received around 100 written representations (WR), including representations from all four relevant highway and planning authorities.

4.13.80. Many of these voiced concerns over HGV and staff traffic, safety, amenity and the adequacy of the local road network, and added more detail to the relevant representations. These included a comprehensive submission from the Say No To Sunnica action group (SNTS) which included a specialist report about the carbon footprint of the Proposed Development [REP2-240g]. A common thread in these representations was the lack of sufficient detail to enable Interested Parties (IPs) to assess the likely impacts of the Proposed Development.

4.13.81. The Applicant responded to written representations [REP3A-035] and referred to various updated documents, in particular its updated Framework CTMP. In particular, the Applicant said in its responses

- at page 502 that “*The measures set out in the Framework Construction Traffic Management Plan and Travel Plan are secured in the draft DCO - Requirement 16 in Schedule 2 to the draft DCO, which requires the relevant authority’s approval of the CTMP....*”;
- at page 503 that “*The construction of the scheme will result in additional traffic on the local highway network during the construction period. The impact on the local highway network will therefore be a short term and temporary impact.*”;
- at pages 503/504 that “*The Applicant has agreed with the local highway authority to escort HGVs through the Newmarket Road/Freckenham Road T-*

junction within Worlington to safe passage of vehicles (sic) and the safety of the public ... AIL are not proposed to use the T-junction within Worlington.”;

- at page 504 that “... the applicant does not propose to use U6006 as a route of access (sic) for construction vehicles.”; and
- at page 508, quoting from the Transport Assessment [APP-117] that “*there is no particular safety concern that needs to be considered as part of the Scheme proposals.*”;

Hearings [EV-062] [EV-076 to EV-083]

4.13.82. The ExA scrutinised all these submissions very carefully and decided to explore what it considered to be important and relevant matters further at an issue specific hearing (ISH4), which was held on 16 and 17 February 2023.

4.13.83. In the time available, the ExA heard oral submissions on issues relating to

- Ports, AIL and crane routes: impacts and consents
- HGV routes and forecast impacts
- Site accesses; and
- Traffic management and regulation

and probed the Applicant for more detailed information. Submissions in respect of protective provisions and side agreements were heard later in ISH4 as part of the Development Consent Order (DCO) item.

Ports, AIL and crane routes

4.13.84. With regard to ports, AIL and crane routes, the ExA noted the relevant local authorities’ joint comments on the Applicant’s responses to its ExQ1.10.5 and ExQ1.10.6, and in particular SCC’s comments on the Stowmarket viaduct. The ExA said further that it considered that a feasibility report was necessary which would

- outline which ports were under consideration and the rationale for this;
- include a route inspection and assessment of the feasibility of transporting the now three 400 kilovolt (kV) transformers and the shunt reactor from the docks to the Proposed Development, identifying any restrictions, further assessments needed, parking and signage issues, and temporary diversions e.g. for emergency vehicles; and
- would establish which parts of the route from the port to the sites, including the SRN, are capable of carrying such loads, thus enabling early involvement of the relevant local highway authorities.

4.13.85. The Applicant responded that it had met the local authorities the previous week, on 8 February 2023, and at their request had engaged a haulier to undertake such a review. In response to questions from the ExA, the Applicant confirmed that

- the report would be in respect of the port of Ipswich, as this is the port most likely to be used;
- use of the local highway network from port to SRN was part of the review;
- the typical load was expected to be 130 tonnes, but the report would consider 150 tonnes maximum load;
- the assessment would be within the envelope of the worst-case assessment already undertaken;
- it would advise the Examination if there were to be any reduction in oversailing at plot 21-04; and
- the report would be submitted at Deadline 7.

In the event, a brief AIL High Level Route Summary report was submitted at Deadline 8 [REP8-025], which concluded that it was feasible to transport the transformers and shunt reactor to the Sunnica East A, East B and West A sites.

4.13.86. In response to further questions from the ExA, the Applicant outlined the routes to be used by AIL to access the sites, and confirmed that

- the Sunnica East Site A access K on Beck Road would be used by cranes and AIL;
- there would only be an inbound AIL trip as the trailer would be disassembled into smaller parts for the return journey; and
- it would advise the Examination by way of an update to the next revision to the Framework CTMP if there were to be any change to these routes or to any works required.

HGV routes

4.13.87. In respect of HGV routes, the ExA noted the responses from the Applicant and the relevant local authorities to its ExQ1.10.4 regarding the proposed A11 Barton Mills and associated gap closures, and asked

- what measures might be needed to ensure compliance with signposted diversions, eg for A11 northbound traffic to return on the A11 southbound and not rat-run westwards from Barton Mills on local roads; and
- whether there were any routes which will be used by HGV which we have not already considered.

4.13.88. The Applicant responded that

- Contractors would be required to comply with any National Highways diversion signs;
- The Framework CTMP includes a requirement to monitor and report on changes to the routes used by HGV to access the sites; and
- a considerate contractor would use diversion routes as a matter of course, but this could be included as a requirement in the Framework CTMP.

4.13.89. The ExA noted the Applicant's responses to its ExQ2.10.9 and 2.10.10 in respect of HGV on La Hogue Road, and in particular the inclusion of the extract from the Department for Transport's guide to lorry types and weights. The ExA also referred to its USI and noted that

- it had observed very few HGV of any classification on La Hogue Road;
- it understood that the few HGV currently using La Hogue Road are all 2-axle rigid body vehicles with a maximum weight of 18 tonnes;
- all the proposed HGV will be 4- and 5-axle articulated vehicles; and
- the existing road does not appear to be wide enough to allow such vehicles to pass each other, or to pass other vehicles safely.

4.13.90. The ExA wanted to know

- Where and how passing places would be constructed; and
- Why the Applicant took the view that the numbers and size of HGV proposed for construction, and presumably also for decommissioning, would not have a significant impact on what is currently a quiet and narrow road.

4.13.91. The Applicant explained that

- the section of road between the A11 and the main site access on La Hogue Road (approximately 400 metres (m)) would be widened to allow sufficient passing places and forward visibility between passing places;
- a site visit has confirmed that this can be achieved within the Order limits; and
- this can be achieved without overrunning onto the verge; and
- it recognises that there will be impacts on La Hogue Road but that these are spread over operational hours and are therefore considered to be minor adverse only.

Site accesses

4.13.92. The ExA wanted to know from the Applicant

- What impact the removal of site access L (part of the second change request) would have;
- How HGV drivers would know which delivery route to use;
- What is proposed in respect of Road Safety Audits for site accesses;
- How oversailing and rear end collisions will be avoided at cable route access J adjacent to the A142 will be avoided;
- in view of the junction geometry, what is proposed in respect of safety measures, including signage strategy, at access I at A11/Newmarket Road/Golf Links Road;
- How it envisaged safe access being provided at the West A crane access A on La Hogue Road without significant removal of vegetation on both sides of the junction, noting LHA concerns about swept path, layout and visibility; and
- How safe access would be provided at East A site access K on Beck Road and East B site access on Elms Road.

4.13.93. The Applicant replied that

- Removal of site access L would have no knock-on effects as there is another way of accessing that part of the cable corridor;
- The Framework CTMP is being updated to include briefing of drivers as part of the Delivery Management System (DMS) (paragraph 7.2.4 of [REP7-017]);
- It has been agreed with the relevant local authorities that safety audits will be undertaken of the main accesses on Elms Road and La Hogue Road, plus substation accesses;
- Oversailing at cable route access J would be avoided by use of land adjacent to the access point;
- Access I would be used for all phases: there would be temporary signs during the construction phase and a further speed survey has been undertaken which indicates that 90m visibility is sufficient: the Framework CTMP has been updated (paragraphs 5.11.8 and 6.1.6 of [REP7-017]);
- Some foliage removal would be required but would be minimised by timing HGV arrivals and departures not to coincide, requiring outbound HGV to wait inside the site for incoming HGV to avoid this: an updated plan has now been provided to CCC for review;
- In respect of the other accesses, outstanding concerns will be dealt with in the forthcoming revision of the Framework CTMP to be provided at Deadline 7.

4.13.94. The ExA also sought clarification from the Applicant on site access J on Golf Links Road and asked whether it had now been removed.

4.13.95. The Applicant said that site access K on Golf Links Road has now been removed, and that site access J would be used as a secondary access during the operational phase only, so no HGV would use it.

4.13.96. The ExA asked the relevant highway authorities for comment: SCC and CCC both welcomed the Applicant's position and await the detail.

Traffic management and regulation

4.13.97. The ExA asked the Applicant to specify those locations for which temporary traffic management layouts would be provided, and the Applicant explained that they would be provided for all primary accesses.

4.13.98. The ExA asked the relevant local authorities for comment. SCC said that it would like to see site access D on Newmarket Road included, and the Applicant confirmed that it would be included.

4.13.99. The ExA then asked the relevant local authorities whether they were satisfied with

- The proposed permanent traffic management during operation; and
- The proposed HGV and staff vehicle controls, particularly the HGV and staff vehicle caps.

4.13.100. The relevant local authorities had submitted their outstanding concerns into the Examination [REP6-057] [REP6-075]: these related to the quality and level of detail in relation to swept paths, opposing flows during construction, intensification of use, shared access (eg agricultural) during operation, vehicle speeds and visibility splays, and whether the same measures would continue into the operational phase, eg without traffic signals.

4.13.101. The Applicant confirmed that progress was being made on these concerns and that this would be reported in the next revision of the Framework CTMP to be provided at Deadline 7.

Outstanding Issues

4.13.102. At the close of the Examination, the relevant local authorities submitted their Joint Councils' comments on the Applicant's Deadline 8, Deadline 9 and Deadline 10 submissions [REP11-025]. They noted in particular that *"The volume of new information presented at this late stage ... means that it is not possible for the Councils to review all the documents submitted ... There is concern that the local community and other interested parties will also face the same challenges."*, that protective provisions and a side agreement have not yet been agreed, and that *"their protective provisions ... [REP9-010] should be included in the final DCO."*

4.13.103. The relevant local authorities also noted in respect of the Applicant's Statement of Common Ground (SoCG) Update Note [REP10-033] that *"in table 1.2 (of the Applicant's SoCG update) the last column is incorrectly labelled and should read 'Details of matters not agreed.'"*

4.13.104. At the close of the Examination and following updates to various application documents, the Applicant notes in its Statement of Commonality [REP11-006] that its SoCG with National Highways was signed at Deadline 6. The top line of Table 2-1 indicates that there are outstanding issues in respect of the SoCG with the *"Joint Local Planning Authorities"* and Table 3-1 shows that the LHAs have outstanding concerns in respect of

- Staff vehicle occupancy - should be 1.5, Applicant to update ExA;
- Site access proposals, Applicant to update ExA;
- Monitoring, reporting and enforcement, Applicant to update ExA; and

- Side agreement and indemnity, Applicant to update ExA.

4.13.105. However, in its End of Examination Summary paper [REP10-032], the Applicant says at paragraph 1.8.5 that *“Outstanding issues ... relate to points of detailed design ... The outstanding issues are controlled principally by the protective provisions ... Requirements 6 and 16 ... and the F-CTMP [REP7-017]. The Applicant considers that these issues can be addressed ... through these relevant controls after the DCO has been granted and the weight of such concerns does not merit refusal of the application ...”*.

CONCLUSIONS

4.13.106. The ExA has given careful consideration to the application documents, all relevant representations and all documents submitted into the Examination, including responses to written questions and comments on those responses. The ExA has also given particular consideration to the issues raised by the relevant highway authorities and responded to by the Applicant during the Examination.

4.13.107. The extent and scale of the application meant that the ExA needed to undertake a number of unaccompanied site inspections (USI): these were conducted to observe both summer (27 and 28 July 2022) [EV-011, EV-012] and winter conditions (25 and 26 January 2023) [EV-064].

4.13.108. The ExA also decided to undertake four Accompanied Site Inspections (ASI): these took place on 29 September 2022 [EV-013], 2 and 3 November 2022 [EV-021] and 15 February 2023 [EV-065].

4.13.109. These site inspections enabled the ExA to observe the layout and interrelationship between the four parts of the site as indicated on the Parameter Plans [APP-135, APP-136] and the layout and operating conditions on the local road network in and around the nearby settlements of Burwell, Fordham, Snailwell, Chippenham, Freckenham, Isleham, West Row, Worlington, Red Lodge and Kennett. The ExA also observed the junction layouts and operating conditions on the trunk and primary route network in the study area, namely the A11, A14 and A142, and the interfaces between it and the local highway network.

Findings

Applicant's assessment

4.13.110. The ExA notes that there are limited local bus and rail services, that the nearest bus stops are around 1 kilometre (km) away from the Proposed Development with limited services, and that the two closest rail stations are at Newmarket and Kennett, several miles from the Proposed Development and also with limited services, and finds the Applicant's approach to the assessment of available modes of transport for staff and construction traffic to be acceptable.

4.13.111. The ExA notes that the Applicant has assumed that the peak hours for the construction of the Proposed Development will be 0600-0700 and 1900-2000 so as to avoid the traditional network peak hours. The ExA also notes that it is not stated where the working day which results in these peak hours is secured, but nevertheless finds this to be a reasonable approach.

4.13.112. The ExA finds that, due to the Covid-19 pandemic, undertaking surveys during 2020 and 2021 would not have been helpful or relevant, and consequently the use of

2019 traffic information to generate a 2023 baseline is adequate in the circumstances.

- 4.13.113. Personal injury collision (PIC) information for the period January 2014 to August 2019 was used by the Applicant. The ExA finds that using information from this period is reasonable as it is the most recent available excluding the pandemic.
- 4.13.114. The ExA is in agreement that traffic flows, particularly HGV, will be much lower during operation than during the construction and decommissioning phases, and that operational impacts are not likely to be significant.
- 4.13.115. The ExA notes that cumulative impacts are not explicitly considered in the Transport Assessment, as the 2023 baseline already includes forecast development growth and due to Covid-19 restrictions it has not been possible to collect representative new data. No representations questioning this approach have been maintained by the local highway authorities, and the ExA is satisfied that it is acceptable.
- 4.13.116. The ExA notes the embedded mitigation measures provided and the Applicant's conclusion that no additional mitigation is required as the residual construction phase effects on vehicle travellers and NMUs are negligible or minor adverse.
- 4.13.117. The ExA also notes the assessment methodology adopted by the Applicant. The ExA finds that the impacts relate chiefly to the construction and decommissioning phases of the Proposed Development and that there are no significant traffic, transport and highway safety impacts during operation.
- 4.13.118. However, the ExA notes that there have been difficulties with the signposting and presentation of some information in the original application, and that two changes to the original application, coupled with significant additional information being introduced into the Examination at a late stage, may have created some difficulties for some IPs in their consideration of traffic, transport and highway matters.
- 4.13.119. The ExA further notes that the Applicant considered that the gaps in traffic data on the local road network at La Hogue Road and Elms Road, as well as along Freckenham Road between Freckenham and Worlington and west of the A142 towards Burwell, did not limit its ability to draw conclusions in respect of the traffic effects resulting from the construction of the Proposed Development. The ExA finds from its observations that La Hogue Road and Elms Road are sensitive receptors and significant as they are used for primary accesses, and so does not agree with the Applicant's conclusion.
- 4.13.120. The ExA also notes that, in respect of the NMU impacts along Warren Road, Red Lodge raised in the Joint LIR, no sensitivity testing was done, and finds that this might have been useful in establishing NMU impacts more accurately.
- 4.13.121. The ExA notes the Applicant's use of an even distribution of generated forecast trips over the construction day (the flat profile approach). The ExA finds this to be unrealistic and likely to result in an underestimate of the resulting impacts.
- 4.13.122. The ExA is not persuaded that a longer construction period would result in lower overall impacts in respect of social, mental health and wellbeing issues, and hence is not persuaded that the worst case has been assessed and reported in the ES.

Ports, AIL and crane routes

- 4.13.123. The AIL report was submitted at Deadline 8 on 13 March 2023, i.e. 15 days before the close of the Examination. The ExA finds that this was a substantive new document and that it was submitted late in the Examination for interested parties to be able to read and comment on it. However, the ExA has considered it in forming its conclusions on traffic, transport and highway safety matters.
- 4.13.124. The ExA notes that the assessment in the AIL report is in respect of the port of Ipswich, as this is the port most likely to be used, and finds this to be a reasonable approach.
- 4.13.125. The ExA notes that the typical AIL to be transported from Ipswich is expected to be 130 tonnes, but the report considers 150 tonnes maximum load, and considers this to be a reasonable worst-case assumption.
- 4.13.126. The ExA finds that the AIL report has demonstrated that the identified routes from the port of Ipswich to the substation sites are feasible and that necessary enabling works have been adequately identified.
- 4.13.127. However, the ExA notes that the AIL would not necessarily follow the routes proposed: consequently the ExA is not persuaded that the Applicant has demonstrated that the worst case has been assessed and reported in the ES.
- 4.13.128. The ExA is not persuaded that the AIL assessment would be within the envelope of the worst-case assessment already undertaken, as there would be impacts outside the study area which will not have been considered in the ES.

HGV routes

- 4.13.129. The ExA noted the responses from the Applicant and IPs, and is broadly in agreement with the selection of HGV routes between the SRN and the sites.
- 4.13.130. However, the ExA also finds that safety, amenity and wellbeing impacts appear not to have been explicitly considered in the Applicant's assessment, although GEART requires this where relevant. Consequently, the ExA finds that the Applicant has not followed its stated methodology so there could be significant safety, amenity and wellbeing impacts, as well as significant noise and air quality impacts.
- 4.13.131. The ExA notes that HGVs currently using La Hogue Road are 2-axle lorries with a maximum weight of 18 tonnes, whereas the construction HGV would all be 4- or 5-axle articulated lorries of 36 tonnes or 40 tonnes. The ExA also notes that the forecast figures have been averaged out over the working day and over 24 months. The ExA therefore finds that the resulting impacts have been underestimated.
- 4.13.132. The ExA also notes that the Applicant recognises that there will be impacts on La Hogue Road but says that these are spread over operational hours and are therefore considered to be minor adverse only. The ExA has already found that La Hogue Road is a sensitive receptor and that there would be a large percentage increase in HGVs on a narrow road, coupled with that increase being entirely made up of much larger HGVs. Consequently, the ExA is not persuaded that the impacts will not be significant.

Site accesses

- 4.13.133. The ExA notes that the final revisions and additions to the Framework CTMP were submitted into the Examination at Deadline 7. The ExA notes that this meant that the document was only available to Interested Parties just over three weeks before

the close of the Examination. The ExA finds that Interested Parties may have found it difficult to assimilate and comment on the document in the time available, but is now satisfied that there is a suitable mechanism in the CTMP and the recommended DCO (rDCO) capable of dealing with outstanding concerns in respect of construction site accesses satisfactorily.

Traffic management and regulation

- 4.13.134. The ExA notes the concerns expressed by the relevant local authorities. The ExA also notes that the final revisions and additions to the Framework CTMP were submitted into the Examination at Deadline 7. The ExA notes that this meant that the document was only available to IPs just over three weeks before the close of the Examination. The ExA finds that IPs may have found it difficult to assimilate and comment on the document in the time available, but is now content that outstanding concerns in respect of traffic management and regulation during construction, operation and decommissioning are now capable of being dealt with satisfactorily through the CTMP and rDCO.

Conclusions

- Following detailed consideration of the traffic, transport and highway safety issues, the ExA concludes that impacts all relate to the construction and decommissioning phases of the project and that there are no significant impacts during operation.
- The ExA is satisfied with the Applicant's assessment of operational impacts.
- The ExA concludes that the Applicant's investigation into the available modes of transport for construction traffic is satisfactory.
- The ExA concludes that the Applicant's proposals in respect of port selection and movement of AIL are adequate, and that in accordance with water preferred policy the Applicant has taken all reasonable steps to minimise transport of AIL by road, but that a great deal of careful planning will be required to minimise AIL impacts on the highway and on those affected.
- The ExA has some reservations about the Applicant's assessment of the impacts associated with the construction of the Proposed Development, but concludes that impacts on the local highway network have been minimised and that concerns about the suitability of construction traffic on local roads are capable of being adequately addressed through the CTMP secured in Requirement 16 of the rDCO.
- Regarding the Applicant's cumulative impact assessment, the ExA concludes that satisfactory assumptions have been made by the Applicant.
- Drawing these findings together, the ExA concludes that the Proposed Development will have adverse transport, traffic and highway safety impacts, particularly during transport of AIL and in respect of HGV on local roads, but that these adverse impacts are capable of being satisfactorily managed and minimised through the CTMP and rDCO: however, these impacts will nevertheless cause harm, albeit temporary, and are therefore carry moderately negative weight in the planning balance.

4.14. WATER RESOURCES, FLOOD RISK AND DRAINAGE POLICY CONSIDERATIONS

National Policy Statements

- 4.14.1. National Policy Statement (NPS) EN-1 at paragraph 4.10.3 states that the decision-maker "*should focus on whether the development itself is an acceptable use of the*

land, and on the impacts of that use, rather than the control of processes, emissions or discharges themselves". Paragraph 4.10.7 states the decision maker should be satisfied that the relevant pollution control authority is satisfied that potential releases can be adequately regulated under the pollution control framework.

4.14.2. Section 5.7 of NPS EN-1 states that development and flood risk must be considered at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas at highest risk. It also advises that the SoS should be satisfied that the proposal would meet the requirements of the Water Framework Directive (WFD). Where a proposed development is likely to affect the water environment, applicants should undertake an assessment of the status of, and the impacts of the proposed project on water quality, water resources and the physical characteristics of the water environment as part of their Environmental Statement (ES). Similar advice can be found in draft (d)NPS EN1, paragraph 5.12.3.

4.14.3. Flood risk assessments (FRA) should identify and assess the risks of all forms of flooding to and from the project and demonstrate how these flood risks will be managed, taking climate change into account (paragraph 5.7.4). Drainage systems should meet National Standards published under Paragraph 5(1) of Schedule 3 to the Flood and Water Management Act 2010 and provision made for adoption and maintenance of any Sustainable Drainage Systems (SuDS) with the most appropriate body being given maintenance responsibility. To manage flood risk the arrangements should manage surface water and impacts of the natural water cycle on people and property (paragraph 5.7.18).

4.14.4. Paragraph 5.7.21 states that surface water drainage arrangements should result in no greater volumes and peak flow rates of surface water leaving the site than pre-existing unless specific off-site arrangements are made with the same net effect. Applicants should seek opportunities to use open space for multiple purposes such as amenity, wildlife habitat and flood storage uses (paragraph 5.7.23). Paragraph 5.7.24 states that essential energy infrastructure which has to be located in flood risk areas should remain operational when floods occur and energy projects proposed in Flood Zone (FZ) 3b should only be permitted if the development would not result in a net loss of floodplain storage, and would not impede water flows.

4.14.5. With respect to solar photovoltaic (PV) proposals, dNPS EN-3 at paragraph 2.50.7 states:

"The applicant's assessment may be accompanied by a Flood Risk Assessment. This will need to consider the impact of drainage. As solar PV panels will drain to the existing ground, the impact will not in general be significant. Where access tracks need to be provided, permeable tracks should be used, and localised Sustainable Drainage Systems (SuDS), such as swales and infiltration trenches, should be used to control any run-off where recommended. Given the temporary nature of solar PV farms, sites should be configured or selected to avoid the need to impact on existing drainage systems and watercourses. Culverting existing watercourses/drainage ditches should be avoided. Where culverting for access is unavoidable, it should be demonstrated that no reasonable alternatives exist and where necessary it will only be in place temporarily for the construction period."

4.14.6. Paragraph 2.5.11 of dNPS EN-3 states:

"Water management is a critical component of site design for ground mount solar plants. Where previous management of the site has involved intensive agricultural

practice, solar sites can deliver significant ecosystem services value in the form of drainage, flood attenuation, natural wetland habitat, and water quality management. The maximum impact case scenario will be assessed, and the Secretary of State will consider the maximum adverse effects in its consideration of the application and consent.”

- 4.14.7. Section 5.16 of NPS EN-1 provides advice on managing and mitigating surface water during construction, controlling pollution risks in groundwater and states the ES should assess likely impacts and effects to water bodies within the area of the Proposed Development.
- 4.14.8. dNPS EN-3 at paragraph 3.4.10 states that solar PV sites may also be proposed in low lying exposed sites. For these proposals, applicants should consider how plant will be resilient to increased risk of flooding and impact of higher temperatures.
- 4.14.9. dNPS EN-3 at paragraph 2.50.7 states that a FRA should consider the impact of drainage. It adds that “As solar PV panels will drain to the existing ground, the impact will not, in general, be significant” and states:
- permeable access tracks should be used, and localised SuDS such as swales and infiltration trenches to control any runoff where recommended;
 - given their temporary nature, sites should avoid the need to impact on existing drainage systems and watercourses;
 - culverting existing watercourses/drainage ditches should be avoided; and
 - where culverting for access is unavoidable, there should be no reasonable alternatives and be in place temporarily for the construction period.

National Planning Policy Framework

- 4.14.10. Section 14 of the NPPF considers the vulnerability of different forms of development and infrastructure and provides similar guidance to local planning authorities in relation to water supply, wastewater and water quality, land contamination and flood risk management. These principles are broadly reflected in the national policy statements and development plan policies of the host local authorities.

Local Policy

- 4.14.11. The main local plan policies are:
- East Cambridgeshire District Council Local Plan 2015, Policy ENV8: Flood Risk;
 - Forest Heath District Council Core Strategy, 2010, Spatial Objective ENV2, Policy CS4 (reduction of emissions and climate change);
 - Forest Heath and St Edmundsbury Local Plan: Joint Development Management Policies Document, February 2015, Policy DM6: Flooding and Sustainable Drainage, Policy DM14: Protecting and Enhancing Natural Resources, Minimising Pollution and Safeguarding from Hazards; and
 - Ely Group of Internal Drainage Boards: Policy Statement to reduce risk to people and the developed and natural environment from flooding through technical, environmentally and economically sound and sustainable defence measures.

THE APPLICANT’S CASE

- 4.14.12. ES Chapter 9 - Flood Risk, Drainage and Water Resources [APP-041] sets out the Applicant’s assessment of the potential impacts of the Proposed Development on surface water bodies including in terms of water quality, hydromorphology, flood risk, drainage and water resources during construction, operation and

decommissioning phases. Ground conditions are considered in Environmental Statement - Appendix 16B - Ground Conditions - Phase 1 - Preliminary Environmental Risk Assessment [APP-122].

4.14.13. Other relevant application documents include:

- [APP-016] Water Bodies in a River Basin Management Plan;
- [APP-093] [Environmental Statement - Appendix 9A - Relevant Legislation and Policy for Flood Risk, Drainage and Water Resources;
- [APP-094] ES - Appendix 9B - Water Framework Directive Assessment;
- [APP-095] ES - Appendix 9C - Flood Risk Assessment - Part 1;
- [APP-096] ES - Appendix 9C - Flood Risk Assessment - Part 2;
- [APP-097] ES - Appendix 9C - Flood Risk Assessment - Part 3;
- [APP-098] ES - Appendix 9C - Flood Risk Assessment - Part 4; and
- [APP-099] ES - Appendix 9D - Water Resources Data.

4.14.14. For the purposes of the Applicant's assessment, a general study area of c1km around the Application Site was adopted. Water environment baseline conditions were determined by a desk study and a range of online data sources including Environment Agency (EA). Information on private water supplies was obtained from East Cambridgeshire District Council (ECDC) and Forest Heath District Council (FHDC).

4.14.15. Numerous surveys including hydromorphological, were carried out by the Applicant including at all proposed watercourse crossings (access permitting) by the cable route. Where there were unavoidable access constraints a precautionary assessment was based on desk study and proxy observations of other nearby and similar waterbodies.

4.14.16. A predominantly qualitative assessment of likely significant effects considered the construction, operation, and decommissioning phases as well as cumulative effects with other developments, based on a source-pathway-receptor approach set out in section 9.4 [APP-041].

4.14.17. A site-specific FRA was submitted (Appendix 9C [APP-095] [APP-096] [APP-097]) for the Proposed Development which would be 'Essential Infrastructure', that includes essential utility infrastructure. It included a full review of the flood risk and identified preventative measures to mitigate flood risk from all sources, if necessary, demonstrating how the Sequential Test and Exception Test had been met.

4.14.18. A drainage technical note, containing the surface water drainage strategy, was submitted as Annex F to the FRA in ES Appendix 9C [APP-095] [APP-096] [APP-097]. It proposes above-ground conveyance and attenuation features to mimic the natural flow regime whilst reducing flood risk. Further, a Water Framework Directive (WFD) Assessment in ES Appendix 9B [APP-094] considered compliance of the Proposed Development with the WFD objectives for those WFD water features within or close to the Application Site that may be impacted.

4.14.19. The potential impact on public potable water supply was scoped out of the assessment as all water companies must have a Water Resources Management Plan (WRMP) to show how they plan to maintain a secure supply of water to all their customers over the next 25 years. Anglian Water's WRMP December 2019, aimed to ensure that they can continue to meet customer demand in the future whilst having a minimum impact on the environment. The Application Site is in the Newmarket Water Resource Zone (NWRZ) that had a medium deficit in water

supply and all water treatment works in the area were under 10 megalitres per day (ML/day) capacity. Anglian Water aimed to have 93% of households metered by end of 2020 and by 2045 to reduce leakage by 42%.

- 4.14.20. The Proposed Development would contain solar PV technology, have c17 staff onsite for work only and no residential use, and have a negligible impact on local potable water supplies which are therefore scoped out of the Environmental Impact Assessment (EIA).
- 4.14.21. Section 9.4 [APP-041] set out the methodology for determining the significance of effects. Consideration of responses to matters raised in the Scoping Opinion and statutory consultation was described in Table 9-4 and how they were addressed in preparation of the ES. Baseline conditions are described in Section 9.6, including the sensitive receptors and their individual importance or value. The Application Site is in the Cam and Ely Ouse Management catchment of the Anglian River Basin Management Plan (RBMP) and Sunnica East Site A, Sunnica East Site B and Sunnica West Site A are within the Lark Operational Catchment, with the cable route passing westwards into the Cam and Ely Ouse operational catchment. The geology underlying each of these sites was described in detail, as well as the aquifer characteristics and groundwater flow for the Proposed Development as a whole in paragraph 9.6.138 onwards [APP-041].
- 4.14.22. In section 9.6 the flood risk for Sunnica East Sites A was summarised in Table 9-5; for Sunnica West Site A in Table 9-6; and for Sunnica East Site B there is no table, but the risk was described in section 9.6.21 to 9.6.48, ES Chapter 9 [APP-041]. A similar exercise was undertaken for Grid Connection Routes A and B.
- 4.14.23. Table 9-12 summarised the waterbodies that might be impacted by the Proposed Development, their attributes, and their importance in the assessment.
- 4.14.24. The Applicant considered that the Proposed Development had been designed, as far as possible, to avoid and minimise impacts and effects on the water environment through the process of design development, and by embedding measures into the design. No solar PV panels or other infrastructure would be located within fluvial FZ3b extents, and panels within FZ3a and FZ2 would be raised on higher struts to mitigate flood risk. The detailed design would determine the various heights required but at least 850mm above ground level. The solar PV panel struts would not materially affect the floodplain volume or the flow of flood waters. No construction would take place within a 10m buffer from the edge of watercourses.
- 4.14.25. Along the grid connection routes for cables beneath watercourses boring, micro-tunnelling or moling methods would avoid direct physical impacts to waterbodies. The cable depth below the bed of all watercourses would be a minimum of 2m. Table 9-13 [APP-041] set out the watercourse crossings and proposed construction methods. The non-intrusive watercourse crossings shown on Figure 3-23 would entail temporary launch and receiving pits each side of the watercourse, to avoid direct adverse impacts from construction works. Once installed there would be no long-term potential impacts such cables being exposed above the watercourse bed.
- 4.14.26. Two operational office/warehouse blocks would be constructed for use during operation on Sunnica East A on parcels E18 and E33 towards the eastern boundary of the site, and also in parcel W17 within Sunnica West B although the location of the latter is not specifically shown within parcel W17. Figures 3-1 and 3-2 refer [REP10-018, REP10-019]. They would contain welfare facilities for up to 17 permanent members of staff on shift at a time thus generating low volumes of foul

drainage which would be generated disposed of by septic tanks regularly emptied with a registered recycling and waste management contractor.

- 4.14.27. The construction of the Proposed Development would follow a Construction Environmental Management Plan (CEMP) for which a Framework CEMP was submitted [APP-123] detailing the measures that would be undertaken during construction to mitigate the temporary effects on the water environment. The CEMP would be supported by a Water Management Plan (WMP) detailing mitigation to be implemented to protect the water environment from adverse effects during construction. The WMP would be secured through a Requirement in the DCO as part of the CEMP. The potential for adverse impacts would be minimised by the adoption of the general mitigation measures outlined below, which would be described in the WMP and CEMP.
- 4.14.28. The assessment included consideration of management of construction site runoff, spillage risk, watercourse crossings with non-intrusive and intrusive techniques at paragraphs 9.7.10 to 9.7.32 with Table 9-13 summarising the watercourse crossing proposed methods. The Framework CEMP would incorporate measures aimed at preventing an increase in flood risk during the construction.
- 4.14.29. A Framework Operation Environmental Management Plan (OEMP) (ES Chapter 16 Appendix 16F [APP-126]) would, regulate operational environmental effects and ensure maintenance activities avoid or minimise environmental impacts, including measures to manage the risk from pollution from small leaks and spillages from proposed infrastructure. The full OEMP would include a regular schedule for visual inspection of the structural integrity of the panels and any needing replacement would be removed before leakage of chemicals from the sealed units. The panel components cannot be separated save with a considerable mechanical load, therefore the risk of liquid leakage therefrom would be very low.
- 4.14.30. Fire water would be stored at the three Battery Energy Storage Systems (BESS) compounds sectional or cylindrical steel panel tanks. Each BESS compound would store 242.5m³ of water. The drainage design also allows for fire water containment with its proposed bunded lagoon with a 410m³ capacity. Active fire-fighting can spread chemicals, potentially harmful to the water environment, therefore apparatus or containers that catch fire would be allowed to burn out. Water would be sprayed on adjacent containers to cool them and reduce the risk of fire spreading. The water used would be directed to the fire water storage areas whence decisions post-incident would be made about suitable disposal.
- 4.14.31. ES Chapter 9 Appendix 9B - Water Framework Directive Assessment [APP-094] assesses the impacts of and identifies appropriate mitigation measures for, the Proposed Development, built components and activities associated with the construction, operation and decommissioning phases. It concludes that the Scheme would not impact on the WFD status or objectives of any associated surface water or groundwater bodies near the Proposed Development. It finds that the Proposed Development would not prevent the achievement of wider WFD objectives in the Anglian RBMP and is not predicted to have an impact on any other water body within the Anglian River Bed District (RBD) taking into account proposed mitigation that is embedded in the design or to be applied as a standalone measure to achieve “good water status” for all surface water bodies.
- 4.14.32. The likely impacts and effects of the Proposed Development following consideration of the embedded mitigation measures as described in Section 9.7, were assessed in section 9.8 [APP-041].

- 4.14.33. Overall, the impacts during construction within Sunnica East Site A and Sunnica East Site B on flooding and flood risk, to the Proposed Development and from it to other developments outside the relevant parts of the Order Limits, was considered to result in a temporary no change impact, with neutral effect, not considered significant. A similar assessment of impacts for Sunnica West Site A resulted in a temporary very low impact, with neutral effect, not considered significant. For Grid Connection Route A there would be a temporary no change impact, with a neutral effect, not considered significant and for Grid Connection Route B, a temporary negligible impact, with neutral effect, not considered significant.
- 4.14.34. The magnitude of impact and significance of a combined effect for the construction phases on receptors of all the above elements of the Proposed Development was summarised in Table 9-21, as having a very low or no change in impact with minor or neutral effect. Through standard mitigation measures during construction no in-combination significant effects were anticipated. The receptors and impacts described (in parentheses) were:
- River Kennett, Lee Brook, River Snail, New River, Burwell Lode (potential for within channel changes to the watercourses);
 - Chippenham Fen (potential harm to wetland habitat due to pollution);
 - Groundwater Resource (potential loss of resource due to pollution for abstraction and baseflow contribution);
 - EA licensed abstractions and private water supplies (potential reduction in water levels (river and groundwater) causing potential risk to yield, and water quality changes); and
 - Flood risk (runoff to be attenuated using SuDS features, nil detriment on the flooding potential to or from the site).
- 4.14.35. No changes were anticipated for the water environment and flood risk assessment as presented for the Operational Section (paragraphs 9.8.170 onwards of ES Chapter 9 [APP-041]).
- 4.14.36. Potential impacts from decommissioning works would be similar in nature to those during construction, as some work would be required to remove infrastructure installed. It was not proposed that cables installed beneath watercourses would be removed but they would remain in situ. Effects would be controlled by the Decommissioning Environmental Management Plan (DEMP) during decommissioning. There would be a very low impact on the waterbodies as described during the construction stage, resulting in a potentially temporary minor effect due to the high importance of some waterbodies, not considered significant.
- 4.14.37. No significant residual effects on surface water or groundwater resources or flood risk were anticipated by the Proposed Development. Table 9-22 of ES Chapter 9 [APP-041] outlined the likely residual construction effects with the embedded mitigation including good industry practice measures that would be implemented in the full CEMP. The CEMP itself would be reviewed, revised and updated towards construction to address potential impacts and residual effects as far as practicable, in line with good practice then obtaining.
- 4.14.38. As to cumulative effects, proposed development in the local area was assessed as described in:
- [APP-037] ES Chapter 5, EIA Methodology;
 - [APP-049] ES Chapter 17, Effect Interactions of this Environmental Statement;
 - [APP-055] ES Chapter 5, Appendix 5A Cumulative Schemes; and

- [APP-178] Figure 5-1 (Projects Scoped into the Cumulative Assessment of this Environmental Statement).

4.14.39. Table 9-23 ES Chapter 9 [APP-041] summarised the developments within 1km of the different areas of the Proposed Development. For Sunnica East Site A, there are two other applications within 1km of the Order limits. The application for 110m dwellings at Isleham is in a different watercourse catchment and discounted from the cumulative effects assessment. Construction of the proposed 70km pipeline to the west of Sunnica East Site A and crossing Grid Connection Route A south of Sunnica East Site B is expected to take five years, likely to coincide with the construction of the Proposed Development but expected to be constructed to similar minimum levels of mitigation to prevent water pollution. On this basis, cumulative adverse impacts with the Proposed Development would be unlikely to occur and overall, no cumulative effect was predicted.

EXAMINATION

- 4.14.40. In their joint Local Impact Report (LIR) [REP1-024] the host local authorities were concerned that the Proposed Development should prioritise the use of SuDS without increasing surface water flood risk. Each county council had a statutory role as Lead Local Flood Authority (LLFA) and required sufficient evidence to demonstrate that a suitable drainage solution could be delivered for all sites during construction and operation. Concerning flood risk resulting from fluvial flooding they deferred to the EA or where relevant the Internal Drainage Boards (IDB) in this area, noting that flood risk remained important for local communities.
- 4.14.41. The host local authorities agreed that local planning policies in relation to surface water flood risk and drainage were consistent with NPS EN-1 paragraph 9.6 [REP1-024]. Key local issues in Newmarket highlighted were peak flows in Newmarket Brook nearest to the Application Site from upper catchments which due to their synchronous hydrology produced at similar times, resulting in a rapid rise in flood water. Also, soil conditions in Newmarket and surrounding areas were variable and could not be relied on to deliver infiltration unless proven through BRE365 compliant infiltration testing.
- 4.14.42. The Applicant's Response to the Joint Local Impact Report [REP3-019] summarised the detailed comments in the LIR, commenting on each issue. With regard to the unspecified number of watercourses to be crossed by the cable routes, these crossings were shown on Figure 3-23 [APP-166]. Some very small ephemeral drains might be hidden by vegetation such as along hedgerows but would be very small and local features. It was impractical to survey the entire length of all watercourses, however the survey data was representative of each watercourse and sufficient for prediction of effects. Site specific variances for final crossing locations would be surveyed as part of pre-works surveys to inform reinstatement.
- 4.14.43. As to the proper installation and management of septic tanks to support infrastructure, the Applicant pointed to the Framework CEMP [REP2-026] and Framework OEMP [REP2-030] secured via DCO Requirements [REP2-042], whereby all wastewater from on-site welfare facilities would be managed by self-contained independent non-mains domestic storage and / or treatment system.
- 4.14.44. The proposed SuDS did not in the host local authorities' view meet the requested design parameters in local guidance, and there needed to be infiltration testing for the proposed infiltration-based features, as the geological mapping was unlikely to be an accurate representation of local conditions. The Applicant agreed to prepare an FRA Addendum to include climate change assessment for the 1 in 30 year

scenario, as published in the revised PPG August 2022, to be reviewed with the EA. The proposed drainage strategy [AS-010] secured via Requirement 12 of the DCO would include use of above ground SuDS techniques such as swales and existing natural low spots to treat and attenuate surface water runoff.

- 4.14.45. Concerns as to changes in flood risk due to deposition in watercourses of sediment or the like arising from construction, was dealt with as part of embedded design mitigation to accord with principles in industry guidelines including those of the Construction Industry Research and Information Association (CIRIA) reports referenced in section 9, ES Chapter 9 [APP-041], and detailed in the Framework CEMP [REP2-026] secured via Requirement 14 of the DCO [REP2-012].
- 4.14.46. As to demonstrating the potential to deliver legacy benefit through reduction of existing surface water flood risk or improvement of water quality, the Applicant considered the Drainage Strategy, Annex F of the FRA [AS-010] showed there would be, among other things, a reduction in existing surface water risk to the existing regime which currently had uncontrolled runoff from within the Application Site. Also, within paragraph 9.8.170 of ES [APP-041] it was stated that the operational phase of the Proposed Development would result in reduced chemical loading of watercourses associated with the cessation of nitrate, pesticide, herbicide and insecticide applications, which would be beneficial.
- 4.14.47. In reply to a request for clarification on temporary watercourse crossings to facilitate haul roads, the Applicant clarified that, should Land Drainage Consent(s) under s23 of the Land Drainage Act 1991 not be disapplied by the DCO, watercourse crossings for such access purposes would be regulated in the protective provisions with the relevant drainage authority, with potential for internal access roads to be moved at detailed design stage.
- 4.14.48. The host local authorities requested changes to the surface water drainage system to retain and discharge surface water generated by the Proposed Development through infiltration whilst intercepting and putting to good use surface water flows such as firefighting water or irrigation, thus providing a legacy benefit. The Applicant responded that the detailed drainage design would have to be approved by the relevant county authorities prior to commencement in accordance with Requirement 12 of the dDCO [REP2-012].
- 4.14.49. Further to the issue of legacy benefit the Applicant explained (page 70 [REP3-019]) that where trenchless techniques would not be used, a pre-works survey would record channel features and provide the baseline against which reinstatement will be provided. Reinstatement would improve channel form with enhancement works to be carried out where appropriate between 5 and 10m upstream and downstream of the open trench, consisting of soft engineering techniques and improvements to the riparian corridor to improve channel diversity and biodiversity. The WFD Mitigation Strategy would be secured through the Framework CEMP [REP2-026].
- 4.14.50. The EA in its Relevant Representation [RR-1208] considered that of the issues dealt with in this Chapter of our Report that fell within its remit, could be resolved but required further detail in the FRA, focussing on: a sequential approach to the site layout; positioning of infrastructure in relation to predicted flood levels; siting of compounds or storage areas outside FZ3; protective provisions for the EA.
- 4.14.51. The Applicant's Responses to Relevant Representations [REP1-016] noted that consultation was ongoing with the EA as to the protective provisions in the DCO, Requirement 14 of the dDCO [APP-019] and the Framework CEMP [APP-123] in

relation to managing flood risk including for compounds and storage areas. The FRA [APP-095] was considered to show a sequential approach in locating vulnerable components of the Proposed Development in the lowest FZs, resulting in no solar PV panels in FZ3b. The FRA [APP-095] at paragraph 4.3.8 identified a small area of panels proposed in FZ3a where the River Lark bank level was c3.0m AOD, considered adequate to define where infrastructure will be located in high flood risk areas, however, consultation with the EA was on-going. The Applicant was undertaking further modelling as to the proposed height of PV panels but the reduction to 850mm in response to landscape and visual impact outcomes, should be acceptable based on the lower risk from climate change impacts in this area. More discussion with the EA was needed over the need for floodplain compensation and hydraulic modelling to show there would be no increase in the existing flood risk on or off site due to the Proposed Development.

4.14.52. Issue Specific Hearing 3 (ISH3) held on 8 December 2022 was scheduled to consider, amongst other things:

- the adequacy of the FRA;
- the design of SuDS features and floodplain compensation;
- residual flood risk at Burwell Substation; and
- solar panels in FZ3.

Natural England (NE) had no comments to make on these matters (Position Statement in lieu of attendance at ISH3 comment [AS-314]). In the event it was agreed that these matters would be dealt with by concerned IPs in their post-hearing written submissions. The ExA noted that a lot of these issues appeared to have been resolved and, in light of time constraints at the hearing, further discussions would be taken offline. The host local authorities stated in their Written Summary of Oral Case for ISH3 [REP4-081] that they had nothing to add to their concerns set out in the Joint LIR [REP1-024].

4.14.53. The EA made a Deadline (D)4 post hearing submission [REP4-096] to the effect that it had through discussions with the Applicant resolved the issues previously raised in its RR [RR-1208]. All flood risk issues were addressed in:

- Appendix 9C FRA Addendum – Part 1 (and Technical Note included in Annex C of the FRA Addendum (dated 5 December 2022, Rev 05) [REP4-040]; and
- Statement of Common Ground (SoCG dated 7 December 2022, Rev 01 [REP4-016].

4.14.54. The Applicant and the EA agreed to list the FRA Addendum [REP4-040] as a certified document in the DCO and to alter Requirement 6(2) dDCO to state '*flood risk assessment*' only, and to remove '*appendix 16D of the environmental statement*'.

4.14.55. Further documents related to drainage strategy were submitted by the Applicant following discussions with IPs:

- [REP4-041] 8.66 Appendix 9C: Flood Risk Assessment Addendum - Part 2 (Drainage Strategy);
- [REP5-070] 8.83 Drainage Technical Note; and
- [REP10-055] 8.83 Drainage Technical Note.

4.14.56. By close of the Examination the EA confirmed by letter dated 23 March 2023 ([AS-330]) that the protective provisions in the dDCO were agreed, as was the disapplication of relevant byelaws under Schedule 25 to the Water Resources Act

1991; and the disapplication of the requirement for flood risk activity permits under the Environmental Permitting Regulations 2016. Consequently, the EA withdrew any outstanding objection to the application.

- 4.14.57. The completed SoCG with Anglian Water (AW) Rev 03 [REP8-041] recorded no outstanding matters in dispute. Protective Provisions in Part 3 of Schedule 12 to the dDCO [APP-019] were agreed. AW agreed that its access to the Broad's Road treatment facility would not be prevented due to the Proposed Development without the undertaker providing alternative means of access to such apparatus as will enable AW to maintain or use the apparatus no less effectively than was possible before such obstruction.
- 4.14.58. The completed SoCG with the host local authorities [REP8-029] recorded no outstanding matters in dispute. Within the FRA Part 1 Rev 1 [AS-007] the infiltration SuDS techniques were agreed to be designed to mimic existing drainage conditions and accommodate the 1 in 100-year return period storm event plus a 40% increase allowance for climate change, and that the availability of land for attenuation was not a significant constraint, as if additional attenuation is required it would be provided within the Application Site.
- 4.14.59. The completed SoCG with the host local authorities [REP8-029] also recorded agreement that the FRA Part 1 Rev 1 [AS-007] used EA data and no site specific hydraulic fluvial modelling was carried out, therefore the EA model was reviewed, the revised climate change allowances were 19% for design purposes, the EA model included 20% climate change allowance which the EA found acceptable. The credible maximum scenario was also assessed as agreed with the EA using 22% climate change allowance as a sensitivity test to demonstrate the PV panels could operate in that scenario.
- 4.14.60. For the outline design, the LLFAs agreed the approach to hydraulic drainage modelling based on 100% greenfield land, and a greenfield runoff assessment calculation using the "HR Wallingford" tool (an independent civil engineering and environmental hydraulics organisation) for existing runoff rates. Catchment level greenfield runoff rates, with an allowance for climate change, would be used for solar panel sites taking into account swale design and sizes, following the drainage strategy principles so as not to affect the ES findings and conclusions. A hydraulic drainage model would be prepared for the BESS and site compound areas once the designs were set out at detailed design stage with the results helping to inform the final detailed design.
- 4.14.61. The county councils as LLFAs would have power to discharge Requirements 12 and 19 concerning surface water drainage to reflect their statutory duties, and as they held the technical expertise on this matter. Wording for a revised Requirement was agreed as contained in the final preferred DCO of the Applicant [REP10-005].
- 4.14.62. Accordingly, the Applicant's final preferred version of the DCO [REP10-005] contains flood risk documents to be certified by the SoS as follows:
- Appendix 9C in volume 2 of ES (document reference 6.2) – Part 1 rev 2, dated 24/03/2023;
 - Appendix 9C in volume 2 of ES (document reference 6.2) – Parts 2-4 rev 1, dated 21/01/2022;
 - Appendix 9C flood risk assessment addendum – Part 1 rev 1, dated 24/03/2023;
 - drainage technical note rev 1, dated 24/03/2023; and

- FRA clarification document in light of proposed Scheme changes rev 1, dated 24/03/2023.

4.14.63. Shakespeare Martineau on behalf of South Staffordshire Water PLC withdrew its objection to the Proposed Development on agreeing protective provisions for its client water company to be included in the DCO [AS-327].

4.14.64. By the close of the Examination protective provisions were agreed with all relevant bodies in relation to flood risk, drainage and water resources, which provisions are set out in Schedule 12 of the Applicant's preferred DCO [REP10-005] and has effect under Article 40 as follows:

- Part 1: for the protection of, among other bodies, water and sewage undertakers;
- Part 3: for the protection of AW;
- Part 5: for the protection of the EA;
- Part 8: for the protection of drainage authorities; and
- Part 15: for the protection of Suffolk County Council and Cambridgeshire County Council.

CONCLUSION

4.14.65. Considering the above matters the ExA concludes that an appropriate FRA, meeting the requirements of NPS EN-1, has been carried out. The Applicant has provided sufficient information on flood risk to meet the requirements of NPS EN-1 and dNPS EN-1 and the ExA is satisfied that no further mitigation in respect of flooding would be required beyond that which is secured in the dDCO.

4.14.66. A sequential approach is applied to the layout and design of the Proposed Development which would locate vulnerable components in the lowest flood risk zones. Development in FZ3a would remain operational in flooding events, however permanent above ground development is not proposed in functional Floodplain/ FZ3b areas. The ES outlines safe access measures for the Proposed Development, with all compounds for site staff, on-site substations and BESS located out of flood zones. During a flood event, the affected infrastructure would remain operational and not accessed until flood waters recede. Emergency response measures for flooding are robustly provided for in the Framework CEMP.

4.14.67. The drainage strategy appended to the FRA includes the provision of above ground SuDS in the drainage design, properly considers the proposed discharge rates, and surface water runoff generated within the Application Site would be disposed of via infiltration to mimic existing conditions, as discussed and agreed with the LLFAs, EA and IDBs. No offsite attenuation storage is proposed.

4.14.68. The FRA includes the effects of climate change and addresses the resilience of the Proposed Development to climate change such that future increased risk of flooding is assessed and how residual risks would be managed through resilience and resistance measures in compliance with Section 5.7 of NPS EN-1. The Applicant has appropriately identified and assessed the risks of all forms of flooding to and from the Proposed Development and demonstrated how flood risks would be managed, taking climate change into account.

4.14.69. The Applicant has assessed the potential for effects on the water environment and no significant residual effects on surface water, groundwater resources or flood risk are predicted for the Proposed Development. The ExA does not consider mitigation measures are needed over and above those forming part of the application,

including those set out in the CEMP. In addition, the ExA is satisfied that, subject to the mitigation measures identified in the ES, and secured in dDCO Requirement 6 (Detailed Design), Requirements 12 and 19 (Surface and Foul Water Drainage), Requirement 14 (CEMP), Requirement 15 (OEMP) and Requirement 22 (Decommissioning and Restoration), there should be no adverse effects on water quality and resources from the Proposed Development during construction, operation or decommissioning phases.

- 4.14.70. Therefore, the ExA finds that the Proposed Development accords with the requirements of the WFD Regulations and concludes that the requirements in respect of water quality and flood risk set out NPS EN-1, dNPS EN-1, the NPPF and local development plans would be met by the Proposed Development. Consequently, the effect would be neutral in the overall planning balance.

5. FINDINGS AND CONCLUSIONS IN RELATION TO HABITATS REGULATIONS ASSESSMENT

5.1. INTRODUCTION

- 5.1.1. This Chapter sets out the Examining Authority's (ExA's) analysis and conclusions in relation to the Habitats Regulations Assessment (HRA). This will assist the Secretary of State for Energy Security and Net Zero (SoS), as the Competent Authority, in performing their duties under the Conservation of Habitats and Species Regulations 2017 ('the Habitats Regulations').
- 5.1.2. For the purposes of this chapter, in line with the Habitats Regulations and relevant Government policy, the term "European sites" includes Special Areas of Conservation (SAC), candidate SACs, possible SACs, Special Protection Areas (SPA), potential SPAs, Sites of Community Importance, listed and proposed Ramsar sites and sites identified or required as compensatory measures for adverse effects on any of these sites. For ease of reading, this chapter also collectively uses the term "European site" for 'European sites' defined in the Conservation of Habitats and Species Regulations 2017 and 'European Marine Sites' defined in the Conservation of Offshore Marine Habitats and Species Regulations 2017, unless otherwise stated. "UK National Site Network" refers to SACs and SPAs belonging to the United Kingdom (UK) already designated under the Directives and any further sites designated under the Habitats Regulations.
- 5.1.3. In accordance with the precautionary principle embedded in the Habitats Regulations, consent for the Proposed Development may be granted only after having ascertained that it will not adversely affect the integrity of European site(s) and no reasonable scientific doubt remains².
- 5.1.4. Policy considerations and the legal obligations under the Habitats Regulations are described in Chapter 4 of this Report.
- 5.1.5. The ExA has been mindful throughout the Examination of the need to ensure that the SoS has such information as may reasonably be required to carry out their duties as the Competent Authority. The ExA has sought evidence from the Applicant and the relevant Interested Parties (IPs), including Natural England (NE) as the Appropriate Nature Conservation Body (ANCB), through written questions and oral questions at Issue Specific Hearings (ISHs).

5.2. RIES AND CONSULTATION

- 5.2.1. The ExA produced a Report on the Implications for European Sites (RIES) [PD-027] which compiled, documented, and signposted HRA-relevant information provided in the Development Consent Order (DCO) application and Examination representations up to Deadline 6 (30 January 2023). The RIES set out the ExA's understanding of HRA-relevant information and the position of the IPs in relation to the effects of the Proposed Development on European sites at that point in time. Consultation on the RIES took place between 13 February 2023 and 13 March 2023. Comments were received from the Applicant [REP8-024], NE [REP8-057] and

² CJEU Case C-127/02 Waddenzee 7 September 2004, Reference for a preliminary ruling from the Raad van State (Netherlands) in the proceedings: Landelijke Vereniging tot Behoud van de Waddenzee and Nederlandse Vereniging tot Bescherming van Vogels v Staatssecretaris van Landbouw, Natuurbeheer en Visserij.

Say No To Sunnica Ltd (SNTS) [REP8-050] at Deadline 8 (13 March 2023). These comments have been taken into account in the drafting of this Chapter.

- 5.2.2. The ExA's recommendation is that the RIES, and consultation on it, may be relied upon by the SoS as an appropriate body of information to fulfil the consultation duties under Regulation 63(3) of the Habitats Regulations, should the SoS wish to do so.

5.3. PROPOSED DEVELOPMENT DESCRIPTION AND HRA IMPLICATIONS

- 5.3.1. The Proposed Development and its location are described in Chapter 2 of this Report. During pre-Examination and Examination, the Applicant submitted two change requests as described in Chapter 4 of this Report.
- 5.3.2. The location of the European sites in relation to the Proposed Development was shown in the Applicant's Environmental Statement Figure 8-1 [APP-185].
- 5.3.3. The Proposed Development is not directly connected with, or necessary to, the management of a European site. Therefore, the SoS must make an 'appropriate assessment' of the implications of the Proposed Development on potentially affected European sites in light of their Conservation Objectives.
- 5.3.4. The Applicant's assessment of effects is presented in the following application document(s):
- Document 6.2 Environmental Statement - Appendix 8M - Habitats Regulations Assessment - Report to Inform an Appropriate Assessment ([APP-092, as updated by [REP3-009 and REP5-045]);
 - Document 8.2 Proposed Changes to the Application [AS-243] provided as part of Change Request 1 (CR1) and accepted into the Examination [PD-016]. Table 2-3 contains information relevant to HRA; and
 - Document 8.74 Second Change Application [REP5-059], accepted into the Examination [PD-023]. Table 4-1 contains information relevant to HRA, provided as part of Change Request 2 (CR2).
- 5.3.5. The Applicant's HRA Report (up to the last revision submitted at Deadline 5 of the Examination [REP5-045]) also drew information from other DCO documents. This included relevant chapters of the Environmental Statement (ES), environmental management plans and the draft Development Consent Order (dDCO).
- 5.3.6. CR2 developed during the Examination in response to representations made around the presence of solar photovoltaics in Sunnica West Site B. CR2 was accepted by the ExA on the 25 January 2023 [PD-023] and removed some of the identified pathways to effects on Chippenham Fen Ramsar Site and Fenland SAC, which are adjacent to the Order Limits. The implications of CR2 on these sites are discussed further in section 5.6 of this Chapter.
- 5.3.7. The Applicant did not identify any likely significant effects (LSE) on non-UK European sites in European Economic Area (EEA) States in its ES Chapter 5 [APP-037, paragraphs 5.3.2 to 5.3.4]. Only UK European sites are addressed in this Report. No such impacts on non-UK sites were raised for discussion by any IPs during the Examination.

5.4. SUMMARY OF HRA MATTERS CONSIDERED DURING THE EXAMINATION

- 5.4.1. The main HRA matters raised by the ExA, NE and other IPs, and discussed during the Examination included:
- The conclusions of LSE both alone and in-combination with other plans or projects;
 - the design of the Proposed Development in relation to potential effects on groundwater flow;
 - the existence of a functional linkage between Breckland SPA and populations of stone curlew identified within the Order Limits; and
 - consideration of air quality impacts alone and in-combination with other plans or projects.
- 5.4.2. These matters are discussed in the sections below, as appropriate, and set out in the RIES [PD-027], Annex 1.

5.5. FINDINGS IN RELATION TO LSE

- 5.5.1. Under Regulation 63 of the Habitats Regulations, the Competent Authority must consider whether a development will have LSE on a European site, either alone or in combination with other plans or projects. The purpose of the LSE test is to identify the need for an 'appropriate assessment' (AA) and the activities, sites or plans and projects to be included for further consideration in the AA.
- 5.5.2. Section 3.2 of the Applicant's HRA Report [APP-092] described the process used to identify sites and features for inclusion in the assessment. The Applicant used Environment Agency (EA) guidance on large power generation developments greater than 50 megawatts (MW), which provides a 15 kilometre (km) radius of search as appropriate for identifying relevant European designated sites that may be affected by a Proposed Development. The Applicant states [APP-092, paragraph 3.2.1], however, that the ES considered a search radius of 10km as appropriate for the Sunnica Energy Farm, as it does not involve the stack emissions that can be connected with large power generation developments. The HRA Report nevertheless also states that while a 10km radius was used, there are no other European sites within 15km of the Proposed Development.
- 5.5.3. Paragraph 3.2.4 of the HRA Report also states that there are no sites designated for highly mobile species within 30km of the Proposed Development.
- 5.5.4. European sites and qualifying features that were considered in the Applicant's assessment of LSE were:
- Fenland SAC;
 - Chippenham Fen Ramsar Site;
 - Breckland SPA;
 - Wicken Fen Ramsar Site;
 - Rex Graham Reserve SAC;
 - Breckland SAC; and
 - Devil's Dyke SAC.
- 5.5.5. The Applicant's HRA Report set out the methodology applied to determining what would constitute a 'significant effect' within its HRA Report ([APP-092, section 3.2]).

5.5.6. In its response to the ExA's First Written Questions (ExQ1) [PD-017], NE confirmed [REP2-090] that it was satisfied that the Applicant's HRA Report had considered all relevant sites. This position was reiterated in [AS-313] prior to ISH2. In its Statement of Common Ground (SoCG) with the Applicant [REP4-017], NE also confirmed that it was satisfied that all relevant sites and impact-pathways were taken into account in the Applicant's screening exercise.

Eversden and Wimpole Woods SAC

5.5.7. The Applicant considered the potential for sites designated for mobile species such as bats within 30km of the Proposed Development, but stated [REP5-045, paragraph 3.2.4] that none were identified.

5.5.8. At Deadline 3A, SNTS noted that the Eversden and Wimpole Woods SAC lay within 26.7km of the Order Limits [REP3a-051]. This site has one qualifying feature, barbastelle bat (*Barbastella barbastellus*). SNTS considered that this site should be included in the assessment on the basis of the species' wide foraging range and its presence in the Applicant's baseline survey results presented in Appendix 8J of the ES [APP-087].

5.5.9. The Applicant responded at Deadline 4 [REP4-036] and again at Deadline 10 [REP10-030] that evidence on the foraging range of bats from the SAC demonstrated that no functional link existed between the Proposed Development and the SAC. The Applicant also noted at Deadline 10 that with the removal of panels at Sunnica West Site B in CR2, that the SAC would also be over 30km from any permanent development that could affect habitat used by barbastelle bat.

5.5.10. At ExQ3 [PD-025], the ExA invited NE to comment on the identification of this site. NE responded [REP7-104] that it did not consider there to be potential for impacts on this SAC due to the distance of the Proposed Development, and the intervening built development. This was reiterated in its response to the RIES [REP8-057] and identified by the Applicant [REP8-024] as a matter of agreement with NE.

5.5.11. SNTS maintained [REP8-050] that it disputed the robustness of NE's position due to the identification of barbastelle bat in the Applicant's field surveys, a lack of known roosts for the species locally and the known dispersal range for the species.

5.5.12. No other UK European sites or features had been identified for inclusion in the assessment by any other IPs at the point of publication of the RIES and no other representations made on the Applicant's approach to the selection of sites for the assessment.

5.6. LSE FROM THE PROPOSED DEVELOPMENT ALONE

5.6.1. The Applicant identified potential construction impacts of the Proposed Development considered to have the potential to result in LSE alone in sections 4.1 to 4.3 of the HRA Report and Table 4-1 [APP-092]. HRA Report Table 4-2 [APP-092] presented the screening conclusions for project alone operational impacts.

5.6.2. The Applicant's HRA Report concluded no LSE from the Proposed Development alone on any of the qualifying features of:

- Wicken Fen Ramsar Site (due to the distance from the Proposed Development).
- Breckland SAC (due to the distance from the Proposed Development and the lack of ecological or hydrological connectivity);

- Rex Graham Reserve SAC (due to the distance from the Proposed Development and the lack of ecological or hydrological connectivity); and
- Devil’s Dyke SAC (due to the distance from the Proposed Development and the lack of ecological or hydrological connectivity).

5.6.3. The impacts considered by the Applicant to have the potential to result in LSE are shown in Table 5.1 below:

Table 5.1 Summary of LSE from the project alone considered during Examination [APP-092].

European sites considered	Relevant qualifying features	LSE
Fenland SAC	Calcareous fens with Great Fen-sedge <i>Cladium mariscus</i> and species of the <i>Caricion davalliana</i> . (Calcium rich fen dominated by Great Fen-sedge (saw sedge))	Habitat degradation due to airborne pollutants and dust generation during construction
	<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>). (Purple moor-grass meadows)	
Chippenham Fen Ramsar Site	Habitats: areas of sedge fen, fen meadow, chalk grassland, <i>Alnus/ Salix</i> carr and taller woodland (<i>Fraxinus, Quercus, Betula</i>).	Habitat degradation due to airborne pollutants and dust generation during construction
	Invertebrate fauna: rare and scarce invertebrates characteristic of ancient fenland sites in Britain.	
	Flora: rare and scarce plants, including Cambridge milk parsley (<i>Selinum carvifolia</i>).	
	Breeding Bird Assemblage.	
Breckland SPA	Stone Curlew (<i>Burhinus oedicephalus</i>)	Physical displacement of breeding birds from functionally linked land during construction

European sites considered	Relevant qualifying features	LSE
		Noise and visual disturbance during construction
		Noise and visual disturbance during operation
		Non-physical disturbance during construction

- 5.6.4. In its Relevant Representation (RR) [RR-1291], NE noted it was broadly satisfied that LSE from the Proposed Development alone could be ruled out with the exception of the sites discussed in Table 5.2 below.
- 5.6.5. Concerns on the Applicant’s conclusions of no LSE on other sites and qualifying features were also raised by other IPs.
- 5.6.6. In summary, the Applicant’s conclusions of no project alone LSE on the following qualifying features were disputed by IPs:

Table 5.2 Summary of disputed conclusions LSE from the project alone considered during Examination [APP-092].

European sites considered	Relevant qualifying features	Disputed conclusions of no LSE
Fenland SAC	Calcareous fens with Great Fen-sedge <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> . Calcium rich fen dominated by Great Fen-sedge (saw sedge))	Habitat contamination (Construction and decommissioning) Groundwater disturbance (Construction and decommissioning)
	<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>). (Purple moor-grass meadows)	Habitat contamination (Construction and decommissioning) Groundwater disturbance (Construction and decommissioning)
	Great Crested Newt (<i>Triturus cristatus</i>)	Habitat loss or deterioration (Construction and decommissioning) Disturbance (Construction and decommissioning) Non-physical disturbance (Operation)
	Habitats: areas of sedge fen, fen	Habitat contamination (Construction and decommissioning)

European sites considered	Relevant qualifying features	Disputed conclusions of no LSE
Chippenham Fen Ramsar Site	meadow, chalk grassland, <i>Alnus/ Salix</i> carr and taller woodland (<i>Fraxinus, Quercus, Betula</i>).	Groundwater disturbance (Construction and decommissioning) Non-physical disturbance (All phases) Physical disturbance (Operation)
	Invertebrate fauna: rare and scarce invertebrates characteristic of ancient fenland sites in Britain	Habitat Contamination (Construction and decommissioning) Groundwater disturbance (Construction and decommissioning) Non-physical disturbance (All phases) Physical displacement (Operation)
	Flora: rare and scarce plants, including Cambridge milk parsley (<i>Selinum carvifolia</i>)	Habitat contamination (Construction and decommissioning) Groundwater disturbance (Construction and decommissioning) Non-physical disturbance (All phases)

5.6.7. Agreement was reached by Deadline 2 that there were no LSE on Wicken Fen Ramsar Site, although NE noted [REP2-090] that the Applicant's assessment did not fully consider that Wicken Fen Ramsar Site is also designated for its invertebrate assemblage. Nevertheless, NE was satisfied that this would not alter the conclusions of no LSE at Wicken Fen Ramsar Site and no further representations on this site were received during the Examination.

Chippenham Fen Ramsar Site and Fenland SAC

5.6.8. The Applicant's HRA Report and Annex B Screening Matrices [APP-092] report separately for each of the qualifying features at Fenland SAC and Chippenham Fen Ramsar site. During the Examination, however, the Applicant's conclusions and representations commonly referred to the sites collectively as 'Chippenham Fen'. Details of the matters that have been discussed and points of dispute are discussed here together with the exception of the great crested newt (GCN) qualifying feature, which is only relevant to Fenland SAC, and so addressed separately in section 5.6.24.

Habitat Contamination and Groundwater disturbance during construction and decommissioning

5.6.9. The Applicant concluded ([APP-092], Screening Matrix B1, B2) there would be no potential for LSE on qualifying features from habitat contamination or groundwater disturbance from installation of Grid Connection Route B or solar panels at Sunnica West Site B. This infrastructure was proposed to be installed on land adjacent to Chippenham Fen Ramsar Site / Fenland SAC. This was on the basis of all

structures and grid connection route B being above the depth of the chalk aquifer that feeds the Fen. In its updated HRA Report at Deadline 3 [REP3-009], it further advised that there would be no piling below 12m in depth.

- 5.6.10. East Cambridgeshire District Council (ECDC), Cambridgeshire County Council (CCC), Suffolk County Council (SCC) and West Suffolk Council (WSC) (hereafter referred to as 'the Local Authorities') [REP1-024], Suffolk Wildlife Trust (SWT) [REP2-049] and SNTS [REP3a-045] disputed the Applicant's original conclusions. Due to the potential hydrological impacts, they suggested that solar panels should be removed from Sunnica West site B.
- 5.6.11. NE had concluded [REP2-090] and [AS-313] that it was satisfied there would be no LSE on the hydrology of this site or its qualifying features following submission of additional information from the Applicant in relation to hydrological linkages to the Brackland Rough Site of Special Scientific Interest (SSSI) component of the SAC/Ramsar site.
- 5.6.12. CR2, outlined at Deadline 3a [REP3a-037] by the Applicant and later submitted [REP5-059], removed all solar panel infrastructure from Sunnica West B, but retained Grid Connection Route B within the Order Limits adjacent to the Fen. The Applicant concluded [REP5-059] that this would resolve concerns about the habitat contamination and groundwater disturbance impact pathway to Chippenham Fen Ramsar site and Fenland SAC.
- 5.6.13. With the removal of solar panels from Sunnica West B, the Applicant confirmed [REP-059] that the nearest above-ground infrastructure to Chippenham Fen Ramsar site/ Fenland SAC would be over 1km away.
- 5.6.14. However, several IPs remained concerned (SWT, CCC) about the potential for LSE from the Grid Connection Route B and sought further information to confirm the potential impacts on peaty soils [REP4-019, REP4-137].
- 5.6.15. At Deadline 5, [REP5-057], the Applicant responded that the small diameter and nature of the cabling in this area would prevent hydrological effects. The Applicant's Design Principles document [REP6-037] confirms the parameters of the cabling in conjunction with Works Plans [REP6-006]. At Deadline 8, it confirmed that agreement had been reached with the Local Authorities [REP8-029] and SWT [REP8-034] that the cabling was sited in an appropriate location and would not affect the small area of peaty soils.
- 5.6.16. The final SoCGs submitted by the Applicant at Deadline 8, (The Local Authorities [REP8-029], SWT [REP8-034] and NE [REP8-031 and REP8-057] demonstrate that this matter was resolved to the satisfaction of all IPs.

Non-physical disturbance during all phases

- 5.6.17. The Applicant concluded ([APP-092], Screening Matrix B1, B2) no potential for LSE as a result of light spill. This was due to the presence of a buffer of vegetation between the Proposed Development and Chippenham Fen Ramsar Site and Fenland SAC.
- 5.6.18. NE initially requested [RR-1291] further information on noise and light spill contour maps and modelling data for sensitive habitats within Chippenham Fen Ramsar site to validate those conclusions. However, in light of CR2, the ExA queried with NE at ExQ3 [PD-025] whether this impact pathway still remained. In its response [REP7-104], and subsequently in response to the RIES at Deadline 8 [REP8-057], NE

confirmed its agreement that the removal of the solar panels directly adjacent to the Fen eliminated potential for LSE from either light spill or noise.

5.6.19. No other IPs commented on this particular impact pathway.

Physical displacement and disturbance during operation

5.6.20. The Applicant concluded ([APP-092] Screening Matrix B1, B2), no potential for LSE from egg-laying aquatic invertebrates being attracted to solar panels at Chippenham Fen. It cited the distance of panels and the presence of natural barriers between Sunnica West B and the Fen as factors which would prevent invertebrates from reaching the panels.

5.6.21. NE agreed [RR-1291, paragraph 4.3.1 and REP4-017] with the Applicant's conclusions. However, SCC, CCC, WSDC and ECDC [REP1-024] considered there was insufficient evidence to support the conclusion of no LSE to this feature. The conclusions of no LSE were also disputed by SWT [RR-1142 and REP2-049] who also indicated that long term monitoring of invertebrates should be required.

5.6.22. The Applicant supplied further evidence ([REP2-037 and REP2-038], Appendix C, Review of impact of Sunnica energy farm on aquatic invertebrates) concluding that given the behavioural nature of the invertebrate assemblage and the natural barriers in place between Chippenham Fen and the Proposed Development, no LSE would arise.

5.6.23. The Applicant [REP3A-037] noted its proposed change request would remove solar panels from Sunnica West Site B altogether and concluded that this should resolve concerns around potential LSE. This position is supported in the final SoCGs at Deadline 8 (The Local Authorities [REP8-029], SWT [REP8-034] and NE at Deadline 10 [REP10-027]).

Fenland SAC – GCN qualifying feature

Habitat loss and deterioration, disturbance (construction and decommissioning) and non-physical disturbance (operation)

5.6.24. In its HRA Report, the Applicant identified one record for GCN 250m north-west of Sunnica East Site B [APP-092, paragraph 3.3.19], concluding that there was therefore no link between GCN populations and Fenland SAC and thus no LSE on this qualifying feature.

5.6.25. SNTS [REP2-240e and REP3A-051] identified an additional record (GCN licence return) for GCN at Chippenham Fen not identified in the Applicant's baseline.

5.6.26. At Deadline 7, this issue was resolved. The Local Authorities confirmed [REP7-074] that further investigation with NE, as the site manager for Chippenham Fen, had established that the identified record was an error in the dataset and as such, they were comfortable that GCN were not present at Chippenham Fen and thus there is no potential for LSE. SNTS agreed with this position in its Deadline 7 and 8 responses [REP7-076, REP8-024].

Physical displacement – operation

5.6.27. The Applicant did not include consideration of physical displacement in operation in its submitted HRA Report [APP-092].

- 5.6.28. NE [REP4-039] considered that this impact would occur during operation due to the presence of the solar panels. The Applicant's SoCG with NE [REP4-017], identified that agreement had been reached with NE that this impact pathway should be screened in. The Applicant's updated HRA Report ([REP5-045], Table 4-2 and Screening Matrix B3) therefore included this impact pathway and potential for LSE.

5.7. LSE FROM THE PROPOSED DEVELOPMENT IN COMBINATION

- 5.7.1. The Applicant addressed potential in-combination effects arising from the Proposed Development within [APP-092, section 4.4], which set out the methodology applied. The plans and projects included in the in-combination assessment were set out in [APP-092, Table 4.3].
- 5.7.2. The Applicant concluded [APP-092, Table 4.3] that, due to the distance from the Proposed Development in all cases, no in-combination LSE would arise on any sites and qualifying features.
- 5.7.3. The disputed in-combination effects on the following three sites were considered together as the concerns raised by IPs were the same in all cases. The Applicant's conclusions of no LSE were disputed on the grounds that the A11 and A14 pass close to all three sites; these routes would be used by construction traffic.
- Breckland SAC
 - Inland dunes with open *Corynephorus* and *Agrostis* grasslands.
 - Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* – type vegetation.
 - European dry heaths.
 - Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*).
 - Semi natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (*important orchid sites).
 - Rex Graham Reserve SAC
 - Semi natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (*important orchid sites).
 - Devil's Dyke SAC
 - Semi natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites).
- 5.7.4. In its RR, [RR-1291] NE stated it did not agree with the Applicant's methodology for the in-combination construction impacts, and that further assessment was required on the impact of vehicular traffic associated with the construction of the project on sites outside the Order Limits (Breckland SAC, Devil's Dyke SAC, Rex Graham Reserve SAC). It reiterated its position at Deadline 4 [REP4-017].
- 5.7.5. The Applicant's response [REP3-009] initially clarified that its assessment conclusions used data and outputs of the air quality presented in the ES [APP-046]. It restated its position that there was no in-combination LSE on the basis of this assessment. It also indicated that this position had been discussed with NE.
- 5.7.6. The Applicant subsequently changed its position in the updated HRA Report [REP5-045, Table 4-1] which identifies the potential for LSE from construction traffic

associated with the Proposed Development elevating levels of air pollution and deposition of harmful pollutants on sensitive habitats and plant communities.

Breckland SPA

- 5.7.7. At Deadline 2 [REP2-090], NE commented on the potential for in-combination effects on air quality sensitive features at Breckland SPA. The ExA questioned [ExQ3, PD-025] the inclusion of Breckland SPA in relation to air quality impacts. NE subsequently confirmed [REP7-104] that the reference to this impact-pathway (habitat loss / degradation) to Breckland SPA during construction was an error and it did not therefore need to be considered in the Applicant's in-combination air quality assessment.
- 5.7.8. Following the publication of the RIES, the Local Authorities also raised a further aspect of the HRA which they considered to be unresolved [REP7-074]. In response to ExQ3 [PD-025], the Local Authorities identified that Table 4-3 of the HRA Report omits an assessment of the potential for in combination LSE on Breckland SPA with site SA4 allocated in the Site Allocations Local Plan (2019) for the Forest Heath area of West Suffolk.
- 5.7.9. The Applicant provided a response to these queries [REP8-023] and concluded that there was no reason to believe there would be any additional effect on stone curlew from this allocated site 1.4km east of the Proposed Development, and that sufficient land had been embedded to offset any loss in nesting opportunities within the Order Limits. No further comments were received on this matter after this Deadline.

5.8. LSE ASSESSMENT OUTCOMES

- 5.8.1. The sites for which the Applicant concluded no LSE would occur from either the project alone or in combination with other projects and plans were presented in the RIES [PD-027].
- 5.8.2. Sections 5.6 and 5.7 describe the evidence discussed on the Applicant's conclusions of no LSE. The conclusions of no LSE on the following European sites and their qualifying features were reached and agreed with IPs:
- Chippenham Fen Ramsar Site;
 - Ramsar Criterion 1 (Spring fed calcareous basin mire)
 - Habitat contamination (Construction and decommissioning)
 - Groundwater disturbance (Construction and decommissioning)
 - Non-physical disturbance (All phases)
 - Physical disturbance
 - Ramsar Criterion 2 (Invertebrate fauna)
 - Habitat contamination (Construction and decommissioning)
 - Groundwater disturbance (Construction and decommissioning)
 - Non-physical disturbance (All phases)
 - Physical disturbance
 - Ramsar Criterion 3 (Diverse vegetation types)
 - Habitat contamination (Construction and decommissioning)
 - Groundwater disturbance (Construction and decommissioning)
 - Non-physical disturbance (All phases)
 - Fenland SAC;
 - Calcareous fens
 - Habitat contamination (Construction and decommissioning)
 - Groundwater disturbance (Construction and decommissioning)

- *Molinia* Meadows
 - Habitat contamination (Construction and decommissioning)
 - Groundwater disturbance (Construction and decommissioning)
- Great Crested Newt (*Triturus cristatus*)
 - Habitat loss or deterioration (Construction and decommissioning)
 - Disturbance (Construction and decommissioning)
 - Non-physical disturbance (Operation)
- Wicken Fen Ramsar site; and
 - Ramsar Criterion 2 (*Viola persicifolia*)
 - Habitat contamination (Construction and decommissioning)
- Breckland SPA.
 - Stone curlew (*Burhinus oedichnemus*)
 - Habitat loss and / or degradation (Construction)
 - Woodlark (*Lullula arborea*) and Nightjar (*Caprimulgus europaeus*)
 - Habitat loss and/ or degradation (Construction and decommissioning)

5.8.3. LSE could not however be excluded for the following sites and features shown below in Table 5.3. These were assessed by the Applicant to determine if they could be subject to AEoI, as a result of the Proposed Development alone or in combination with other plans and projects, in view of their conservation objectives:

Table 5.3 Sites and qualifying features where LSE could not be excluded

European sites considered	Relevant qualifying features	Impact pathway
Project alone		
Fenland SAC	Calcareous fens with Great Fen-sedge <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> . Calcium rich fen dominated by Great Fen-sedge (saw sedge))	Habitat loss and / or degradation (construction/ decommissioning)
	<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>). (Purple moor-grass meadows)	Habitat loss and / or degradation (construction/ decommissioning)
Chippenham Fen Ramsar Site	Ramsar criteria 1,2 and 3	Habitat loss and / or degradation (construction/ decommissioning)
	Breeding bird assemblage	Habitat loss and / or degradation (construction/ decommissioning)

European sites considered	Relevant qualifying features	Impact pathway
Breckland SPA	Stone curlew (<i>Burhinus oedicnemus</i>)	Physical displacement from functionally-linked land during construction, operation and decommissioning
		Noise and visual disturbance during construction, operation and decommissioning
		Non-physical disturbance (construction)
In-combination		
Breckland SAC	Inland dunes with open <i>Corynephorus</i> and <i>Agrostis</i> grasslands. Natural eutrophic lakes with Magnopotamion or Hydrocharition – type vegetation. European dry heaths. Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>). Semi natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (*important orchid sites).	Habitat loss and / or degradation (construction/ decommissioning)
Rex Graham SAC	Semi natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (*important orchid sites).	Habitat loss and / or degradation (construction/ decommissioning)
Devil's Dyke SAC	Semi natural dry grasslands and scrubland facies on	Habitat loss and / or degradation (construction/ decommissioning)

European sites considered	Relevant qualifying features	Impact pathway
	calcareous substrates (<i>Festuco-Brometalia</i>) (*important orchid sites).	

5.8.4. The ExA is satisfied, on the basis of the information provided, that the correct impact-pathways on each site have been assessed for LSE and is satisfied with the approach to the assessment of alone and in-combination LSE.

5.8.5. Taking into account the evidence set out above, the ExA considers that the Proposed Development is likely to have a significant effect from the impacts identified in Table 5.3 on the qualifying features of the European sites when considered alone, or in combination with other plans or projects.

5.9. CONSERVATION OBJECTIVES

5.9.1. The Conservation objectives for the sites and features identified above were set out in Table 3-2 of the HRA Report [APP-092]. Following a request by the ExA in ExQ1 [PD-017], this table was updated at Deadline 3 [REP3-009] to reflect the correct conservation status of each identified site.

5.9.2. NE confirmed [REP7-104] it was satisfied that the Applicant had identified the correct conservation objectives.

5.9.3. No other IPs commented on conservation objective matters.

5.10. FINDINGS IN RELATION TO ADVERSE EFFECTS ON INTEGRITY (AEI)

5.10.1. The European sites and qualifying features identified in Table 5.3 above were further assessed by the Applicant to determine if they could be subject to AEI from the Proposed Development, either alone or in-combination. The assessment of AEI was made in light of the conservation objectives for the European sites.

5.10.2. The ExA is satisfied, based on the information provided, that the correct impacts have been assessed. This section discusses the conclusions with respect to AEI for each site.

Consideration of mitigation

5.10.3. Section 5 of the Applicant's HRA Report [APP-092] explains that certain sites and features were brought forward in the assessment because of the need to take mitigation into account before forming conclusions on AEI. The Applicant referred

to the 'People over Wind' ruling³ that concludes that mitigation measures implemented to avoid significant effects cannot be applied at the screening stage.

5.10.4. Section 5 of the Applicant's HRA report [REP5-045] therefore set out the sites taken forward for assessment where mitigation measures could not be applied to address potential impacts at the screening stage. Sections 5.1 to 5.3 then detailed the impact pathways, the mitigation measures considered, and the conclusions on AEol that were reached. This was supported by matrices provided in Annex C of [APP-092], [REP3-009] and [REP5-045].

5.10.5. Mitigation measures detailed within the Applicant's HRA [REP5-045] were secured in the last update of the draft DCO [REP10-005] as follows:

- Landscape and Ecology Management Plan – Schedule 2, Requirement 8;
- Construction Environmental management Plan – Schedule 2 Requirement 14;
- Operational Environmental Management Plan – Schedule 2, Requirement 15;
- Decommissioning Environmental Management Plan – Schedule 2, Requirement 22; and
- Stone Curlew Nesting Plots and foraging habitats – Works no. 10, Schedule 2 Requirement 10 (also listed within the Construction Environmental Management Plan (CEMP)).

5.10.6. Where mitigation measures have been relied upon by the Applicant in reaching its conclusions, these measures are described in the following sections.

5.11. SITES FOR WHICH AEol CAN BE EXCLUDED

5.11.1. The Applicant's HRA Report [APP-092] concluded that the Proposed Development will not result in AEol on all European sites listed in paragraph 5.9.4 above.

5.11.2. The following sections describe the outcome of the discussions during the Examination in relation to the AEol identified in paragraph 5.8.4 above.

Chippenham Fen Ramsar Site

5.11.3. The Applicant's HRA Report [APP-092, section 5.3 and Matrix C2] provided an assessment which addressed the potential for AEol.

5.11.4. The Applicant concluded that, with dust control measures secured through the framework CEMP [APP-123], there would be no AEol on any qualifying feature of the Chippenham Fen Ramsar Site from habitat loss / degradation.

5.11.5. In its SoCG with the Applicant [REP2-046], NE confirmed it agreed with the conclusion of no AEol and confirmed that measures within ES Chapter 14 - Air Quality [APP-046] and the framework CEMP [APP-123] would be appropriate to control the potential adverse effects of the Proposed Development. No other IPs commented on this matter.

5.11.6. On the basis of the above information, the ExA is satisfied that this pathway will not result in AEol to the European site from the Proposed Development alone.

Fenland SAC

³ People Over Wind & Sweetman v. Coillte Teoranta (C-323/17)

- 5.11.7. The Applicant's HRA Report [APP-092, section 5.2 and Matrix C1] provided an assessment which addressed the potential for AEol.
- 5.11.8. The Applicant concluded that, with dust control measures secured through the framework CEMP [APP-123], there would be no AEol on any qualifying feature of the Fenland SAC from habitat loss / degradation.
- 5.11.9. In its SoCG with the Applicant [REP2-046], NE confirmed it agreed with the conclusion of no AEol and confirmed that measures within ES Chapter 14 - Air Quality [APP-046] and the framework CEMP [APP-123] would be appropriate to control the potential adverse effects of the Proposed Development.
- 5.11.10. CCC raised general concerns [REP1-024] about the level of detail provided in the framework CEMP. In relation to the *Molinia* meadows qualifying feature, at Deadline 4 [REP4-137], CCC also requested further information on the location of the proposed off-site daily inspections for dust monitoring, as part of its consideration of effects on the *Molinia* qualifying feature.
- 5.11.11. CCC's concerns were highlighted to the Applicant at ExQ3 [PD-025]. The Applicant provided a response [REP7-055] and an updated Framework CEMP [REP7-032] to include a commitment for monitoring of the relevant *Molinia* communities within Chippenham Fen (Fenland SAC) with details of locations of this monitoring to be finalised in the detailed CEMP and to be subject to approval by CCC.
- 5.11.12. No further comments were received on this matter from IPs during the later stages of the Examination.
- 5.11.13. On the basis of the above information, the ExA is satisfied that this LSE pathway will not result in AEol to the European site from the Proposed Development alone.

Breckland SAC

- 5.11.14. The Applicant's HRA Report [REP5-045, section 5.6, Matrix C5] provided an assessment which addressed the potential for AEol.
- 5.11.15. Following written representations on the disputed conclusions of LSE from NE ([RR-1291], [REP2-090]), the Applicant amended its HRA Report at Deadline 5 ([REP5-045], section 5.6 and Matrix C5) to include an assessment of AEol from in-combination air quality effects.
- 5.11.16. Air quality modelling [REP5-045, section 5.6 and Annex D] identified that the mean critical levels of nitrogen oxides (NO_x) and nitrogen deposition were exceeded in combination with other plans or projects.
- 5.11.17. The Applicant identified that the negative effects of NO_x were most likely to arise in the presence of sulphur dioxide (SO₂) and that as background concentrations of SO₂ at the component SSSIs to the SAC are very low, that no synergistic effect with NO_x was expected.
- 5.11.18. Critical loads for ammonia, nitrogen and acid were predicted not to exceed 1% of the mean critical level / load threshold in most cases, except for one location where nitrogen levels increased slightly above the critical load at Transect 2 ([REP5-045], Annex D, Appendix A, Figure 3).
- 5.11.19. The Applicant concluded, however, that as the contribution of the Proposed Development to ammonia, nitrogen and acid deposition in combination with other

plans or projects was very small, below the 1% of the critical level / load threshold, that there was no potential for the Proposed Development to affect the ability of the SAC to meet its conservation objectives.

- 5.11.20. At Deadline 6 [REP6-070], NE noted that the Applicant had provided an in-combination assessment [REP5-045] and confirmed its satisfaction with the Applicant's conclusion of no AEol from this impact pathway.
- 5.11.21. On the basis of the evidence submitted during the Examination, the ExA is satisfied that AEol can be excluded for the Breckland SAC.

Rex Graham Reserve SAC

- 5.11.22. The Applicant's HRA Report provided an assessment ([REP5-045, section 5.5, Matrix C4] which addressed the potential for AEol.
- 5.11.23. Following written representations on the disputed conclusions of LSE from NE ([RR-1291], REP2-090]), the Applicant amended its HRA Report at Deadline 5 ([REP5-045], section 5.5 and Matrix C5) to include an assessment of AEol from in-combination air quality effects.
- 5.11.24. The Applicant's assessment [REP5-045, section 5.5 and Matrix C4] identified an exceedance of the mean critical level for NO_x and critical load for nitrogen at Transect 4 ([REP5-045, Annex D, Appendix A, Figure 4] with the addition of the Proposed Development.
- 5.11.25. The Applicant identified that the negative effects of NO_x were most likely to arise in the presence of sulphur dioxide (SO₂) and that as background concentrations of SO₂ at the SAC's component SSSIs are very low, that no synergistic effect with NO_x was expected.
- 5.11.26. For ammonia, nitrogen and acid, the assessment identified critical loads/ levels were already exceeded although the Applicant concluded that the contribution of the Proposed Development would be below 1% of the threshold.
- 5.11.27. The Applicant concluded that as the contribution of the Proposed Development to ammonia, nitrogen and acid deposition in combination with other plans or projects was very small, there was no potential for the Proposed Development to affect the ability of the SAC to meet its conservation objectives.
- 5.11.28. At Deadline 6 [REP6-070], NE noted that the Applicant had provided an in-combination assessment and confirmed it was satisfied with the conclusion of no AEol from this impact pathway.
- 5.11.29. On the basis of the evidence submitted during the Examination, the ExA is satisfied that AEol can be excluded for the Rex Graham Reserve SAC.

Devil's Dyke SAC

- 5.11.30. A description of Devil's Dyke SAC and its qualifying features, and the potential effects resulting from the Proposed Development, were provided in [REP5-045, section 5.7, Matrix C6].
- 5.11.31. The Applicant's HRA Report provided an assessment ([REP5-045, section 5.7, Matrix C6] which addressed the potential for AEol.

- 5.11.32. Following written representations on the disputed conclusions of LSE from NE [RR-1291], REP2-090]), the Applicant amended its HRA Report at Deadline 5 ([REP5-045, section 5.7 and Matrix C6] to include an assessment of AEol from in-combination air quality effects. The Applicant's assessment identified an exceedance of the critical level for NO_x and critical load for nitrogen at Transect 1 [REP5-045], Annex D Appendix A Figure 2) with the addition of the Proposed Development.
- 5.11.33. The Applicant identified that the negative effects of NO_x were most likely to arise in the presence of sulphur dioxide (SO₂) and that as background concentrations of SO₂ at the SAC's component SSSI are very low, that no synergistic effect with NO_x was expected.
- 5.11.34. For ammonia, nitrogen and acid, the critical loads / levels were already exceeded although the Applicant concluded that the contribution of the Proposed Development would be below 1% of the threshold.
- 5.11.35. The Applicant concluded that as the contribution of the Proposed Development to ammonia, nitrogen and acid deposition in combination with other plans or projects was very small, there was no potential for the Proposed Development to affect the ability of the SAC to meet its conservation objectives.
- 5.11.36. At Deadline 6 [REP6-070], NE noted that the Applicant had provided an in-combination assessment and confirmed it was satisfied with the conclusion of no AEol from this impact pathway.
- 5.11.37. On the basis of the evidence submitted during the Examination, the ExA is satisfied that AEol can be excluded for the Devil's Dyke SAC.

5.12. SITES FOR WHICH AEol CANNOT BE EXCLUDED

Breckland SPA

- 5.12.1. The Applicant's HRA Report [APP-092, section 5.3 and Matrix C3] provided an assessment which addressed the potential for AEol.
- 5.12.2. The Proposed Development does not directly affect Breckland SPA, but the Applicant's consultation with the Royal Society for the Protection of Birds (RSPB) identified land within the Order limits as potentially supporting populations of stone curlew at Breckland SPA, indicating a functional link between the two sites. This was initially also the position of NE [RR-1291].
- 5.12.3. The consideration of effects on populations of stone curlew was also addressed by the Applicant in its ES (Chapter 8 [APP-040]). The matters discussed over the adequacy of stone curlew survey coverage and baseline data are also therefore applicable to the HRA and are covered within the terrestrial ecology chapter of this report (Chapter 4).
- 5.12.4. The Applicant concluded ([APP-092], section 5.3 and Matrix C3) that there would be no AEol on the stone curlew feature of Breckland SPA. The Applicant argued that proposed mitigation measures including offsetting habitat would ensure no net loss of breeding pairs of stone curlew. This would be secured through the dDCO in the form of land management specifically to provide additional nesting plots and foraging habitat for this species [REP10-005]. The mitigation measures the Applicant has included within its proposals for stone curlew broadly include:

- Provision of offsetting habitat for nesting and foraging stone curlew;
 - creation of new nesting plots in the breeding season prior to construction commencing;
 - timing construction activities within 500m of new habitat to avoid the stone curlew breeding season; and
 - monitoring of stone curlew nest plot occupancy and condition of created habitat.
- 5.12.5. In its relevant representations [RR-1291, paragraph 3.4.3], NE agreed that there would be no AEoI on the stone curlew feature of the Breckland SPA but that the provision, management and monitoring of mitigation measures for stone curlew required further clarification.
- 5.12.6. The Local Authorities' position in their joint Local Impact Report [REP1-024] was a lack of confidence in the amount of offsetting land being provided such that a precautionary approach should be to remove solar panel infrastructure from land parcels with known recent locations for stone curlew nests, as well as to provide additional stone curlew mitigation measures.
- 5.12.7. SWT [REP2-079], in its response to ExQ1, noted that while it agreed in principle with the types of habitat proposed, it did not agree that the measures were adequate or realistic to retain stone curlew numbers or breeding pairs. It considered that while stone curlew would not be excluded from operational areas, nesting success would be affected due to human disturbance and an increased risk of predation from a reduction in sight lines. It noted the proximity of offsetting areas for stone curlew to roads, houses and PRoW that reduced the suitability of offsetting sites for stone curlew.
- 5.12.8. It also noted a lack of detail, such as in the preparation, timing of cultivation and timing of the other mitigation measures such as grassland establishment, in order to be satisfied that the proposed stone curlew plots would provide suitable mitigation.
- 5.12.9. At Deadline 2, however, NE noted [REP2-090] that its own investigation had established that the stone curlew populations within the Order Limits were not the same population found at Breckland SPA, and therefore concluded ([REP2-090], Table 2 of part III) that there was no functional link to the stone curlew qualifying feature at Breckland SPA, which therefore no longer required consideration in the HRA.
- 5.12.10. NE stated [REP4-139] that there was potential for an AEoI of the stone curlew qualifying feature from physical displacement from outside the designated site boundary during operation and that this impact pathway should therefore be considered in the Applicant's assessment, nevertheless. The Applicant's updated HRA Report [REP5-045] reflects this impact pathway but maintains its conclusions of no AEoI on stone curlew on the basis of the proposed mitigation measures.
- 5.12.11. The ExA therefore asked NE to clarify its position on the apparently conflicting advice over the inclusion of Breckland SPA in the HRA at ExQ2 [PD-021] and ExQ3 [PD-025]. NE confirmed at Deadline 5 [REP5-096] that it considered that the stone curlew and the supporting habitat within the Order limits were not functionally linked to Breckland SPA, but that it had agreed with the Applicant in a meeting of the 9 January 2023 that mitigation would continue to be considered through the mechanism provided by the appropriate assessment. A summary of the research findings supporting this position was supplied by NE at Deadline 7 [REP7-104]. This response noted, however, that the evidence was only available as a draft and not

ready for external publication. This remained the position at the close of the Examination.

- 5.12.12. Notwithstanding its position in relation to the HRA process, at Deadline 6 [REP6-070], NE advised it was satisfied with the Applicant's estimates of the numbers of pairs of stone curlew within and close to the Order Limits. It also confirmed its agreement to the area of offsetting habitat for stone curlew provided, the methods for creating and managing the habitat and that its monitoring proposals were also acceptable. NE noted that management measures such as mowing should be preceded by stone curlew surveys, and that this should be secured in the relevant environmental management plan. The Applicant's updated Landscape and Ecology Management Plan (LEMP) supplies further details [REP7-016]. NE confirmed [REP8-031] that it was satisfied with the Applicant's mitigation measures for this qualifying feature, as reflected in its final SoCG with the Applicant at Deadline 10 [REP10-027].
- 5.12.13. The position of NE on the acceptability of the proposed mitigation differs to that of other IPs, however.
- 5.12.14. In responses to ExQ2 (2.2.6) [PD-021], CCC [REP5-079], ECDC [REP5-080], SCC [REP5-084] and WSC [REP5-085] considered a potential conflict to exist between areas of preservation and management of archaeological assets and the management of stone curlew plots, including the requirements for a reduction of nutrient levels prior to the establishment of grassland, management of bare ground nesting plots; and management / grazing of grassland, with particular reference to plot ECO1. It remained a concern of these IPs whether archaeological constraints would restrict the Applicant's ability to deliver habitat for stone curlew. These concerns were reiterated in the CCC response [REP6-057] to the updated Stone Curlew Offsetting Specification [REP5-046].
- 5.12.15. In its comments on the Applicant's Deadline 5 submissions, CCC [REP6-057] also considered that the proposed grassland creation and establishment, along with proposed fencing within the LEMP was inconsistent with the Offsetting Habitat Provision for Stone-Curlew Specification [REP5-046]. Inconsistencies between the LEMP and the offsetting specification were also commented on by SCC [REP6-075] and WSC [REP6-080].
- 5.12.16. In its comments on the Applicant's revised Stone Curlew Offsetting Specification [REP5-046], CCC [REP6-057] and WSC [REP6-080] considered that there remained concerns over conflict with the management of archaeological assets, the minimum number of replacement nesting plots, compliance of the proposed offsetting with national guidance for stone curlew habitat, and optimal mitigation preparation and post-construction maintenance associated with mowing or other vegetation management processes.
- 5.12.17. At Deadline 8 [REP8-051], the Local Authorities' position remained also that the issues around archaeology, recreational and operational disturbance meant they could not be confident that stone curlew mitigation proposed would be effective and that there was no contingency in place to address this conflict (requested by WSC [REP7-088]). The Deadline 8 submission did, however, demonstrate agreement with the Applicant's proposed annual monitoring programme.
- 5.12.18. SWT's final position [REP8-034] was that, whilst it agreed that the working methods during construction would prevent disturbance to stone curlew, it did not agree that

the offsetting measures were adequate to conclude no AEol on land functionally linked to the Breckland SPA.

5.12.19. SNTS questioned [REP8-050] whether NE's conclusions were consistent with published guidance on functional linkages.

5.12.20. Evidence submitted in relation to the question of a functional linkage between the Breckland stone curlew population and the Order Limits was not considered by the ExA to be sufficiently detailed or conclusive for a functional linkage to be ruled out. The ExA therefore considers that the precautionary principle should apply and that there is a possibility of AEol on the Breckland SPA.

5.13. AEOI ASSESSMENT OUTCOMES - SUMMARY

5.13.1. The Applicant's HRA Report concluded that AEol can be excluded on the following sites and their qualifying features from the Proposed Development alone, or in-combination with other plans and projects. The conclusions were agreed with NE [REP10-027]:

- Chippenham Fen Ramsar Site;
- Fenland SAC;
- Breckland SPA;
- Breckland SAC;
- Rex Graham Reserve SAC; and
- Devil's Dyke SAC.

5.13.2. Based on the findings of the Examination, the ExA is satisfied that AEol on all qualifying features of European sites can be excluded from the Proposed Development alone / in-combination except in relation to Breckland SPA, in relation to which the ExA has found that an AEol from the Proposed Development alone cannot be excluded beyond reasonable scientific doubt for land within the Order limits that is used by breeding stone curlew and which may be functionally linked to the Breckland SPA.

5.14. HRA CONCLUSIONS

Conclusions on the Proposed Development

5.14.1. The Proposed Development is not directly connected with, or necessary to, the management of a European site, and therefore the implications of the project with respect to adverse effects on potentially affected sites must be assessed by the SoS.

5.14.2. At the close of the Examination, NE stated [REP10-074] that it was satisfied that all relevant sites and their qualifying features had been taken into consideration. It also concluded that it was satisfied there would be no AEol of any of the sites and qualifying features identified by the Applicant with appropriate mitigation measures in place.

5.14.3. Seven European Sites and their qualifying features were considered in the Applicant's assessment of LSE:

- Fenland SAC;
- Chippenham Fen Ramsar Site;
- Breckland SPA;
- Wicken Fen Ramsar Site;

- Rex Graham Reserve SAC;
- Breckland SAC; and
- Devil's Dyke SAC.

- 5.14.4. LSEs were identified for a number of these sites, both from the Proposed Development alone and in-combination with other plans or projects (see sections 5.6 and 5.7). The ExA is satisfied with the conclusions of no LSE on Wicken Fen Ramsar Site.
- 5.14.5. The methodology and outcomes of the Applicant's screening for LSE on European sites was subject to some discussion and scrutiny, however, the ExA is satisfied that the correct European sites and qualifying features have been identified for the purposes of assessment, and that all potential impacts which could give rise to significant effects have been identified.
- 5.14.6. On the basis of the information before the ExA and having regard to the mitigation measures to be secured in the dDCO, the ExA is of the view that the Proposed Development would not lead to AEoI on Fenland SAC; Chippenham Fen Ramsar Site; Breckland SAC; Rex Graham Reserve SAC; and Devil's Dyke SAC, either alone or in-combination with other plans or projects, on the qualifying features of any European site.
- 5.14.7. In respect of Breckland SPA however, the ExA is not satisfied that adequate evidence has been presented to demonstrate beyond reasonable scientific doubt that there will not be an adverse effect on land supporting stone curlew and functionally linked to Breckland SPA.

Conclusions on the Suffolk County Council Alternative Proposal

- 5.14.8. The Suffolk County Council Alternative Proposal (SCC AP) would remove from the Proposed Development land parcels E05, E12 and E13 where stone curlew have nested in recent years. Whilst this could mitigate impacts on stone curlew nesting, further evidence would be required in order to ascertain whether there would remain other impacts on the species, for example in relation to foraging. The possibility of ecological mitigation sites ECO1, ECO2 and / or ECO3 also therefore being removed from the Proposed Development would need to be assessed. The ExA is therefore unable to conclude whether the SCC AP would satisfactorily remove potential for LSE and AEoI from the Proposed Development.

6. CONCLUSION ON THE CASE FOR DEVELOPMENT CONSENT

6.1. INTRODUCTION

6.1.1. This Chapter evaluates the planning merits of the Proposed Development in the light of the legal and policy context set out in Chapter 3 and applicable legal and policy considerations identified in Chapters 4 and 5 above (Planning Issues and Habitats Regulations Assessment). It applies relevant law and policy to the application in the context of the matrix of facts and issues set out in Chapters 4 and 5. Whilst the HRA has been documented separately in Chapter 5, relevant facts and issues set out in that Chapter are taken fully into account.

POLICY CONSIDERATIONS

National Policy Statements

6.1.2. The statutory framework for deciding NSIP applications where there is no relevant designated NPS is set out in s105 PA2008. In deciding the application, the SoS must have regard to:

- any LIR submitted before the deadline specified under s60(2) of the PA2008;
- any matters prescribed in relation to development of the description to which the application relates; and
- any other matters which the SoS thinks are both important and relevant to the SoS's decision.

6.1.3. The applicable draft National Policy Statements (dNPS) are important and relevant matters to consider. The ExA has taken them into account in the form in which they existed at the close of the Examination, ie as they were originally published in September 2021. Subsequent to the close of the Examination, on 30 March 2023 the SoS published for consultation revisions to those draft national policy statements including: revisions to dNPS EN-1 (rdNPS EN-1); dNPS EN-3 (rdNPS EN-3); and dNPS EN-5 (rdNPS EN-5).

6.1.4. Where the ExA believes it is appropriate and useful it has flagged up relevant differences between the two versions of the revised drafts, however it will be for the SoS to consider the proper application of post-examination revisions to the draft NPSs as they may pertain to the Proposed Development.

The Environmental Statement

6.1.5. The ES and other information submitted by the Applicant during the Examination meets the requirements under the EIA Regulations. Full account of all environmental information has been considered in the ExA's consideration of the application.

HRA Considerations

6.1.6. The SoS is the Competent Authority under the Habitats and Species Regulations 2017 (the Habitats Regulations). The Proposed Development is development for which a Habitats Regulations Assessment (HRA) Report has been provided. In reaching the overall conclusion and recommendations in this Report, the ExA has considered all documentation relevant to HRA.

- 6.1.7. The Proposed Development is not directly connected with, or necessary to, the management of a European site. At the close of the Examination, Natural England (NE) was satisfied that all relevant sites and their qualifying features had been considered. It was also satisfied that with appropriate mitigation measures in place there would be no adverse effect on integrity (AEol) of any of the sites and qualifying features identified by the Applicant.
- 6.1.8. Seven European Sites and their qualifying features were considered in the Applicant's assessment of Likely Significant Effects (LSE). The ExA is satisfied that for the purposes of assessment the correct European sites and qualifying features have been identified as well as all potential impacts which could give rise to significant effects.
- 6.1.9. The ExA is satisfied with the conclusions of no LSE on Wicken Fen Ramsar Site. LSEs were identified for a number of other sites, however the ExA is satisfied that the Proposed Development taken alone and in-combination with other plans or projects, would not lead to AEol on the qualifying features of Fenland SAC; Chippenham Fen Ramsar, Breckland SAC; Rex Graham Reserve SAC; or Devil's Dyke SAC.
- 6.1.10. However, in respect of Breckland SPA, the ExA is not satisfied that adequate evidence has been presented to demonstrate beyond reasonable scientific doubt that there will not be an AEol on land supporting stone curlew which is functionally linked to Breckland SPA.

6.2. CONCLUSIONS ON THE PLANNING ISSUES

PRINCIPLE OF DEVELOPMENT

- 6.2.1. As noted in Chapter 5 above, the NPSs have established the urgent need for energy generation of all types and the dNPSs maintain this stance. The Proposed Development would make a very significant contribution to meeting this need, as well as contributing substantially in the transition to a low carbon system, generally in accordance with the designated NPSs.
- 6.2.2. The ExA is satisfied that sufficient details of the alternatives and how these were considered as part of the overall design of the Proposed Development, have been provided to meet the requirements of NPS EN-1, dNPS EN-1 and the EIA Regulations. Furthermore, the ExA considers that there is no conflict between the principle of the Proposed Development and the general thrust of other relevant policy, including the NPPF and PPG. The Proposed Development would contribute to a secure, flexible energy supply, and meet an identified urgent need for additional generating capacity and storage which should be afforded significant weight.
- 6.2.3. The Government has made clear its intention to bring large-scale ground mounted solar generating stations within the ambit of the energy NPS. By the close of the Examination nothing has indicated to the ExA that this overall approach has changed. As such the principle of the Proposed Development would be consistent with the relevant emerging policy in dNPS EN-1, dNPS EN-3 and dNPS EN-5 in all material respects, as it would be consistent with rdNPS EN-1, rdNPS EN-3 and rdNPS EN-5.
- 6.2.4. The CCA2008 imposes a duty on the SoS to reduce the net UK carbon budget for 2050 to least 100% lower than the 1990 baseline. The Proposed Development, or the SCC Alternative Proposal, could make a meaningful contribution towards

meeting that target and the legally binding commitment to the UK's contribution to climate change.

- 6.2.5. Overall, the ExA considers that the Proposed Development generally accords with the policy support for renewable energy generation and the legal obligation to reduce greenhouse gases. Accordingly, the principle of the Proposed Development accords with both local and national policy.

AIR QUALITY AND HUMAN HEALTH

- 6.2.6. The ExA generally agrees with the methodology and assessment of air quality and human health impacts and concludes that adverse construction impacts are mainly capable of satisfactory mitigation, so this weighs slightly against the Order being made.

- 6.2.7. There could however be significant operational impacts due to glint and glare which have not been adequately assessed and which may affect equestrian and other users unless satisfactorily mitigated. The ExA concludes that further assessment is required in order to establish the nature and extent of these operational impacts in more detail, and that unless these operational impacts are effectively mitigated against they may cause harm and therefore weigh substantially against the Order being made.

- 6.2.8. The ExA concludes that the adverse impacts of unplanned atmospheric emissions at any of the BESS sites could result in adverse air quality and human health impacts, particularly to receptors close to the Order limits. However, BESS is a rapidly evolving area of technology, and so safety and performance is likely in the ExA's view to evolve and improve in the future. The battery fire safety management plan (BFSMP) now secured in Requirement 7 in the dDCO provides a satisfactory mechanism capable of addressing and mitigating all adverse impacts satisfactorily at the detailed design stage, so this weighs slightly against the Order being made.

- 6.2.9. The ExA concludes that cumulative impacts have been satisfactorily addressed and that there are no significant cumulative residual effects, so this is considered to weigh only slightly against the Order being made.

ECOLOGY AND BIODIVERSITY

- 6.2.10. The Applicant has not demonstrated that adequate and appropriate ecological assessments would be secured to identify all ecological risks from the Proposed Development. This weighs slightly against the Order being made. The Proposed Development includes adequate safeguards to prevent harm to nature conservation sites of national and local importance. The Proposed Development has the potential to cause significant harm to the stone curlew population within and adjacent to the site and this weighs slightly against the Order being made. It has not been demonstrated that the mitigation measures included in the Proposed Development will give adequate protection to farmland birds from adverse effects and this weighs slightly against the Order being made. The ExA is satisfied that effects on other habitats or species from the Proposed Development will be limited and adequately mitigated and this is neutral in terms of the Order being made.

- 6.2.11. In overall terms the ExA considers that the Proposed Development would be likely to have a negative impact on ecology and biodiversity and this weighs against the Order being made.

CULTURAL HERITAGE AND HISTORIC ENVIRONMENT

- 6.2.12. Potential adverse effects on archaeological sites, settings and landscapes weigh against the Order being made to a limited extent. The Proposed Development has the potential to cause harm to the setting of the Chippenham Park RPG and this weighs substantially against the Order being made. The Proposed Development does not demonstrate adequate and appropriate mitigation for potential effects on the Isleham plane crash site and this weighs substantially against the Order being made. The Proposed Development has not been designed sensitively in relation to heritage and cultural assets and their associated settings in general and this weighs substantially against the Order being made.

LANDSCAPE AND VISUAL IMPACT

- 6.2.13. The size and fragmented nature of the Proposed Development would result in material harm to landscape character and visual amenity and does not constitute good design, which the ExA considers weighs substantially against the Order being made. Proposed landscape mitigation would minimise local visual impacts but would cause its own effects in terms of overall landscape character, which the ExA considers weighs slightly against the Proposed Development. The Proposed Development would have an extensive adverse impact on the landscape setting of and views from the Limekilns, which comprises a valued landscape, and this weighs substantially against the Proposed Development.
- 6.2.14. The design of the Sunnica West A element of the Proposed Development would result in general adverse effects on the landscape and falls short of the requirement to achieve good design and minimise landscape and visual impact, thus weighing substantially against the Order being made.
- 6.2.15. The design of the Proposed Development would result in the increased enclosure of an open and expansive landscape, to the detriment of its enjoyment and appreciation by residents and other users, and this weighs slightly against the Order being made. There would be material impacts on views from La Hogue Farm and the Elms Road permanent caravan site which weighs slightly against the Proposed Development.
- 6.2.16. A reduction in the scale of the Proposed Development would need to be extensive to achieve adequate mitigation of landscape and visual effects and the current scale of the Proposed Development therefore weighs substantially against the Order being made. The temporary nature of the Proposed Development does not outweigh the negative impacts in terms of landscape effects and on people's enjoyment of the landscape.

NOISE AND VIBRATION

- 6.2.17. The Applicant's noise and vibration assessment assesses those matters required to be assessed in NPS EN-1 and operational noise with respect to human receptors was properly assessed using BSs and other guidance as appropriate. Consultation took place as required with the Environment Agency (EA) and Natural England (NE) about assessment of noise on protected species or other wildlife with results informing ecological assessments. The assessment has adopted the NPSE principles and aims relating to noise, including definitions of 'significant adverse effects' and 'adverse effects' using the NOEL, LOAEL and SOAEL concepts, and had regard to PPG guidelines.

- 6.2.18. Measurable requirements have been inserted in the DCO where necessary to ensure noise levels do not exceed limits specified in the DCO. Embedded mitigation measures have been identified and additional measures for noise that may be encountered over and above predicted levels. The s61 Consent process under the Control of Pollution Act 1974 and the planning related controls secured within the DCO constitute parallel tracking in line with the emerging dNPS EN-1.
- 6.2.19. The ExA notes the outstanding issue relating to the hours of construction of the Proposed Development. It considers that where the SOAEL is likely to be exceeded during this period, consideration should be given to excluding the Saturday pm period. The ExA recommends that the Framework CEMP is amended so that this mitigation is considered as part of the CEMP.
- 6.2.20. Further, the ExA considers that at detailed design stage the relevant local authorities should be able to scrutinise effectively the extent to which each phase of the authorised development will have taken due account of noise as a design issue. Therefore, it recommends that Requirement 6 of the DCO is amended to clarify that each phase of the authorised development shall contain such details.
- 6.2.21. Subject to these amendments, the ExA is satisfied that the noise resulting from the construction, operation and decommissioning of the Proposed Development would remain below the significance thresholds as set out in the NPSE and NPPF and that effects have been mitigated as far as reasonably practicable. The inclusion in the dDCO of Requirement 6 (Detailed Design), Requirement 14 (CEMP), Requirement 15 (OEMP), Requirement 16 (CTMP), Requirement 17 (Operational Noise), and Requirement 22 (Decommissioning) would provide sufficient safeguards to ensure that the adverse impacts resulting from the Proposed Development would be minimised. The ExA concludes that the Application would accord with the Government's policy on noise and vibration as set out in NPS EN-1 and NPS EN-5, the NPSE and NPPF. It would also accord with the dNPSs as well as local planning policy. Consequently noise and vibration weighs slightly against the Order being made.

SOCIO-ECONOMICS AND LAND USE

Economic and Employment Effects (Including the Horse Racing Industry)

- 6.2.22. The ExA notes the criticisms of the host local authorities of the methodology deployed in the socio-economic analysis of effects of the Proposed Development, and concludes that there could be an overall net benefit during the construction phase with a significant number of jobs coming from within the study area. Embedded mitigation measures would secure in a reasonable manner the potential improvements and benefits to local communities in connection with the Proposed Development. The OSSCEP if implemented in full would gear those measures specifically to the local area in compliance with dNPS EN-1 and the extant NPS EN-1.
- 6.2.23. However, the ExA considers that insufficient evidence has been presented to give confidence that the highly-sensitive HRI would not be adversely affected and that this would not present a long-term threat. This lessens the confidence with which the ExA can be assured that the full extent of jobs created in the various stages during the life of the Proposed Development would materialise as assessed. This is particularly the case in respect of the relatively small numbers of jobs created during the operational phase of this temporary Proposed Development when set against the very real possibility of the permanent loss of a great many jobs in the HRI. It is not therefore clear that there is an overall net benefit in respect of the potential for

jobs to be created by the Proposed Development within the study area when set against the potential loss of jobs in the HRI, both within the study area and, in view of the pre-eminence of Newmarket in the HRI, from outside the study area.

- 6.2.24. In view of the temporary nature of the Proposed Development, with jobs being created chiefly during the construction phase, set against the established and long standing value of the HRI to Newmarket and to the nation, the ExA therefore concludes that the impact of the Proposed Development weighs substantially against the Order being made.

BMV, Agricultural Land and Farming Circumstances

- 6.2.25. The IPs' submissions on agricultural land use matters are mainly by affected farmers who disputed the ALC findings; however the evidence suggests they obtain good yields of high-quality arable produce.
- 6.2.26. In respect of agricultural land matters, NE was content with the Applicant's approach and the outcome of the ALC studies, as reflected in the final, signed SoCG.
- 6.2.27. However, there were technical differences in approach to ALC between the Applicant and the various parties and their experts in relation to the reliable availability of irrigation as a factor impacting agricultural land and productivity.
- 6.2.28. The ALC grade outcome is marginal in places due to the transition between soil types. Direct local comparisons between adjacent farms and adjacent fields could therefore be unreliable.
- 6.2.29. The ExA has considered the implications of the Applicant not undertaking ALC surveys for parts of the cable routes or the substation site and concludes that although the Proposed Development is temporary and NE clearly states it is content with the arrangements to carry out the ALC surveys post-consent, there is the residual possibility of an adverse effect on soil quality.
- 6.2.30. Bearing in mind the results consistently achieved by the farmers, the ExA concludes that valid differences in position on the ALC issue remain between the Applicant and NE on the one hand, and SNTS and other IPs on the other, and finds some merit in the "Rochdale envelope" approach put forward by the local authorities.
- 6.2.31. The ExA does not agree that development of farmland for solar power generation would necessarily involve little disturbance of the soil and enable retention of the land resource for future use.
- 6.2.32. The ExA agrees that construction work in respect of the solar panels would involve little displacement of soil material, but does not agree that this is true of the installation of BESS, substations or the cabling.
- 6.2.33. The ExA finds that the main impacts on agriculture would be in respect of construction of the solar PV infrastructure. There would also be impacts in respect of the underground cabling, but these impacts would be temporary and limited. The construction impacts would be due to tracking of delivery and construction vehicles, and also due to the footprint of the BESS and substations, so this is not similar to the current baseline of arable land use and heavy farm machinery. The ExA therefore considers that construction impacts could be significant.

- 6.2.34. In terms of the operation of the Proposed Development, the ExA concludes that suspension of a farm enterprise for the agricultural occupants for the duration of the Proposed Development would be fundamental, because the benefits have not been demonstrated and because the loss would be of substantial areas of farmland for a period of at least 45 years, that is to say two generations, and would therefore be effectively permanent. Even if the farming operation were to resume after decommissioning, it is uncertain what the soil condition would be at the end of the operational period.
- 6.2.35. The ExA hence concludes that the Proposed Development will have adverse impacts on farming operations, particularly in respect of the loss of productive farmland, and that these impacts will cause harm and therefore weigh moderately against the Order being made.

Public Rights of Way

- 6.2.36. Disruption to PRoW users during the construction phase of development would be minimised in line with local and national policy expectations, by making reasonable provision for diversions and permissive paths in light of the predicted adverse effects. Such measures would offset the disadvantages to the public and are secured in the CTMP and dDCO, and overall the Proposed Development would comply with the requirements in regard to PRoW set out in paragraph 5.11.30 of NPS EN-1, assuming completion of the Deed of Obligation.
- 6.2.37. The ExA hence concludes that impacts on PRoW would be of minor significance and consequently would weigh slightly against the Order being made.

TRAFFIC, TRANSPORT AND HIGHWAY SAFETY

- 6.2.38. Following detailed consideration of the traffic, transport and highway safety issues, the ExA concludes that impacts all relate to the construction and decommissioning phases of the project and that there are no significant impacts during operation.
- 6.2.39. The ExA is satisfied with the Applicant's assessment of operational impacts and concludes that the Applicant's investigation into the available modes of transport for construction traffic is satisfactory.
- 6.2.40. The ExA concludes that the Applicant's proposals in respect of port selection and movement of AIL are adequate, and that in accordance with Department for Transport (DfT) water preferred policy the Applicant has taken all reasonable steps to minimise transport of AIL by road. However, the ExA also finds that a great deal of careful planning will be required to minimise AIL impacts on the highway and on those affected.
- 6.2.41. The ExA has some reservations about the Applicant's assessment of the impacts associated with the construction of the Proposed Development but concludes that impacts on the local highway network have been minimised and that concerns about the suitability of construction traffic on local roads are capable of being adequately addressed through the CTMP secured in Requirement 16 of the dDCO.
- 6.2.42. Regarding the Applicant's cumulative impact assessment, the ExA concludes that satisfactory assumptions have been made by the Applicant.
- 6.2.43. The ExA concludes that overall the Proposed Development will have adverse transport, traffic and highway safety impacts, particularly during transport of AIL and in respect of HGV on local roads, but that these adverse impacts are capable of

being satisfactorily managed and minimised through the CTMP and rDCO. However, these impacts will nevertheless cause harm, albeit temporary, and therefore weigh moderately against the Order being made.

WATER RESOURCES, FLOOD RISK AND DRAINAGE

- 6.2.44. A Flood Risk Assessment (FRA), meeting the requirements of NPS EN-1, has been carried out and a sequential approach is applied to the layout and design of the Proposed Development which would locate vulnerable components in the lowest flood risk zones. Permanent above-ground development is not proposed in functional Floodplain / FZ3b areas. Safe access measures would be adopted for all compounds for site staff, on-site substations and BESS, located out of flood zones. During a flood event, the affected infrastructure would remain operational and not accessed until flood waters recede. Emergency response measures for flooding are robustly provided for in the Framework CEMP.
- 6.2.45. The drainage strategy appended to the FRA includes the provision of above ground SuDS in the drainage design and properly considers the proposed discharge rates. Surface water runoff generated within the Application Site would be disposed of via infiltration to mimic existing conditions. No offsite attenuation storage is proposed.
- 6.2.46. The Applicant has identified and assessed the risks of all forms of flooding to and from the Proposed Development and demonstrated how flood risks would be managed, taking climate change into account. The potential for effects on the water environment has been assessed and no significant residual effects on surface water, groundwater resources or flood risk are predicted for the Proposed Development. Subject to the mitigation measures identified in the ES and secured in dDCO Requirement 6 (Detailed Design), Requirements 12 and 19 (Surface and Foul Water Drainage), Requirement 14 (CEMP), Requirement 15 (OEMP) and Requirement 22 (Decommissioning and Restoration), there should be no adverse effects on water quality and resources from the Proposed Development during construction, operation or decommissioning phases. The Proposed Development would accord with the requirements of the WFD Regulations.
- 6.2.47. Overall, the effect of the Proposed Development on water resources, flood risk and drainage would be neutral in the overall planning balance.

6.3. THE PLANNING BALANCE

THE PROPOSED DEVELOPMENT

- 6.3.1. The potential adverse impacts of air quality and human health would generally be mitigated through the measures in the dDCO via the CEMP and CTMP and hence weigh only slightly against the Proposed Development.
- 6.3.2. However, the ExA remains concerned at the lack of proper assessment of glint and glare effects from the Proposed Development due to inadequacies in the Applicant's assessment. This has potential harm for all users (as per dNPS EN-3) and may specifically adversely affect equestrian users and facilities, in particular the Limekilns. The ExA considers that the currently proposed mitigation measures cannot reduce this harm to an acceptable level and so the potential effects of glint and glare weigh substantially against the Proposed Development.
- 6.3.3. Technology and safety in the performance of battery energy storage system (BESS) is likely to evolve and improve in the future. The ExA is satisfied that the fire safety management plan secured in the dDCO would be capable of satisfactorily

addressing and mitigating all adverse impacts at the detailed design stage. This leaves a small residual risk which is adverse and therefore weighs slightly against the Proposed Development.

- 6.3.4. The Proposed Development has the potential to cause significant harm to the stone curlew population within and adjacent to the site. Although in overall terms of the planning balance this weighs only slightly against the Order being made, the implications of any failure to meet the requirements of the Habitats Regulations when considering whether to grant consent for a qualifying project such as the Proposed Development need to be considered by the SoS as described above.
- 6.3.5. Weighing slightly against the grant of consent for the Proposed Development is the harm that would be caused by failing to demonstrate that the mitigation measures would adequately protect farmland birds from adverse effects and that adequate and appropriate ecological assessments would be secured to identify all ecological risks from the Proposed Development.
- 6.3.6. The Proposed Development includes adequate safeguards to prevent harm to nature conservation sites of national and local importance. The ExA is satisfied that effects on other habitats or species from the Proposed Development would be limited and adequately mitigated against. These matters are neutral in the planning balance.
- 6.3.7. The ExA has found that the Proposed Development has the potential to cause harm to the setting of the Chippenham Park RPG which weighs substantially against it. Also weighing substantially against the Proposed Development is that it would not mitigate satisfactorily for the potential effects on the Isleham plane crash site. Potential effects on archaeological sites, other heritage assets and their settings, caused by a lack of sensitive design, would also be adverse but the ExA considers that the harm would be less than substantial.
- 6.3.8. Furthermore, the ExA considers that the Proposed Development would cause significant harm to landscape character and visual amenity which is an integral feature of good design for developments as set out in NPS EN-1 and dNPS EN-3. In particular there would be an extensive adverse impact on the landscape setting of and views from the Limekilns, which comprise a valued landscape, and upon the landscape in the vicinity of and views towards the Sunnica West A element of the Proposed Development. Proposed mitigation planting would cause its own effects on the landscape which could be negative in terms of reducing characteristic openness, although the harm caused would be less than substantial. Overall, the harm, including the harm caused by the scale of the development, would result in general adverse effects on the landscape that weigh substantially against the Proposed Development.
- 6.3.9. The detriment to enjoyment of and appreciation by residents and other users of the area caused by adverse impacts on views, as in relation to The Ark church, La Hogue Farm and the Elms Road permanent caravan site, would cause harm which also weighs moderately against the Order being made.
- 6.3.10. The temporary nature of the Proposed Development would not in the ExA's view outweigh these negative impacts in terms of landscape effects or on people's enjoyment of their landscape. A reduction in the scale of the Proposed Development would need to be extensive to achieve adequate mitigation of landscape and visual effects. This is discussed further in the next section on the SCC Alternative Proposal.

- 6.3.11. With reference to noise and vibration, the ExA concludes that subject to amendments to the dDCO which it recommends be made to any eventual Order, the application would accord with Government policy and local planning policy. The effect would weigh slightly against the Proposed Development.
- 6.3.12. In socio-economic terms, the ExA is not satisfied that there would be an overall net benefit in terms of the local economy and employment in terms of jobs to be created from within the study area, particularly as these would be concentrated in the construction period only. The OSSCEP would gear mitigation measures specifically to the local area in compliance with NPS EN-1 and the emerging dNPS EN-1, but the ExA acknowledges the concern that the horse racing industry (HRI) has regarding the Proposed Development. The ExA concludes that the Applicant has provided insufficient evidence to give confidence that the highly-sensitive HRI would not be adversely affected and that the Proposed Development would not be a threat to the long-term viability of the HRI or unacceptably impact the operational use of existing HRI sites. Given the local, national and international importance of the HRI in Newmarket this could have consequential negative impacts on the economy locally and beyond. This therefore weighs substantially against the Proposed Development.
- 6.3.13. The ExA finds that the residual impacts on the farmland used for the buried cables are capable of being managed through the CEMP. However, bearing in mind the productivity of the agricultural land which would be occupied by solar PV infrastructure, the ExA concludes that valid differences in position on ALC remain and that suspension of a farm enterprise, albeit temporary in planning terms, would be fundamental, because the benefits have not been demonstrated and because the loss would be of substantial areas of farmland for a period of at least 45 years, ie two generations, and would therefore be effectively permanent. Even if the farming operation were to resume after decommissioning, it is uncertain what the soil condition would be at the end of the operational period.
- 6.3.14. The ExA hence concludes that the Proposed Development will have adverse impacts, particularly in respect of the loss of productive farmland, and that these impacts will cause harm, and therefore weigh moderately against the Proposed Development.
- 6.3.15. Disruption to PRow users during the construction phase of development would be minimised in line with local and national policy expectations, by making reasonable provision for diversions and permissive paths. Such measures would largely offset the disadvantages to the public and would be satisfactorily secured in the CTMP and dDCO. Overall, and subject to completion of the Deed of Obligation, the Proposed Development would comply with the requirements in regard to PRow set out in paragraph 5.11.30 of NPS EN-1, assuming completion of the Deed of Obligation. There would be slight benefits attached to the proposals providing for pathways around and interpretation for the Isleham plane crash site. However, the ExA finds that these benefits would be effectively offset by the disadvantages to non-motorised users of footpaths and bridleways through and surrounding the Application Site caused by the temporary diversion of PRow. The effect of the Proposed Development on the public rights of way rights network would be neutral in the long term whilst weighing slightly adversely during the construction phase of the Proposed Development, and so would weigh slightly against the Proposed Development.
- 6.3.16. The ExA concludes that the Proposed Development will have adverse transport, traffic and highway safety impacts, particularly during transport of AIL and in respect

of HGV on local roads. These adverse impacts are capable of being satisfactorily managed and minimised through the CTMP and rDCO. However, these impacts will nevertheless cause harm, albeit temporary, and are therefore weigh moderately against the Proposed Development.

- 6.3.17. The ExA is satisfied that the Proposed Development would not impact adversely on water resources, flood risk and drainage, and would therefore be neutral in the overall planning balance.
- 6.3.18. In favour of the Proposed Development and given the urgent need for energy generation of all types established within the NPSs and September 2021 draft NPSs, the Proposed Development could make a meaningful contribution to meeting this need, as well as contributing substantially in the transition to a low carbon system. Thus, the principle of the Proposed Development accords with national policy which is important and relevant. The generation and the BESS would contribute positively to a secure, flexible energy supply, and meet an identified urgent need for additional generating capacity and storage which should be afforded significant weight. It would be consistent with the relevant policy in dNPS EN-1, dNPS EN-3 and dNPS EN-5 in all material respects. The revised draft NPSs issued on 30 March 2023 were after the close of the Eamination. A review of rdNPS EN-1, rdNPS EN-3 and rdNPS EN-5 shows no changes affecting this conclusion. Further, the Proposed Development would make a meaningful contribution towards meeting the legally binding commitment to end the UK's contribution to climate change. There is also general support for renewable energy in the LIR and local plan policies where these are well designed and in sympathy with the local characteristics.

Conclusion on the Planning Balance for the Proposed Development

- 6.3.19. Drawing together these elements of its findings, the ExA is firmly of the view that there would be substantial disbenefits resulting from the Proposed Development, principally in terms of the harm that would be caused to the setting of the Chippenham Park RPG, the extensive adverse impact on the landscape setting of and views from the Limekilns, a non-designated but an especially valued landscape, and the design of the Sunnica West A element. These elements would also be in conflict with local plan policies on landscape and heritage assets. Overall, the combination of these harms, taken together with the other harms identified, clearly outweigh the benefits of the Proposed Development. These disbenefits are not outweighed by the public benefit of the provision of solar generating capacity despite its need and urgency. Consequently, the ExA recommends that development consent for the Application be refused in the terms sought.

THE SCC ALTERNATIVE PROPOSAL (SCC AP)

- 6.3.20. As already noted in this Report, the SCC AP was put forward by SCC on behalf of the four host local authorities. Although the Applicant has produced an Alternative Without Prejudice Development Consent Order [REP10-034], no ES revisions in respect of the SCC AP has been submitted into the Examination by the Applicant and other application documents such as Land and Works plans were not updated for the revisions implied by the SCC AP. Consequently, the ExA is not able to assess in any detail the effects on the planning balance. However, the ExA is mindful that the SCC AP may require consideration by the SoS and so an indication of the planning balance in respect of the SCC AP as compared with the planning balance in respect of the Proposed Development is given in the following paragraphs.

- 6.3.21. As with the Proposed Development, the potential adverse impacts of air quality and human health would be mitigated through the measures in the DCO via the CEMP and CTMP and weigh only slightly against the SCC AP.
- 6.3.22. The SCC AP would remove almost all of the Sunnica West Site A from the Proposed Development. However, although the Limekilns is one of the areas of concern in respect of equestrians, there are other areas of the SCC AP such as the U6006 which could potentially affect both equestrians and other users. The ExA therefore remains concerned at the lack of proper assessment of glint and glare effects from the Proposed Development due to inadequacies in the Applicant's assessment. The currently proposed mitigation measures cannot reduce this harm to an acceptable level and so the potential effects of glint and glare would still weigh substantially against the SCC AP.
- 6.3.23. As with the Proposed Development, technology and safety in the performance of battery energy storage systems (BESS) is likely to evolve and improve in the future. The ExA is satisfied that the fire safety management plan secured in the DCO would be capable of satisfactorily addressing and mitigating all adverse impacts at the detailed design stage. This leaves a small residual risk which weighs slightly against the SCC AP.
- 6.3.24. The SCC AP would have implications so far as the ES and HRA-related issues are concerned. It would involve the removal from the Proposed Development of all land parcels with known previous stone curlew nesting sites and could therefore mitigate potential adverse effects on habitat for this species. It is recommended that the Secretary of State seeks clarification of this if they are minded to grant consent.
- 6.3.25. In respect of other farmland birds, substantial areas of land supporting these would be removed from the Proposed Development area, but the areas remaining comprise current arable land with populations that would still suffer adverse impacts from the Proposed Development, and this would still weigh slightly against it.
- 6.3.26. Although the SCC AP would also result in the removal from the Proposed Development of the ecological mitigation areas (ECO1, ECO2, ECO3 and ECO5), including the stone curlew nesting plots, the effects of this would be neutral as there would be no loss of historic nesting sites. As far as other species are concerned, the loss of all the ecological mitigation sites could have adverse implications as there would still be a considerable extent of solar arrays but without meaningful ecological mitigation. The potential impacts of this would need to be assessed.
- 6.3.27. The SCC AP would have no further implications in respect of local and national nature conservation sites and would thus be neutral in terms of the planning balance.
- 6.3.28. The removal of the land parcels E05 and W03 to W12 as suggested in the SCC AP, along with the substation/BESS site in parcel W17, would mitigate the Proposed Development substantially in respect of adverse impacts on the setting of the Chippenham Park RPG, the Isleham plane crash site and the Bronze Age bowl barrow SAM. The remaining developable areas would be neutral in terms of impacts on the historic environment.
- 6.3.29. The SCC AP would remove the potential adverse impacts on the setting of, and views from, the Limekilns and land in the vicinity of Sunnica West A. The removal of parcel E05 would maintain the current open character of the landscape in that area. These changes along with the other parcels removed would substantially reduce

adverse impacts on landscape character and visually amenity in general, to the extent that effects would be less than substantial.

- 6.3.30. In terms of visual effects on specific receptors considered above, the removal of parcel E05 would remove the potential adverse effects on visual amenity in relation to The Ark church and the removal of parcel E12 would mitigate adverse impacts on views from Mr Alan B Smith's property in Worlington. Parcels E14 to E32 in Sunnica east B would remain part of the Proposed Development and therefore potential harm would be caused to views from la Hogue Farm and the Elms Road permanent caravan site, which would weigh moderately against the Order being made.
- 6.3.31. With reference to noise and vibration, the ExA concludes that subject to amendments to the DCO which it recommends be made to any eventual Order, the Application would accord with Government policy and local planning policy. As with the Proposed Development, the effect would weigh slightly against the SCC AP.
- 6.3.32. In socio-economic terms, the ExA would not be satisfied that there would be an overall net benefit in terms of jobs to be created from within the study area, particularly as the SCC AP would be smaller than the Proposed Development and these jobs would be concentrated in the construction period only. Although the SCCAP would remove much of Sunnica West Site A, the ExA concludes that there is insufficient evidence to give confidence that the highly-sensitive HRI would not be adversely affected and that the SCC AP would not be a threat to the long-term viability of the HRI or unacceptably impact the operational use of existing HRI sites. Consequently, as with the Proposed Development, this weighs substantially against the SCC AP.
- 6.3.33. As with the Proposed Development, the ExA finds that the residual impacts of the SCC AP on the farmland used for the buried cables would be capable of being managed through the CEMP. However, bearing in mind the productivity of the agricultural land which would be occupied by solar PV infrastructure, the ExA concludes that valid differences in position on ALC remain and that suspension of a farm enterprise, albeit temporary in planning terms, would be fundamental, because the benefits have not been demonstrated and because the loss would be of substantial areas of farmland for a period of at least 45 years, ie two generations, and would therefore be effectively permanent. Even if the farming operation were to resume after decommissioning, it is uncertain what the soil condition would be at the end of the operational period.
- 6.3.34. The ExA hence concludes that the SCC AP will have adverse impacts, particularly in respect of the loss of productive farmland, and that these impacts will cause harm, and as with the Proposed Development therefore weigh moderately against the SCC AP.
- 6.3.35. As with the Proposed Development, disruption to PRow users during the construction phase of development would be minimised in line with local and national policy expectations, by making reasonable provision for diversions and permissive paths. Such measures would largely offset the disadvantages to the public and would be satisfactorily secured in the CTMP and DCO. Overall, and subject to completion of the Deed of Obligation, the Proposed Development would comply with the requirements in regard to PRow set out in paragraph 5.11.30 of NPS EN-1, assuming completion of the Deed of Obligation. There would be slight benefits attached to the proposals providing for pathways around and interpretation for the Isleham plane crash site. However, the ExA finds that these benefits would be effectively offset by the disadvantages to non-motorised users of footpaths and

bridleways through and surrounding the Application Site caused by the temporary diversion of public rights of passage. The effect of the SCC AP on the public rights of way rights network would therefore weigh slightly against the SCC AP.

- 6.3.36. As with the Proposed Development, the SCC AP would still have adverse transport, traffic and highway safety impacts, particularly during transport of AIL and in respect of HGV on local roads. Localised impacts would not change, but these would not be so extensive and are still capable of being satisfactorily managed and minimised through the CTMP and rDCO. However, these impacts will nevertheless cause harm, albeit temporary, and remain of medium significance and so weigh moderately against the SCC AP.
- 6.3.37. As with the Proposed Development, the ExA is satisfied that the SCC AP would not impact adversely on water resources, flood risk and drainage, and would therefore be neutral in the overall planning balance.
- 6.3.38. In favour of the Proposed Development and given the urgent need for energy generation of all types established within the NPSs and September 2021 draft NPSs, the SCC AP could, as with the Proposed Development, make a meaningful contribution to meeting this need, as well as contributing in the transition to a low carbon system as the SCC AP would still be considerably above the NSIP threshold. However, the removal of a significant proportion of the generating capacity would mean that the scale of the benefits would be reduced compared to the original Proposed Development but it would still contribute to the need for renewable energy generation capacity and as such is a substantial positive weight in favour of the SCC AP.

Conclusion on the Planning Balance for the SCC Alternative Proposal

- 6.3.39. Drawing together these elements of its findings, acknowledging that the SCC AP removes most of the Sunnica West Site A, and bearing in mind that the Applicant has not prepared an ES in respect of the SCC AP, the ExA is firmly of the view that there would be substantial disbenefits resulting from the SCC AP, principally in terms of the reduced amount of electricity generated set against the reduced harm that would be caused to the setting of the Chippenham Park RPG and the landscape setting of and views from the Limekilns. The SCC AP would also reduce overall harm relating to agricultural land, but other harms relating to air quality, human health, glint and glare, BESS, ecology and biodiversity, HRI and traffic and transport would remain. The cable route would also not be the shortest available which would not represent good design in a revised proposal. Overall, the ExA considers that the combination of these harms would outweigh the benefits of the SCC AP. As application documents were not updated for the SCC AP further work would be required if the SoS were minded to consider consenting the SCC AP and further consideration would need to be given to the impacts on Affected Persons.

7. COMPULSORY ACQUISITION AND RELATED MATTERS

7.1. INTRODUCTION

7.1.1. This chapter of the report deals with the compulsory acquisition (CA) of land and rights over land, and related matters including temporary possession (TP), human rights and the Public Sector Equality Duty (PSED). It is set out as follows:

- The request for CA and TP powers;
- The purposes for which land is required;
- Legislative requirements;
- Examination of the CA and TP case; and
- Conclusions.

7.1.2. The ExA's overall recommendation is that development consent should not be granted, for reasons given elsewhere in this report. It follows that, if that recommendation is accepted, the compelling case in the public interest which is required to justify CA and TP powers has not been made out.

7.1.3. Nevertheless, the ExA is mindful of the fact that the SoS may conclude that development consent should be granted. This chapter has therefore been written in a way that would enable the SoS to consider CA matters in the event that the SoS is minded to grant development consent.

7.2. THE REQUEST FOR CA AND TP POWERS

CA and TP powers sought

The original application

7.2.1. Paragraph 1.8.1 of the covering letter to the application [APP-001] states that:

“The land over which the Applicant is seeking powers of compulsory acquisition of land, rights and interests and powers of temporary possession in the draft DCO for the purposes of the Scheme is listed in the Book of Reference [EN010106/APP/4.3]. The Statement of Reasons [EN010106/APP/4.1] also provides details of the powers sought and negotiations to date.”

7.2.2. The Applicant sought CA and TP powers within the draft DCO [APP-019] for both land and rights over land. In relation to rights over land, the request relates both to the creation of new rights and to the acquisition of existing rights.

7.2.3. The Applicant also submitted:

- a land and Crown land plan [APP-006];
- a draft DCO [APP-019];
- an Explanatory Memorandum to the draft DCO [APP-020];
- a Statement of Reasons [APP-022];
- a Funding Statement [APP-023]; and
- a Book of Reference [APP-024].

7.2.4. After acceptance of the application [PD-001] and advice under section 51 of PA2008 [PD-003], the Applicant submitted the following document:

- a revised land and Crown land plan [AS-003].

7.2.5. Taken together, these documents set out the land and rights sought by the Applicant together with the reasons for seeking compulsory powers and the basis on which compensation would be funded.

7.2.6. The Applicant did not submit a plan showing special category land because none had been identified.

Changes prior to the start of the Examination

7.2.7. There were changes made to the submitted application prior to the start of the Examination. No additional land was requested. As a result of these changes, the Applicant submitted the following revised documents:

- a land and Crown land plan [AS-281];
- a draft DCO [AS-293];
- an Explanatory Memorandum to the draft DCO [AS-294];
- a Statement of Reasons [AS-295]; and
- a Book of Reference [AS-296].

7.2.8. The Applicant did not submit a revised Funding Statement prior to the start of the Examination.

Changes during the Examination

7.2.9. There were changes made to all these application documents during the Examination. These changes included changes made as a result of further changes to the application. No additional land was requested.

7.2.10. The land and Crown land plan was updated at

- Deadline 2 [REP2-003];
- Deadline 4 [REP4-003]; and at
- Deadline 6 [REP6-004].

7.2.11. The draft DCO was updated during the Examination at

- Deadline 2 [REP2-012];
- Deadline 4 [REP4-005];
- Deadline 6 [REP6-013]; and at
- Deadline 10 [REP10-005].

7.2.12. The Explanatory Memorandum was updated during the Examination at

- Deadline 2 [REP2-014];
- Deadline 6 [REP6-015]; and at
- Deadline 10 [REP10-007].

7.2.13. The Statement of Reasons was updated at

- Deadline 2 [REP2-018]; and at
- Deadline 7 [REP7-005].

7.2.14. The Funding Statement was revised at

- Deadline 5 [REP1-004]; and at
- Deadline 7 [REP7-007]; and

7.2.15. The Book of Reference was updated at

- Deadline 1 [REP1-004];
- Deadline 3 [REP3-003];
- Deadline 4 [REP4-007];
- Deadline 6 [REP6-017];
- Deadline 7 [REP7-009]; and at
- Deadline 8 [REP8-004].

7.2.16. Consequently, at the close of the Examination, the most up-to-date versions of the relevant application documents referred to above were as follows:

- a land and Crown land plan [REP6-004];
- the Applicant's final preferred dDCO [REP10-005];
- the Explanatory Memorandum to the draft DCO [REP10-007];
- the Statement of Reasons [REP7-005]
- the Funding Statement [REP7-007]; and
- the Book of Reference [REP8-004].

7.2.17. The position at the close of the Examination is that the Applicant seeks CA powers within its final preferred dDCO [REP10-005] for both land and rights over land, as well as TP powers. In relation to rights over land, the request relates both to new rights and to the acquisition of existing rights.

DCO Articles and Schedules

7.2.18. The relevant Articles in the Applicant's final preferred dDCO [REP10-005] are as follows:

- Article 18: Compulsory acquisition of land;
- Article 19: Time limit for exercise of authority to acquire land compulsorily;
- Article 20: Compulsory acquisition of rights;
- Article 21: Private rights;
- Article 22: Application of the 1981 Act;
- Article 23: Acquisition of subsoil only;
- Article 24: Power to override easements and other rights;
- Article 25: Modification of Part 1 of the Compulsory Purchase Act 1965;
- Article 26: Rights under or over streets;
- Article 27: Temporary use of land for constructing the authorised development;
- Article 28: Temporary use of land for maintaining the authorised development;
- Article 29: Statutory undertakers;
- Article 30: Apparatus and rights of statutory undertakers in stopped up streets;
- Article 31: Recovery of costs of new connections;
- Article 40: Protective provisions;
- Article 43: Guarantees in respect of payment of compensation; and
- Article 45: Crown rights.

7.2.19. The following schedules to the Applicant's final preferred dDCO [REP10-005] are also relevant:

- Schedule 4: Streets subject to street works;
- Schedule 5: Alteration of streets;
- Schedule 6: Public rights of way to be temporarily stopped up;
- Schedule 7: Access to works;
- Schedule 8: Land in which only new rights etc may be acquired;
- Schedule 9: Modification of compensation and compulsory purchase enactments for the creation of new rights and imposition of new restrictive covenants; and

- Schedule 12: Protective provisions.

The Order land

- 7.2.20. Land over which CA and/or TP powers are sought is referred to in this chapter as the Order land.
- 7.2.21. The Order land which the Applicant seeks only to use temporarily is shown in green on the land and Crown land plan [REP6-004]. This land is described in the introduction to the Book of Reference [REP8-004] at paragraph 1.1.7 as being subject to temporary use, and during any period of temporary possession the exercise of easements, servitudes and other private rights is to be suspended. The only plot is plot 21-04 (shown on sheet 21), which is required temporarily for the transport of abnormal indivisible loads (AIL). Temporary possession of all other plots will be taken prior to permanent acquisition of land or rights.
- 7.2.22. The Order land which the Applicant seeks to use temporarily and which is also subject to compulsory acquisition of permanent rights is shown in blue on the land and Crown land plan [REP6-004]. This land is described in the introduction to the Book of Reference [REP8-004] at paragraph 1.1.7 as being land in which new rights are to be compulsorily acquired and restrictive covenants imposed, and land in relation to which existing easements, servitudes and other private rights the exercise of which is inconsistent with the rights and restrictions acquired pursuant to the Order are to be extinguished. This land is initially to be possessed temporarily, and during any period of temporary possession the exercise of easements, servitudes and other private rights is to be suspended. These plots are listed in Schedule 8 to the Applicant's final preferred dDCO [REP12-013].
- 7.2.23. The Order land which the Applicant seeks to use temporarily and which is also subject to acquisition of the freehold is shown in pink on the land and Crown land plan [REP6-004]. This land is described in the introduction to the Book of Reference [REP8-004] at paragraph 1.1.7 as being land of which the freehold and leasehold are to be compulsorily acquired, and in relation to which it is proposed to extinguish easements, servitudes and other private rights. This land is initially to be possessed temporarily and, during any period of temporary possession the exercise of easements, servitudes and other private rights is to be suspended.

Conclusions

- The Applicant seeks CA powers within its final preferred dDCO [REP10-005] for both land and rights over land.
- The Applicant sought CA powers within the original application [APP-001]. The requirements of sections 123(1) and 123(2) of PA 2008 are therefore satisfied in respect of land (including new rights over land) over which CA was sought in the original application.
- The changes to the application did not seek or require any additional land. The requirements of section 123 of PA2008 are therefore satisfied in respect of all the land and rights over land now sought in the Applicant's final preferred dDCO [REP10-005].

7.3. THE PURPOSES FOR WHICH LAND IS REQUIRED

Application documents

- 7.3.1. The Applicant submitted proposed changes to the application on 30 August 2022 [AS-243], prior to the start of the Examination. Prior to acceptance the ExA sought

clarification on a number of issues [PD-015] and the proposed changes were accepted as non-material changes on 4 October 2022 [PD-016]:

- Change 1: removal of the Burwell National Grid Substation Extension Option 1 from the Scheme;
- Change 2: change to 400kV cabling within the grid connection routes (Cable Routes A and B) to facilitate grid connection Option 3; and
- Change 3: introduction of a 33kV/400kV transformer in place of the 33kV/132kV transformer at each of the onsite substations at Sunnica East A, Sunnica East B and Sunnica West A, with consequent changes to the electrical configuration and therefore their general arrangement, with a shunt reactor introduced at Sunnica East Site B. This change requires the transportation of a 33kV/400kV transformer to each of the onsite substations, and the transportation of a shunt reactor to Sunnica East Site B.

7.3.2. The Applicant submitted further proposed changes to the application during the Examination on 13 January 2023 [REP5-059]:

- Change 1: removal of the Burwell National Grid Substation Extension Option 2 from the Scheme;
- Change 2: the removal of Sunnica West Site B;
- Change 3: the inclusion of two new archaeological offset areas, the first at parcel E05 (the Isleham plane crash site) and the second an area of concentrated archaeological features within parcel W04; and
- Change 4: removal of Cable Route Access L and removal of use of the Campus Access Road to HPUT's premises, being one of the access options for the cable route corridor between what was West Site B and Burwell Substation.

7.3.3. During the Examination, SCC on behalf of the four host local authorities put forward an alternative proposal which would amount to a significant reduction in the size of the Proposed Development. This SCC alternative proposal is discussed in detail in the DCO chapter of this report and would not involve any additional CA.

7.3.4. The purposes for which land (and rights over land) are required are set out and described in the final versions of:

- the land and Crown land plan [REP6-004];
- the Applicant's final preferred dDCO [REP10-005];
- the Statement of Reasons [REP7-005]
- the Book of Reference [REP8-004].

7.3.5. Various method statements, comments and responses were submitted during the Examination which assisted ExA understanding of the application proposals. Other documents were also provided with the application, or produced by way of clarification in the course of the Examination, which assisted our understanding of both the purposes for which land and rights over land are sought and the related issues, including human rights issues:

- the Scheme Description [REP2-022];
- Sunnica East parameter plan, showing land parcels and uses [APP-135];
- Sunnica West parameter plan, showing land parcels and uses [APP-136];
- Cable and vehicle access across Chippenham Park Avenue [REP7-058];
- a land plan and parameter plan overlay [REP7-059]; and
- an Equality Impact Assessment [REP3-020].

- 7.3.6. Paragraph 1.4.1 of the Applicant's Statement of Reasons [REP7-005] describes the main components of the proposed development. In summary, these are:
- Work No. 1: a ground mounted solar photovoltaic generating station with a gross electrical output capacity of over 50 megawatts;
 - Work No. 2: an energy storage facility;
 - Work No. 3: an onsite substation at each of Sunnica East Site A (Work No. 3A), Sunnica East Site B (Work No. 3B), and Sunnica West Site A (Work No. 3C), with a shunt reactor (Sunnica East Site B only);
 - Work No. 4: works to lay electrical cables to connect the onsite substations (Work No. 3), the generating station (Work No. 1) and existing National Grid Burwell Substation, and temporary construction laydown areas;
 - Work No. 6: works to create, enhance and maintain green infrastructure;
 - Work No. 7: temporary construction laydown areas;
 - Work No. 8: warehouse buildings and permanent compounds;
 - Work No. 9: works to existing streets to facilitate access; and
 - Work No. 10: works to create and maintain a stone curlew reserve.
- 7.3.7. Section 5 of the Statement of Reasons [REP7-005] deals with the need for compulsory acquisition of land and rights. Paragraphs 5.2.1 and 5.2.2 explain that the Applicant has already negotiated and completed some property agreements and continues to negotiate with the remaining parties to reach voluntary agreement and states that the Applicant expects agreements with the remaining main landowners of the Sites to be entered into before the end of the Examination.
- 7.3.8. Paragraphs 5.4.8 and 5.4.9 of the Statement of Reasons [REP7-005] state that:
- "The Applicant is in the process of securing the necessary property rights for the Sites by negotiated agreement ... However, it has not been possible to acquire the necessary land and rights by agreement in respect of the underground grid connection cable route and works to facilitate access, despite efforts by the Applicant to do so. Whilst the Applicant will continue to seek to acquire the land and rights by voluntary agreement, it requires the powers of compulsory acquisition sought in order to provide certainty that it will have all the land required to construct and operate the Scheme ..."*
- 7.3.9. At the close of the Examination, the Applicant had been unable to acquire all the land and rights required by agreement: the position is stated in the Schedule of Negotiations and Powers Sought [REP11-004].
- 7.3.10. In paragraph 5.4.1 of the Statement of Reasons [REP7-005] the Applicant explains the need for compulsory acquisition powers and that *"the rights are sought as a fall back position in case the owners (where agreement has been reached) do not grant a lease in accordance with the completed option agreements and to ensure that third party private rights across the Sites can be extinguished to the extent that it is necessary to do so."*
- 7.3.11. Sections 6 and 7 of the Statement of Reasons [REP7-005] set out briefly the Applicant's case for the CA and TP powers requested, and at paragraph 11.1.3 the Applicant concludes that *"It is demonstrated that there is a compelling case in the public interest for the land to be acquired compulsorily."*
- 7.3.12. In paragraph 5.1.5 of the Statement of Reasons [REP7-005], the Applicant concludes that the conditions of section 122 of PA2008 have been met:

“the Applicant considers ... that the conditions in section 122 of the PA 2008, and the considerations set out in the CA Guidance, are satisfied.”

The Order land

- 7.3.13. In section 3 of the Statement of Reasons [REP7-005] the Applicant sets out a brief description of the Order land. This land is shown on the land and Crown land plan [REP6-004] edged red, and each plot is listed and described in the Book of Reference [REP8-004]. The Book of Reference also explains the various categories of Order land, and the various rights being sought and their purpose.
- 7.3.14. Land where the freehold is to be acquired compulsorily is shown coloured pink on the land and Crown land plan [REP6-004] and is required for the construction, operation and decommissioning of :
- solar photovoltaic panels;
 - battery energy storage;
 - onsite substations;
 - a shunt reactor at Sunnica East Site B;
 - associated infrastructure; and
 - landscaping, ecological mitigation and flood protection.
- 7.3.15. The rights to be acquired compulsorily relate mainly to the grid connection routes. This land is coloured blue on the land and Crown land plan [REP6-004]. The standard cable corridor width for each cable route is 100m, within which the typical working width would be located as described in paragraph 5.2.9.d of the Statement of Reasons [REP7-005].
- 7.3.16. In relation to the need for the compulsory acquisition of rights, paragraph 5.2.9.d of the Statement of Reasons [REP7-005] explains that powers for temporary use of such land will be taken prior to acquisition of permanent rights in order to reduce the amount of land affected:
- “Article 27 would allow ... temporary possession of the cable corridor up to a width of circa 100m ... and once it has carried out detailed surveys and installed the cables, to acquire new rights ... only in respect of the relevant strip within that overall corridor in which the permanent easement would be located.”*
- 7.3.17. The Applicant therefore relies upon Articles 20, 27 and 28 in respect of this land, which would also have private rights and restrictive covenants extinguished in accordance with Article 21.
- 7.3.18. As explained in paragraph 2.5.4 of the Statement of Reasons [REP7-005], *“The working width which is required for material laydown and construction equipment is expected to be 30m across the majority of the cable corridor; however, the working width increases to 50m and 100m along limited sections of the cable corridor where particular environmental and engineering constraints exist”*.
- 7.3.19. The working width on the unconstrained parts of the cable routes is hence 30m. This is shown as unconstrained land in Appendix A to the Statement of Reasons [REP7-005].
- 7.3.20. The need for a working width greater than 30m is explained in Appendix A to the Statement of Reasons [REP7-005]. This is shown as constrained land in Appendix A to the Statement of Reasons [REP7-005]. This constrained land requires a working width of 50m and falls into one of five categories:

- Route deviations;
- Obstructions;
- Access limitations;
- The need for horizontal directional drilling (HDD); and
- The presence of adjacent structures.

7.3.21. Further to the constrained land, the Applicant has also identified specific pinch points in Appendix A to the Statement of Reasons [REP7-005] where a working width of up to 100m is required, as follows:

- an area of potential archaeological interest and a hedgerow belt of potential ecological interest immediately to the north of Chippenham Road;
- between Sunnica West A and the A142, where there is a high pressure gas main to be crossed and where there are areas of archaeological interest;
- where HDD will be required to place the cables beneath the A142 and the Bury St Edmunds to Ely railway line;
- land to the west of Broads Road and Factory Road/ Little Fen Drove, where directional drilling will be required and there is limited access; and
- land between Lode Side Drove and Newnham Drove, due to existing underground and overhead cables and uncertainty regarding the location of the connection point at Burwell substation.

7.3.22. In addition to the specific pinch points identified, a working width of 100m will also be required in areas where the Applicant has been unable to obtain information through geophysical survey.

7.3.23. HDD will also be required to take the cable route under the A11 to connect the two parts of Sunnica West A. 50m has been allowed at the northern crossing near La Hogue Farm (plots 10-29 to 10-33) and 100m has been allowed for the southern crossing just north of La Hogue Road (plots 10-12 to 10-17).

7.3.24. Once the cable route has been determined, a permanent easement would be taken over the land required. This is stated in Appendix A to the Statement of Reasons [REP7-005] as being typically between 10m and 20m wide, depending on detailed design and ground conditions.

7.3.25. However, on the approach to the railway crossing the cables will have to be separated into individual cable trenches to pass beneath the railway, so a permanent easement of up to 46m will be required to ensure that the individual cables are the requisite distance apart as they cross under the railway line.

7.3.26. Section 158 of PA2008 gives the Applicant statutory authority and protection to override easements and other rights.

Temporary possession of land

7.3.27. The Order land which the Applicant seeks only to use temporarily is shown in green on the land and Crown land plan [REP6-004]. The only land is plot 21-04, which is shown on sheet 21 of the land and Crown land plan [REP6-004]. It is adjacent to the north west corner of the Mildenhall Road/Freckenham Road junction and is required for the occasional transport of abnormal loads to the Sunnica East A site.

7.3.28. The NPA2017 provisions relating to TP would, in general terms, enhance the rights of APs subject to TP. However, these provisions had not come into force at the time of the application and the Applicant has not sought to incorporate any of them. This

matter was explored during the Examination and is reported on further in the next section of this chapter.

Time limit for exercise of CA powers

- 7.3.29. Under Article 19 the Applicant has not sought to vary the statutory time period for the exercise of CA powers from five years.

Crown land and rights

- 7.3.30. Rights over Crown land are sought so section 135 of PA2008 is engaged. The rights are sought are cable rights in respect of Grid Connection Route A and exclude all interests of the Crown [REP8-004]. The owner of the Crown interest is the Secretary of State for Transport and consent under s135 was confirmed by the Applicant shortly before the close of the Examination [REP11-012].
- 7.3.31. A Crown rights article is included in the dDCO [REP10-005] at Article 45. As it is not possible to authorise the CA of rights over Crown land in the dDCO other than those rights which already exist and are held otherwise than by or on behalf of the Crown, the Applicant is required to negotiate a separate lease with the Crown for any other rights which it requires in the plots which are Crown land.
- 7.3.32. The only Crown land is plot 4-03, which is shown on sheet 4 of the land and Crown land plan [REP6-004]. It is at the junction of Beck Road and Freckenham Road and is required for Grid Connection Route A connecting the Sunnica East A and Sunnica East B sites. It is described in the Book of Reference [REP8-004] as *“bridge carrying public road (Unnamed Road) and access track below, public road (Beck Road), verges, shrubland and overhead electricity lines (north of Freckenham) (excluding all interests of the Crown)”*.
- 7.3.33. The owner of the Crown interest is the Secretary of State for Transport.

Statutory undertakers and protective provisions

- 7.3.34. The powers sought by the Applicant would affect Statutory Undertakers, both in respect of effects on land (PA s127), and in respect of extinguishment of rights and removal of apparatus (PA s138). Protective provisions are included in the dDCO for the benefit of statutory undertakers.
- 7.3.35. Representations were received from Cadent Gas Limited [RR-1176], Environment Agency [RR-1208], National Grid Electricity Transmission plc (NGET) [RR-1289], National Gas Transmission (NGT) (formerly National Grid Gas) [RR-1290], Network Rail Infrastructure Limited (Network Rail) [RR-1292] and South Staffordshire Water [RR-1138].
- 7.3.36. Airwave Solutions Ltd, Anglian Water Services Ltd (Anglian Water), BT Group, Eastern Power Networks, GTC Pipelines, National Highways, Openreach Ltd, Swaffham Internal Drainage Board (IDB) and UK Power Networks did not make a Relevant Representation.
- 7.3.37. Protective Provisions were agreed between the Applicant and both Eastern Power Networks and UK Power Networks prior to the start of the Examination [REP11-004].

Special category land: open space

- 7.3.38. Compulsory acquisition of certain special categories of land is subject to additional provisions in PA2008, including special parliamentary procedure.
- 7.3.39. No land or new rights are sought, either over National Trust land held inalienably or over commons, open space or fuel or field garden allotments as defined in sections 130, 131 and 132 of PA2008.

Funding

- 7.3.40. The application is accompanied by a Funding Statement with supporting appendices [REP7-007]. This document was updated during the Examination to reflect a change in ownership structure, and describes how the Applicant company fits in to the corporate structure and its relationship to the parent company Los Dalton de Pozoseco S.L. (NIF B72617475) ("LDP").
- 7.3.41. Paragraph 2.1.2 of the Funding Statement [REP7-007] states that *"LDP is a company registered in Spain. LDP replaces the previous parent company which was Solaer Holdings and which was referred to in previous drafts of this document. Solaer Holdings was sold to Solarpack and the sale includes projects under development in Spain and Italy but excluded projects in the UK, which were retained. It was necessary to set up a new holding company to hold the remaining assets, which included Sunnica."*
- 7.3.42. The consolidated accounts of parent company LDP are at Appendix A to the Funding Statement [REP7-007]. LDP is a new parent company set up in 2022 whose main activity is the promotion, management and maintenance of solar parks. Construction is not mentioned. On the sixth and final page is certification *"that the information contained in this report is correct and gives a true and fair view of the company."*
- 7.3.43. As stated in paragraph 2.1.3 of the Funding Statement [REP7-007], LDP is itself owned by Bafi Genki S.L. (NIF: B-88497722), CECU Solar S.L. (NIF: B-16251134) and Los Leandros Solares S.L. (NIF: B-16254864).
- 7.3.44. The consolidated accounts of Bafi Genki S.L., CECU Solar S.L. and Los Leandros Solares S.L. are at Appendix B to the Funding Statement [REP7-007]. On the final page of each set of consolidated accounts is certification that *"that the information contained in this report is correct and gives a true and fair view of the company."*
- 7.3.45. Appendix C to the Funding Statement [REP7-007] gives information about projects carried out by previous parent company Solaer Holding.
- 7.3.46. Paragraph 2.2.1 of the Funding Statement [REP7-007] states that *"The current cost estimate for Sunnica Energy Farm is approximately £600 million."*
- 7.3.47. Within this total cost, paragraph 2.4.4 states that *"The Applicant's estimate is that the costs associated with the acquisition of rights in land for the Scheme will amount to £32 million."* but there is no accompanying property cost estimate.
- 7.3.48. Also, the total of current reserves is not explicitly stated. However, in respect of blight, paragraph 2.4.7 of the Funding Statement [REP7-007] states that *"Should any claims for blight arise because of the Application, the Applicant, through Solaer Holding, has sufficient funds to meet the cost of acquiring these interests at whatever stage they are served. However, the Applicant has not identified any interests which it considers could be eligible to serve a blight notice."* It is assumed

that the reference to Solaer above is a typographical error made when the Funding Statement was revised following the sale of Solaer Holdings.

7.3.49. The Funding Statement [REP7-007] does not appear to state explicitly that adequate funding would be available for compulsory acquisition within the statutory time period.

7.3.50. These issues were probed in the Examination.

Human rights and the Public Sector Equality Duty (PSED)

7.3.51. In response to a written question from the ExA [PD-017] the Applicant submitted an Equality Impact Assessment [REP3-020]. This was updated prior to the close of the Examination [REP10-039] in response to a written submission from the Travellers' Community [REP8-060].

Conclusions

- At the close of the Examination, the Applicant had been unable to acquire all the land and rights required by agreement.
- The Secretary of State for Transport wrote to confirm its consent in respect of s135 PA 2008 immediately prior to the close of the Examination [REP11-012].
- At the close of the Examination, there were no representations from statutory undertakers outstanding and not withdrawn.
- No land or new rights are sought, either over National Trust land held inalienably or over commons, open space or fuel or field garden allotments as defined in sections 130, 131 and 132 of PA2008.
- The Applicant does not appear to demonstrate unambiguously that adequate funding would be available for compulsory acquisition within the statutory time period.
- Human rights and PSED matters have been considered by the Applicant.

7.4. LEGISLATIVE REQUIREMENTS

7.4.1. The development consent regime for NSIPs is created by PA2008. References to land include rights over land.

7.4.2. There is no National Trust land or public open space included in the application, so s130, s131 and s132 PA2008 do not apply and are not considered further.

7.4.3. The ExA has taken all relevant legislation and guidance into account in its reasoning. Relevant conclusions are drawn at the end of this Chapter in relation to both CA and TP.

Compulsory Acquisition

7.4.4. Under PA2008 s122, a DCO may only authorise compulsory acquisition if the land:

- is required for the development to which the development consent relates; or
- is required to facilitate or is incidental to that development; or
- is replacement land which is to be given in exchange for the Order land under sections 131 or 132 of PA2008;
- and there is a compelling case in the public interest for the land to be acquired compulsorily.

7.4.5. Under PA2008 s123, the SoS must be satisfied that either:

- the application for the order granting development consent includes a request for compulsory acquisition of the land to be authorised; or
- all persons with an interest in the land consent to the inclusion of the provision; or
- the prescribed procedure has been followed in relation to the land.

7.4.6. It is therefore for the applicant to defend and justify its proposals and to show how the above tests are satisfied for each parcel of land which it intends to acquire compulsorily.

7.4.7. In particular, the applicant should be able to show that:

- the land to be acquired is no more than is reasonably required⁴; and
- the public benefit outweighs the private loss⁵.

7.4.8. Factors to be taken into account in the decision whether or not to include a provision in the DCO authorising the compulsory acquisition of land include whether:

- there is a need for the project;
- all reasonable alternatives to compulsory acquisition, including modifications to the project, have been explored⁶;
- the proposed interference with the rights of those with an interest in the land is
 - for a legitimate purpose; and
 - necessary; and
 - proportionate⁷;
- the applicant has a clear idea of how the land which is to be acquired is to be used⁸;
- there is a reasonable prospect of the requisite funds for compulsory acquisition becoming available⁹; and
- the purposes are sufficient to justify interfering with the human rights of those with an interest in the land affected, with particular reference to Article 1 of the First Protocol of the European Convention on Human Rights¹⁰.

7.4.9. The application must be accompanied by a funding statement which explains how the compulsory acquisition is to be funded. The applicant is also advised to include as much information as is available at the application stage about how the project as a whole is to be funded and the business case¹¹.

7.4.10. The applicant should also be able to show that adequate funding will be available for compulsory acquisition within the statutory time period¹².

⁴ Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land: DCLG September 2013, paragraph 11

⁵ Ibid, paragraph 13

⁶ Ibid, paragraph 8

⁷ Ibid, paragraph 8

⁸ Ibid, paragraph 9

⁹ Ibid, paragraph 9

¹⁰ Ibid, paragraph 10

¹¹ Ibid, paragraph 17

¹² Ibid, paragraph 18

7.4.11. In this case the applicant has not applied to vary the statutory time period from five to seven years so consequently no explanation is necessary¹³.

7.4.12. The applicant must also submit with the application a statement of reasons relating to the compulsory acquisition which justifies the compulsory acquisition sought, explains why there is a compelling case in the public interest and gives reasons for the creation of new rights¹⁴.

Temporary possession

7.4.13. Further to Part 1 of Schedule 5 to PA2008 at paragraph 2, TP powers are capable of being within the scope of a DCO. PA2008 and the associated DCLG CA Guidance do not contain the same level of specification and tests to be met in relation to the granting of TP powers, as by definition such powers do not seek to deprive or amend a person's interests in land permanently.

7.4.14. The Neighbourhood Planning Act 2017 (NPA2017) contains provisions which amount to a codification of new TP practice. In recognition of the greater extent to which TP is being sought by scheme promoters, and also in recognition of the extended durations for which TP powers are being sought, the NPA2017 also provides for enhancements to the rights of Affected Persons (AP) subject to TP.

7.4.15. These enhancements are with a view to ensuring that APs subject to TP enjoy rights to notice and to relevant compensation which are equivalent or proportionate to those rights already available to APs subject to CA. However, at the close of the Examination, the relevant provisions of NPA2017 had not come into force.

Statutory undertakers' land, rights and apparatus

7.4.16. PA2008 s127 provides that statutory undertakers' land or rights that are the subject of a representation by the statutory undertaker which has not been withdrawn may not be acquired unless the relevant test is satisfied.

7.4.17. In relation to statutory undertakers' land, under PA2008 s127(3) the SoS must be satisfied that:

- it can be purchased and not replaced without serious detriment to the carrying on of the undertaking; or
- if purchased it can be replaced by other land belonging to, or available for acquisition by, the undertakers without serious detriment to the carrying on of the undertaking.

7.4.18. In relation to statutory undertakers' rights, under PA2008 s127(6) the SoS must be satisfied that:

- the right can be purchased without serious detriment to the carrying on of the undertaking; or
- any detriment to the carrying on of the undertaking, in consequence of the acquisition of the right, can be made good by the undertakers by the use of other land belonging to or available for acquisition by them.

¹³ Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land: DCLG September 2013, paragraphs 18, 44

¹⁴ Ibid, paragraph 32

- 7.4.19. PA2008 s138 provides that where land is subject to relevant rights or apparatus benefiting a statutory undertaker, that right may only be extinguished and/or the apparatus removed if the SoS is satisfied that the extinguishment or removal is necessary for the purpose of carrying out the development to which the order relates.

Crown land and rights

- 7.4.20. PA2008 s135(1) provides that an Order may only provide for the CA of an interest in Crown land if it is for the time being held otherwise than by or on behalf of the Crown and the appropriate Crown authority consents.
- 7.4.21. PA2008 s135(2) requires the consent of the appropriate Crown authority to any other provision affecting the Crown, without which the Order may not be made.

Human rights

- 7.4.22. The ExA has considered human rights with reference to the European Convention on Human Rights (ECHR) and in particular:
- Article 6 (fair and public hearing);
 - Article 8 (respect for private and family life, home and correspondence); and
 - Article 1 of the First Protocol to the ECHR (peaceful enjoyment of possessions).
- 7.4.23. The ExA has also considered:
- the degree of importance to be attributed to the existing uses of the land which is to be acquired; and
 - the weighing of any potential loss of ECHR rights against the public benefit.

Public Sector Equality Duty (PSED)

- 7.4.24. Section 1 of the Equality Act 2010 requires public authorities, when making decisions of a strategic nature, to have due regard to the desirability of reducing inequalities of outcome. The SoS is a public authority by virtue of Schedule 19 of the Equality Act 2010.
- 7.4.25. Sections 4 to 12 of the Equality Act 2010 identify and define nine protected characteristics. Reference may be made both to persons who have a particular protected characteristic and to those who share a particular protected characteristic.
- 7.4.26. In respect of the advancement of equality, Section 149 of the Equality Act 2010 places a duty (the Public Sector Equality Duty) on public authorities to have due regard to the need to
- Eliminate discrimination, harassment, victimisation and any other prohibited conduct; and
 - Advance equality of opportunity and foster good relations between those who share a particular protected characteristic and those who do not.

7.5. EXAMINATION OF THE CA [AND TP] CASE

Introduction

- 7.5.1. The purpose of the examination of the powers sought by the Applicant is:

- to consider the CA and related provisions within the Applicant's final preferred dDCO;
- to consider whether the conditions relating to the land being required for the proposed development or required to facilitate or be incidental to the proposed development are met; and
- to consider whether there is a compelling case in the public interest for the CA and TP provisions sought by the Applicant.

7.5.2. This section of the CA and TP chapter sets out:

- Whether the application documents meet the requirements of the relevant regulations and guidance;
- Objections and representations made in respect of the powers being sought;
- Issues arising during the Examination;
- The way in which the proposals for CA and TP powers were examined;
- Requests to change the application and include additional land;
- Matters outstanding at the end of the Examination;
- Considerations in respect of the Human Rights Act 1998; and
- Considerations in respect of the Public Sector Equality Duty.

Application documents

7.5.3. The application documents submitted relevant to CA and TP have been described earlier in this chapter, namely

- a land and Crown land plan [APP-006];
- a draft DCO [APP-019];
- an Explanatory Memorandum to the draft DCO [APP-020];
- a Statement of Reasons [APP-022];
- a Funding Statement [APP-023]; and
- a Book of Reference [APP-024].

7.5.4. In particular, the Explanatory Memorandum explains with reference to the Applicant's preferred dDCO the powers sought to construct, operate, maintain and decommission the project; and the Funding Statement [APP-027] explains how the compulsory acquisition is to be funded and includes information about how the project as a whole is to be funded and the business case. It should also indicate how the necessary funding will be secured when required.

- The ExA examined all these documents and found that they met the requirements of the relevant regulations and guidance.

Statutory undertakers

7.5.5. At the close of the Examination, there were no representations from Statutory Undertakers outstanding and not withdrawn.

7.5.6. There were also bodies which did not respond to the Applicant. These matters are discussed later in this section.

Objections and representations made in respect of CA and TP

7.5.7. There were more than 1300 Relevant Representations made, of which over 30 related to CA and TP issues. Further Written Representations were made during the Examination.

- 7.5.8. In question 1.3.2 of its first Written Questions (ExQ1) [PD-017] the ExA requested that the Applicant complete an Objections Schedule giving information about objections to the CA and/or TP proposals, including details of the plot numbers and land or rights sought, and update it at each deadline. At the start of the Examination there were 35 objectors [REP2-038] and at the close of the Examination there were 27 objectors [REP11-014].
- 7.5.9. In questions 1.3.8 and 1.3.9 of its first Written Questions (ExQ1) [PD-017] the ExA requested that the Applicant submit information about the status of objections to the CA and/or TP proposals from statutory undertakers, both in respect of land/rights (PA2008 s127) and in respect of extinguishment of rights and removal of apparatus (PA2008 s138) including details of the plot numbers and land or rights sought, and update it at each deadline. The position at the close of the Examination is at [REP11-016] and [REP11-018].
- 7.5.10. Changes to the application during the Examination meant that some objections were effectively withdrawn as the relevant interests were removed from the application.
- 7.5.11. Other land and rights were acquired by the Applicant by agreement during the Examination.

Outstanding objections

- 7.5.12. At the close of the Examination, all matters had been agreed with some Affected Persons. However, there were 27 outstanding objections. These are set out below in order of RR EL reference number.
- 7.5.13. Most of the outstanding objections related to
- the industrial nature, size and siting of the solar panels, battery energy storage and substations on agricultural land close to several villages;
 - loss of productive agricultural land;
 - safety and proximity of the storage batteries; and
 - the associated safety, health and amenity issues.
- Topics not relating directly to objectors' interests have been considered in the relevant chapter(s) of this report.
- 7.5.14. The ExA has noted and considered carefully all these outstanding objections, and has set out below its response and conclusion in respect of each particular objection.

1 John James [RR-0018]

Location:	Brookside Stud, Badlingham.
Interests:	Part 1 freeholder.
Plots:	CA of subsoil rights over Plots 7-06, 7-07.
Objection:	Safety of battery storage immediately adjacent to his stud; mental health; loss of customers; collapse of business; loss of productive agricultural land: also [REP2-165].
Status summary:	The objection has not been withdrawn.

7.5.15.

John James expands on his RR in his Written Representation [REP2-165] with particular reference to the lack of response from the Applicant in respect of

- i. The safety and mental health effects of construction, solar panels and BESS on him, his family and also his high value bloodstock which occupies land immediately adjacent to Sunnica East Site B;
 - ii. the need for round the clock access along Elms Road (the main access to Sunnica East Site B) to transport mares to and from stud;
 - iii. the need for sustainable agricultural land; and
 - iv. solar panel components, manufacture, construction and disposal are not green.
- The ExA notes the objection. The rights sought by the Applicant relate to the use of Elms Road to access the Sunnica East Site B site and to the subsurface cable which will remain in the ground after decommissioning, and the ExA is satisfied that the proposed interference with the subsoil rights is proportionate. The ExA concludes that the CA tests are met in respect of John James's rights over Plots 7-06 and 7-07.

2 Dr Harry Sidebottom [RR-0203]

Location:	Immediately east and north of the Horseracing Forensic Laboratories and Biggin Stud Farm, Newmarket Road, Fordham.
Interests:	Parts 1, 2 and 3 freeholder and occupier rights.
Plots:	CA of access and other rights over Plots 16-04, 16-08, 16-09, 16-10, 16-11, 16-12, 16-13.
Objection:	The proposal by Sunnica would ruin over 2,000 acres of countryside and have a catastrophic effect on the lives of the inhabitants of several villages.
Status summary:	Property agreement negotiations at an advanced stage. The objection has not been withdrawn.

7.5.16.

Dr Harry Sidebottom made a Relevant Representation [RR-0203].

- The ExA notes the objection. The rights sought by the Applicant relate to access and to the subsurface cable which will remain in the ground after decommissioning, and the ExA is satisfied that the proposed interference with the freeholder and occupier rights is proportionate. The ExA concludes that the CA tests are met in respect of Dr Harry Sidebottom's interests in Plots 16-04, 16-08, 16-09, 16-10, 16-11, 16-12, 16-13.

3 Lisa Sidebottom [RR-0222]

Location:	Immediately east of the Horseracing Forensic Laboratories and Biggin Stud Farm, Newmarket Road, Fordham.
Interests:	Parts 1, 2 and 3 rights.
Plots:	CA of access rights over Plot 16-04.
Objection:	The use of good agricultural land. Destroying the beautiful countryside. The possible danger from the large batteries close to villages.

Status summary: Property agreement negotiations at an advanced stage.
The objection has not been withdrawn.

7.5.17. Lisa Sidebottom made a Relevant Representation [RR-0222].

- The ExA notes the objection. The rights sought by the Applicant relate to the subsurface cable which will remain in the ground after decommissioning, and the ExA is satisfied that the proposed interference with the Part 1,2 and 3 rights is proportionate. The ExA concludes that the CA tests are met in respect of Lisa Sidebottom's interests in Plot 16-04.

4 Susan Chapman [RR-0287]

Location: Burwell.
Interests: Parts 1, 2 and 3 freeholder and occupier rights.
Plots: CA of rights over Plots 18-09 (Category 2), Plots 18-11, 18-12 and 18-14 (freeholder) and Plot 18-13 (freeholder and occupier).
Objection: Lives in Burwell on a rural farm with horse paddocks. Does not want the cable to go through her land and disturb the natural habitat of hundreds of wild birds and water voles etc.
Status summary: The objection has not been withdrawn.

7.5.18. Susan Chapman made a Relevant Representation [RR-0287].

- The ExA notes the objection. The rights sought by the Applicant relate to access and to the subsurface cable which will remain in the ground after decommissioning, and the ExA is satisfied that the proposed interference with the freeholder and occupier rights is proportionate. The ExA concludes that the CA tests are met in respect of Susan Chapman's interests in Plots 18-09, 18-11, 18-12, 18-13 and 18-14.

5 George Gibson [RR-0290]

Location: Near Fordham, west of A142 and railway towards B1102 and Burwell.
Interests: Part 1 freeholder.
Plots: CA of rights over Plots 16-18, 16-19, 16-20, 17-01, 17-02.
Objection: Loss of prime agricultural land from food production; battery storage.
Status summary: The objection has not been withdrawn.

7.5.19. George Gibson made a Relevant Representation [RR-0290].

- The ExA notes the objection. The rights sought by the Applicant relate to access and to the subsurface cable which will remain in the ground after decommissioning, and the ExA is satisfied that the proposed interference with

the freeholder rights is proportionate. The ExA concludes that the CA tests are met in respect of George Gibson's interests in Plots 16-18, 16-19, 16-20, 17-01 and 17-02.

6 Louise Andreasen [RR-0417]

Location:	Red Lodge/Badlingham.
Interests:	Part 1 occupier.
Plots:	CA of rights over Plot 8-02.
Objection:	Huge industrial scale, loss of agricultural land, clean-up in 40 years, battery safety and contamination, impact on wildlife and villages: also [REP2-183].
Status summary:	The objection has not been withdrawn.

7.5.20. Louise Andreasen made a Relevant Representation [RR-0417].

- The ExA notes the objection. The rights sought by the Applicant relate to the subsurface cable which will remain in the ground after decommissioning, and the ExA is satisfied that the proposed interference with the occupier rights is proportionate. The ExA concludes that the CA tests are met in respect of Louise Andreasen's interest in Plot 8-02.

7 Elizabeth Mary Garget [RR-0568]

Location:	Red Lodge/Badlingham.
Interests:	Part 1 freeholder and occupier.
Plots:	CA of rights over Plots 8-02, 8-03.
Objection:	Size, loss of good productive farmland, battery safety near houses and schools, impact on wildlife, visual appearance, villages hemmed in, traffic, impact on residents, clean-up: also [REP2-133], [REP2-133a].
Status summary:	The objection has not been withdrawn.

7.5.21. Mrs Garget made further representations during the Examination [REP2-133] [REP2-133a] giving further detail about her objections and also in respect of dealings with the Applicant, lack of detail, the cables being left in the ground after the panels are removed and the impact on carriage driving events.

- The ExA notes the objection. The rights sought by the Applicant relate to the subsurface cable which will remain in the ground after decommissioning, and the ExA is satisfied that the proposed interference with the freeholder and occupier rights is proportionate. The ExA concludes that the CA tests are met in respect of Mrs Garget's interests in Plots 8-02 and 8-03.

8 Priscilla McDonagh [RR-0723]

Location:	Elms Road, Red Lodge.
Interests:	Part 1 freeholder.
Plots:	CA of rights over Plot 7-06.

Objection: Battery safety and proximity, loss of good productive farmland, lack of consultation.
Status summary: The objection has not been withdrawn.

7.5.22. Priscilla McDonagh made a Relevant Representation [RR-0723].

- The ExA notes the objection. The rights sought by the Applicant relate to the Elms Road access to the Sunnica East Site B site and to the subsurface cable which will remain in the ground after decommissioning, and the ExA is satisfied that the proposed interference with the freeholder rights is proportionate. The ExA concludes that the CA tests are met in respect of Priscilla McDonagh's interests in Plot 7-06.

9 Hannah Murphy [RR-0780]

Location: Chippenham.
Interests: Part 1 freeholder.
Plots: CA of rights over Plot 9-02.
Objection: Unsightly, blight, detrimental to local businesses, battery safety.
Status summary: The objection has not been withdrawn.

7.5.23. Hannah Murphy made a Relevant Representation [RR-0780].

- The ExA notes the objection. The rights sought by the Applicant relate to the subsurface cable which will remain in the ground after decommissioning, and the ExA is satisfied that the proposed interference with the freeholder rights is proportionate. The ExA concludes that the CA tests are met in respect of Hannah Murphy's interests in Plot 9-02.

10 Huw Neal [RR-0870]

Location: Burwell.
Interests: Part 1 freeholder and occupier.
Plots: CA of rights over Plots 19-08, 19-09, 19-10.
Objection: Equestrian facility horse welfare; no response from Applicant.
Status summary: The objection has not been withdrawn.

7.5.24. Huw Neal made a Relevant Representation [RR-0870].

- The ExA notes the objection. The rights sought by the Applicant relate to the subsurface cable which will remain in the ground after decommissioning, and the ExA is satisfied that the proposed interference with the freeholder and occupier rights is proportionate. The ExA concludes that the CA tests are met in respect of Huw Neal's interests in Plots 19-08, 19-09 and 19-10.

11 Ian Garget [RR-0871]

Location:	Red Lodge/Badlingham.
Interests:	Parts 1, 2 and 3 rights.
Plots:	CA of rights over Plot 8-02.
Objection:	Size, industrial landscape, battery safety, inefficient cable route, cleanup, wildlife, traffic: also [REP2-145].
Status summary:	The objection has not been withdrawn.

7.5.25. Mr Garget made further representations during the Examination [REP2-145] giving further detail about loss of good agricultural land, ALC and the impact on use of the countryside and on carriage driving events.

- The ExA notes the objection. The rights sought by the Applicant relate to the subsurface cable which will remain in the ground after decommissioning, and the ExA is satisfied that the proposed interference with the Part 1, 2 and 3 rights is proportionate. The ExA concludes that the CA tests are met in respect of Ian Garget's interests in Plot 8-02.

12 Joanna Reeks [RR-0881]

Location:	Dane Hill Farm, La Hogue Farm.
Interests:	Parts 1, 2 and 3 rights.
Plots:	CA of all interests and rights in Plots 10-06, 10-07, 10-08, 10-09, 10-10, 10-11, 11-05 and 11-06. CA of rights over Plots 10-02, 10-03, 10-05, 10-12, 10-17, 10-19, 10-28, 10-29, 10-33, 11-01, 11-02, 11-03, 11-04.
Objection:	Size, landscaping, loss of farmland, cleanup, felling of trees: also [REP2-161] [REP7-081].
Status summary:	The objection has not been withdrawn.

7.5.26. Joanna Reeks made a written representation [REP2-161] giving further detail about the size of the proposed development, inadequacy of landscaping, strength of the Applicant's negotiating position, loss of farmland, proposals for site clean-up after decommissioning, felling of trees and impact on farm business; and also the Applicant's *"incredibly aggressive and intimidating"* behaviour.

7.5.27. Joanna Reeks made further representations at CAH2 [REP7-081] and said that

- she does not understand the need for the land as it is separated from the rest of the proposed development by a major highway, the A11;
- she does not want the land, which is part of an arable farming business, to be lost to solar panels; and
- she does not think in respect of her land that there is compelling evidence of the need for her land or that the public benefits outweigh the private loss.

7.5.28. The ExA notes the objection and the detailed submissions, which relate chiefly to the proposed acquisition of the freehold of Plots 10-06, 10-07, 10-08, 10-09, 10-10 and 10-11, and access and cable rights over Plots 10-02, 10-03, 10-05, 10-12, 10

17, 10-19, 10-28 and 10-29. The proposed freehold acquisition relates to the installation and operation of solar panels over the lifetime of the proposed development, and the proposed acquisition of rights relates to access and to the subsurface cable which will remain in the ground after decommissioning.

- 7.5.29. The ExA notes from all these submissions and from site inspections (location A [EV-003] and location 8 [EV-013]) that
- The land is to the east of the A11;
 - The land is separated from the remainder of the proposed development by the A11;
 - consequently there are two HDD cable routes under the A11 connecting it with the remainder of Sunnica West Site A;
 - The land is currently productively farmed;
 - The Applicant proposes to acquire all interests and rights in the land, and thereby take it out of agricultural use permanently; and
 - the objection had not been withdrawn at the close of the Examination.
- 7.5.30. The ExA also notes the extent of Plot 10-33 and that the southern part of that plot relates to the cable route connecting Plots 10-06, 10-07, 10-08, 10-09, 10-10 and 10-11 (the detached part of Sunnica West Site A to the east of the A11) with the rest of the Proposed Development.
- 7.5.31. The ExA has carefully considered and taken into account all the submissions made and the Applicant's responses, and finds that
- the land is productively farmed, and that compulsory acquisition of all interests and rights will mean that Joanna Reeks will no longer be able to continue farming the land;
 - the land is separated from the remainder of the proposed development;
 - complex connections under the A11 dual carriageway will be required to connect this part of the proposed development to the remainder of the proposed development.
 - even if the land were to be returned after decommissioning, the loss of productive farmland over the intervening 45-50 years (construction, operation and decommissioning) would be effectively permanent, because
 - the farm might no longer be a going concern after two generations without Joanna Reeks and/or her successors being able to enjoy the use of the land; and
 - there would be no guarantee that after decommissioning the land would be of the same soil quality or capable of producing the same or similar quality of crops;
- 7.5.32. Taking all these matters together, and giving careful consideration to the degree of importance to be attributed to the existing farming operation, and to the need to weigh any potential infringement of individual ECHR rights against the public benefit, the ExA concludes that
- the need for the land in the public interest in terms of the cost of connections and installation of the solar arrays together with the loss of farming operations and value to the nation of food production set against the energy produced over the lifetime of the project has not been established; and
 - the Applicant's purposes in respect of farmland Plots 10-06, 10-07, 10-08, 10-09, 10-10 and 10-11 (the detached part of Sunnica West Site A to the east of

the A11) are not proportionate or sufficient to justify interfering with the human rights of those with an interest in them.

7.5.33. Having also noted above that Plot 10-33 is required both for connecting the detached part of Sunnica West Site A to the remainder of the Proposed Development and for connecting Sunnica West Site A to Sunnica East Site B, the ExA finds that the rights sought in respect of Plot 10- 33 amount to over-acquisition as the need for the part of that plot connecting Joanna Reeks’s farmland plots to the remainder of the proposed development has not been established.

7.5.34. Consequently,

- the ExA is not satisfied that the case for including all interests and rights in farmland Plots 10-06, 10-07, 10-08, 10-09, 10-10 and 10-11 in the application is made out;
- the ExA is not satisfied that the case for seeking rights in plots 10-01, 10-02, 10-03, 10-04 and 10-05 in respect of access to the above farmland plots from Dane Hill Road is made out;
- the ExA is not satisfied that the case for acquiring cable rights in respect of Plots 10-12, 10-13, 10-14, 10-15, 10-16, 10-17, 10-18, 10-19, 10-20, 10-29, 10-30, 10-31 and 10-32 in order to connect the land to the remainder of the Proposed Development is made out; and
- The ExA is not satisfied that the case for acquiring rights in Plot 10-33 is made out, save for that portion of Plot 10-33 still needed to connect Sunnica East Site B to the remainder of Sunnica West Site A.

7.5.35. Therefore the ExA concludes that

- in relation also to CCC’s objection below that the case for acquiring the freehold of Plots 11-05 and 11-06 is not made out.
- In relation to Plots 11-05 and 11-06 the acquisition of rights is adequate as use of the land is only required for site access purposes during construction and infrequently during operation: because such rights would only be exercised during construction and decommissioning and infrequently during operation, the ExA is satisfied that the proposed interference is proportionate and justified.
- the CA tests are not met in respect of Joanna Reeks’s interests in farmland Plots 10-06, 10-07, 10-08, 10-09, 10-10 and 10-11.
- Consequently, the need to acquire access and cable rights in respect of Plots 10-02, 10-03, 10-05, 10-12, 10-17, 10-19, 10-28, 10-29 and 10-33 is not made out.
- There remains a need to acquire cable and access rights in Plots 11-01, 11-03 and 11-04 so the CA case is made out in relation to these plots.

13 East Cambridgeshire District Council (ECDC) [RR-0998]

Location:	Burwell.
Interests:	Parts 1, 2 and 3 rights.
Plots:	CA of rights over Plot 18-16.
Objection:	Cultural Heritage; Ecology and Nature Conservation; Flood Risk, Drainage and Water Resources; Landscape and Visual Amenity; Noise and vibration; Socio-Economics and Land Use; Transport and Access; Air Quality; Human Health; Battery Fire Safety; Policy: also [REP2-131].

Status summary: The objection has not been withdrawn.

- 7.5.36. ECDC submitted a written representation [REP2-131] referring to the joint LIR and saying that “... *given the size of the Scheme, the period of time it will be in situ, its overall poor quality, the detrimental harm to the long term landscape would not be outweighed by the benefit of renewable energy. The following sections of the development should be removed from the development as a landscaping scheme would not mitigate against the long term harm:*
- *E05*
 - *W03 – W12”.*
- 7.5.37. The sections referred to and the relevant plots are shown on the Land Plan and Parameter Plan overlay [REP7-059]. The affected plots are 2-02, 3-01, 9-07, 9-08, 9-09, 10-21, 10-22, 11-07, 11-08, 12-02, 13-01, 13-02, 13-03, 13-04, 14-01, 14-02 and 14-03.
- 7.5.38. ECDC also said in its written representation [REP2-131] that “*It is considered that the developer has failed to provide adequate reports or understanding of the potential impact on biodiversity within the local area/development site. Specifically it is recommended the following parcels should be removed from the development as this would lead to the long term detrimental harm to biodiversity within the district to Chippenham Fen (Ramsar and SSSI) and Snailwell Meadows (SSSI):*
- *W01 – W02”.*
- 7.5.39. The parcels referred to are shown on the Parameter Plan [APP-136] and the relevant plots are shown on the Land Plan [AS-003]: they are not shown on the Land Plan and Parameter Plan overlay [REP7-059] as they were removed from the proposed development during the Examination.
- 7.5.40. ECDC went into further detail in its written representation [REP2 131] in respect of its other objections, in particular in respect of battery fire safety, the horseracing industry and a request for an independent ALC survey, and also said that “*East Cambridgeshire District Council would also like to draw to the attention of the Examining Authority that the draft EN-3 suggests a Solar Farm of this scale should be typically limited to a lifetime of 25 years while the developer is seeking a 40 year consent without exceptional justification. If the Secretary of State was to approve the application it is requested it is limited to a 25 year lifetime in accordance with emerging national policy.*”
- The ExA notes the objection in respect of Plot 18-16. The rights sought by the Applicant relate to access and to the subsurface cable which will remain in the ground after decommissioning, and because the rights are only required during construction and decommissioning and infrequently during operation the ExA is satisfied that the proposed interference with ECDC’s rights is proportionate. The ExA concludes that the CA tests are met in respect of ECDC’s interests in Plot 18-16.

14 Graham Reeve [RR-1009]

Location: Burwell.

Interests: Parts 1, 2 and 3 freehold, tenant, occupier.

Plots:	CA of rights over Plots 20-09, 20-10, 20-11, 20-12, 20-13, 20-14,20-15, 20-17, 20-18, 20-20, 20-22, 20-23, 20-24, 20-26, 20-27, 20-28, 20-29.
Objection:	Use of prime arable land, bullying and misleading tactics by the Applicant.
Status summary:	The objection has not been withdrawn.

7.5.41. Graham Reeve made a Relevant Representation [RR-1009].

- The ExA notes the objection. The rights sought by the Applicant relate to access, to the subsurface cable and to the proposed connection to the existing substation at Burwell. The cable will remain in the ground after decommissioning, and the precise connection point is not yet known. The ExA is therefore satisfied that the proposed interference is proportionate. The ExA concludes that the CA tests are met in respect of Graham Reeve's interests in Plots 20-09, 20-10, 20-11, 20-12, 20 13, 20-14, 20-15, 20-17, 20-18, 20-20, 20-22, 20-23, 20-24, 20-26, 20-27, 20-28 and 20-29.

15 Bryan Cave Leighton Paisner for Federated Hermes Property Unit Trust (HPUT A Ltd and HPUT B Ltd) (FHPUT) [RR-1017]

Location:	Snailwell.
Interests:	Part 1 freehold.
Plots:	CA of rights over Plots 16-03, 16-04, 16-07.
Objection:	Impacts on LGC Campus and expansion, inadequate information: also [REP2-144].
Status summary:	Protective provisions agreed, property agreement at an advanced stage. The objection has not been withdrawn.

7.5.42. Further to its relevant representation, Bryan Cave Leighton Paisner submitted a written representation [REP2-144] on behalf of HPUT A Ltd and HPUT B Ltd, the freeholders of the LGC Campus. The Campus is described as one of the largest bioanalytical centres in the world, specialising in drug development solutions and in sport and specialised analytical services (it includes the only International Federation of Horseracing Authorities Reference Laboratory in the UK), and conducting sensitive round-the-clock operations with planning permission for expansion. The written representation objected to the rights sought and requested that the Applicant consider alternative routes, highlighting lack of engagement by the Applicant and consequent concerns over transport, access and parking impacts and also noise and vibration [REP2-144a] [REP2-144b].

7.5.43. During the Examination, plots 16-05 and 16-06 relating to access to the cable route were removed from the Order land. Consequently by the close of the Examination the occupiers of the site, Drug Development Solutions Ltd, LGC Ltd and LGC Bioresearch Ltd, had withdrawn their objection as they no longer held an interest in any Order land [AS-329].

7.5.44. At the close of the Examination, FHPUT wrote to the ExA to confirm that protective provisions had been agreed but that it had not been possible to complete the option agreement and easement [REP11-029]. They therefore maintained their objection.

- The ExA notes the objection. The rights sought by the Applicant relate to the subsurface cable which will remain in the ground after decommissioning, and the ExA is satisfied that the proposed interference with HPUT's rights is proportionate. The ExA concludes that the CA tests are met in respect of HPUT's interests in Plots 16-03, 16-04 and 16-07.

16 Kathryn Jane James [RR-1028]

Location:	Brookside Stud, Badlingham.
Interests:	Part 1 freeholder.
Plots:	CA of subsoil rights over Plots 7-06, 7-07.
Objection:	Battery safety, traffic, size of project, loss of productive agricultural land, public footpath closures, wildlife impacts, lack of consultation: also [REP2-174].
Status summary:	The objection has not been withdrawn.

7.5.45.

In her written representation, Kathryn Jane James also highlights mental health impacts, access, the impact of noise on foaling, evacuation of livestock and the consequent impacts on livelihood.

- The ExA notes the objection. The rights sought by the Applicant relate to the use of Elms Road to access the Sunnica East Site B site and to the subsurface cable which will remain in the ground after decommissioning, and the ExA is satisfied that the proposed interference with the subsoil rights is proportionate. The ExA concludes that the CA tests are met in respect of Kathryn Jane James's rights over Plots 7-06 and 7-07.

17 Katherine Stewart [RR-1045]

Location:	Freckenham.
Interests:	Part 1 freeholder.
Plots:	CA of rights over Plot 21-01.
Objection:	Impact on horseracing industry and productive farmland, unsuited to industry, impact on employment: also [REP2-175].
Status summary:	The objection has not been withdrawn.

7.5.46.

Katherine Stewart's written representation also highlights the history and heritage of Newmarket as HQ of the international racing world, including the gallops and their amenity value, and impacts on the horseracing industry workforce.

- The ExA notes the objection. The rights sought by the Applicant relate to the use of The Street, North Street and Elms Road for crane access to the Sunnica East Site A site, and the ExA is satisfied that the proposed interference with the subsoil rights is proportionate. as use is likely to be only during construction and in any case to be infrequent. The ExA concludes that the CA tests are met in respect of Katherine Stewart's rights over Plot 21-01.

18 Lesley Haird [RR-1054]

Location:	Dane Hill Road, Kennett.
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Interests:	Part 1 freeholder.
Plots:	CA of subsoil rights over Plot 10-02.
Objection:	Impact on housing and families, battery storage, unsuitable area, health, wildlife, traffic.
Status summary:	The objection has not been withdrawn.

7.5.47. Lesley Haird made a Relevant Representation [RR-1054].

- The ExA notes the objection. The rights sought by the Applicant relate to the use of Dane Hill Road to access the eastern part of Sunnica West Site A, where the Applicant proposes to acquire the freehold of Plots 10-06, 10-07, 10-08, 10-09, 10-10 and 10-11 compulsorily. As discussed in relation to submissions made by Joanna Reeks, the ExA has given careful consideration to the degree of importance to be attributed to the existing uses of farmland Plots 10-06, 10-07, 10-08, 10-09, 10-10 and 10-11, and to the need to weigh any potential loss of ECHR rights against the public benefit, and concludes that the Applicant's purposes in respect of these plots are not proportionate or sufficient to justify interfering with the human rights of those with an interest in them.
- Consequently, as the need to acquire rights in respect of plots 10-01, 10-02, 10-03, 10-04 and 10-05 relates solely to access to farmland plots 10-06, 10-07, 10-08, 10-09, 10-10 and 10-11, this need falls away, and the ExA hence concludes that the CA tests are therefore not met in respect of Lesley Haird's rights over Plot 10-02.

19 Nick Wright for A G Wright and Son (Farms) Ltd [RR-1102]

Location:	Badlingham.
Interests:	Part 1 freeholder.
Plots:	CA of rights over Plots 8-03, 8-04, 8-05, 8-06, 9-01.
Objection:	Lack of detail throughout, too large, strung out, industrialising the countryside, incorrect ALC assessment, carbon negative, horseracing industry, view from Limekilns, unsafe riding on Icknield Way, battery storage safety: also [REP2-097], [REP2-097a to af], [REP8-053] and [REP10-057].
Status summary:	The objection has not been withdrawn.

7.5.48. An extensive written representation was submitted [REP2-097] with supporting appendices [REP2-097a to af] objecting because

- i. the site is too large and in the wrong place;
- ii. the consultation has deliberately lacked detail;
- iii. of the loss of productive agricultural land; and
- iv. although the representation supports the need for net zero, *“this target has to be achieved by supporting good renewable projects. A government target does not give (the Applicant) the right to inflict an inappropriate scheme on communities and the country as a whole.”* and *“Cranfield University have (sic) confirmed (that) the scheme is a carbon emitter.”*: also *“we want good solar not bad solar. Sunnica is bad solar.”*

7.5.49. The representation then explained the background to the proposed development on the basis of a grid connection being secured at Burwell followed by a search for land with a willing landowner (this landowner having been approached but unwilling) irrespective of other considerations such as integration into the landscape.

7.5.50. The representation also highlights problems with

- v. cycling on narrow roads with construction traffic;
- vi. riding on the U6006 between solar panels;
- vii. interconnection between villages;
- viii. carbon footprint, citing the Cranfield University report;
- ix. sheep grazing under the panels;
- x. ineffective mitigation;
- xi. damage to soils;
- xii. 40 plus years is not temporary as when decommissioned will be brownfield;
- xiii. The presence of solar panels, BESS and substations will make the area vulnerable to further industrialisation;
- xiv. Excellent very profitable agricultural productivity without irrigation, particularly potatoes and sugar beet;
- xv. Light land more resilient to wetter climate;
- xvi. The Daniel Baird (DBSC) report on BMV produced for the Applicant [APP-115];
- xvii. Horse livery business;
- xviii. Compulsory access to A G Wright and Son (Farms) Ltd land, including non-disclosure agreement.

7.5.51. A G Wright and Son (Farms) Ltd also made submissions at [REP8-053] commenting in detail on the Applicant's (DBSC) report relating to agricultural land classification (ALC), with a reasoned commentary on auger boring, soil inspection pits, moisture balance calculations, irrigation and productivity. The submissions also cited the Ripon Services appeal decision of 13 April 2021, saying that the DBSC report produced had been found to be largely unconvincing by the Inspector, submitting that the same applied in this instance, and stating that the 2017 NE predictive BMV assessment should be used to establish the likelihood of best and most versatile (BMV) land, noting that this means that the effects of the Proposed Development "*should therefore be assessed on the basis that 82% of the site is BMV*".

7.5.52. A further written submission from A G Wright and Son (Farms) Ltd [REP10-057] also related to ALC. The submission comments on the further letter from Natural England (NE) [REP8-057] and on NE's approach, explaining in detail why NE's approach is considered to be "... *flawed and not fit for purpose*", and submitting that it has been illogical and should not be relied upon by the ExA. Particular reference was made to NE's acceptance of the Applicant's (DBSC) report and to ALC as a key issue in planning terms.

- The ExA notes the objection and the detailed submissions made. However, the rights sought by the Applicant all relate to the subsurface cable which will remain in the ground after decommissioning, and the ExA is therefore satisfied that the proposed interference with the freeholder and occupier rights is proportionate. The ExA concludes that the CA tests are met in respect of A G Wright and Son (Farms) Ltd's interests in Plots 8-03, 8-04, 8-05, 8-06 and 9-01.

20 Bidwells for B C Mitcham Farms Ltd [RR-1170]

Location: East of Ness Road, Burwell.

Interests:	Parts 1, 2 and 3 rights.
Plots:	CA of rights over Plots 17-03, 18-01.
Objection:	Lack of information on working practices, degree of variation in rights to be acquired, lack of incentive to negotiate: also [REP2-255].
Status summary:	The objection has not been withdrawn.

7.5.53. These objections were elaborated on in a written representation submitted on behalf of the Mitcham family by Bidwells [REP2-255].

- The ExA notes the objection. The rights sought by the Applicant relate to the subsurface cable which will remain in the ground after decommissioning, and the ExA is therefore satisfied that the proposed interference with B C Mitcham Farms Ltd rights is proportionate. The ExA concludes that the CA tests are met in respect of B C Mitcham Farms Ltd’s interests in Plots 17-03 and 18-01.

21 Cambridgeshire County Council (CCC) [RR-1178]

Location:	Red Lodge, Chippenham, Snailwell, Fordham and Burwell.
Interests:	Parts 1, 2 and 3 freeholder and occupier.
Plots:	CA of all interests and rights including freehold of Plots 9-07, 11-05, 11-06, 13-01. CA of rights over Plots 8-06, 9-03, 9-04, 9-05, 10-02, 10-19, 10-24, 10-26, 11-02, 11-03, 11-04, 14-05, 14-08, 15-02, 15-03, 16-10, 16-11, 16-13, 16-15, 16-16, 16-17, 16-18, 18-02, 18-03, 18-04, 18-05, 18-06, 18-07, 18-11, 18-12, 18-15, 18-16, 18-18, 19-12, 19-13, 19-14, 20-01, 20-03, 20-12, 20-13, 20-15, 20-21, 22-01.
Objection:	Cultural heritage; ecology and nature conservation; flood risk, drainage and water resources; landscape and visual amenity (including Limekilns); socioeconomic and land use (ALC and loss of food production); transport and access (insufficient information); air quality and human health (including battery fire safety); also detailed transport comments: also [REP2-112].
Status summary:	Protective provisions for the benefit of the drainage authority agreed. The objection has not been withdrawn.

7.5.54. The CCC written representation [REP2-112] expands on the objections cited above and concludes at paragraphs 1.5 and 1.8 that it *“does not support the proposals as they currently stand and considers that development consent should not be granted.” ... the main topics of concern for the Council are*

- Cultural Heritage*
- Ecology and Nature Conservation*
- Flooding and drainage*
- Land Use and Agriculture*
- Transport and Access*

Public rights of way (PRoW)”

- 7.5.55. The common thread of CCC’s representations is that the application is incomplete and inadequate, particularly in respect of mitigation.
- 7.5.56. Also, at paragraph 5.1, it says *“As stated in the LIR, the Council is concerned the Agriculture Baseline Report (Appendix 12B) does not appear to be consistent with local knowledge or evidence from neighbouring farms. A review of Baird’s report, commissioned by the Action Group but not yet published, has highlighted a number of apparent issues, with the surveys and conclusions. It is noted the Action Group employed an agricultural specialist Cambridgeshire County Council uses to assess planning applications where agricultural assessments need to be verified, therefore the Council considers this credible evidence.”*
- 7.5.57. At paragraph 5.2 it is noted that *“The applicant has excluded the assessment of the soils and agricultural land quality of the cable route, and it is clear in the Draft National Policy Statement for Renewable Energy Infrastructure (EN-3) that soil surveys should be extended to the underground cabling and access routes ...”,* at paragraph 5.3 that *“the capability of the soils to produce high yield crops ... seems to be understated”* and at paragraph 5.4 that *“The loss of land capable of food production is less well documented by Sunnica and should be assessed.”*
- 7.5.58. The Applicant seeks the freehold and rights over
- Plots 9-07, 11-05 and 11-06, which are the highway verge of La Hogue Road, to be used for access to Sunnica West Site A; and
 - Plot 13-01 which forms part of the southern approach to Chippenham Park RPG and would form part of Sunnica West Site A.
- 7.5.59. The Applicant also seeks rights over
- Plots 8-06, 10-19, 15-03, 16-10, 16-11, 16-16, 16-17, 16-18, 18-07, 18-15, 18-18, 20-01 20-03, 20-12, which relate to the subsurface cable which will remain in the ground after decommissioning;
 - Plots 9-03, 9-05, 10-02, 10-24, 10-26, 11-02, 11-04, 14-05, 16-13, 18-05, 18-06, 19-14, which relate to access to the sites and/ or to the cable route;
 - Plots 9-04, 11-03, 14-08, 15-02, 16-15, 18-02, 18-03, 18-04, 18-11, 18-12, 18-16, 19-12, 19-13, and 22-01, which relate both to access to the sites and/ or to the cable route, and also to the subsurface cable which will remain in the ground after decommissioning; and
 - Plots 20-13, 20-15 and 20-21, which relate to substation connection and access rights.
- 7.5.60. The ExA notes the objection, and that the Applicant generally only seeks rights rather than the freehold over land required for access or for the cable route and connection.
- 7.5.61. As discussed in relation to submissions made by Joanna Reeks, the ExA has given careful consideration to the degree of importance to be attributed to the existing uses of farmland Plots 10-06, 10-07, 10-08, 10-09, 10-10 and 10-11, and to the need to weigh any potential loss of ECHR rights against the public benefit, and concludes that the Applicant’s purposes in respect of these plots are not proportionate or sufficient to justify interfering with the human rights of those with an interest in them.

- Consequently, the ExA is not satisfied that the case for seeking rights in plots 10-01, 10-02, 10-03, 10-04 and 10-05 in respect of access to the farmland plots from Dane Hill Road is made out, so the need to acquire rights in respect of plots 10-01, 10-02, 10-03, 10-04 and 10-05 falls away, and the ExA hence concludes that the CA tests are not met in respect of Cambridgeshire County Council's rights over Plot 10-02.
- Further, the ExA is not persuaded of the need for CA of the freehold title of Plots 9-07, 11-05 and 11-06, which are listed in the BoR as "*verge and hedgerow (La Hogue Road)*", but concludes that the CA tests are met in respect of the necessary access rights.
- The ExA is otherwise satisfied that the proposed interference with CCC interests and rights is proportionate. The ExA concludes that the CA tests are met in respect of all CCC's remaining interests in the other plots listed above.

22 Bidwells for M J Mitcham as Trustee of the Heritage SIPP [RR-1261]

Location:	Broads Road, Burwell.
Interests:	Part 1 freeholder.
Plots:	CA of rights over Plots 18-09, 18-10, 18-11.
Objection:	Lack of information on working practices, degree of variation in rights to be acquired, lack of incentive to negotiate, poor scheme design: also [REP2-255].
Status summary:	The objection has not been withdrawn.

7.5.62. These objections were elaborated on in a written representation submitted on behalf of the Mitcham family by Bidwells [REP2-255].

- The ExA notes the objection. The rights sought by the Applicant relate to the subsurface cable which will remain in the ground after decommissioning, and to a cable route access point, and the ExA is satisfied that the proposed interference with M J Mitcham as Trustee of the Heritage SIPP rights is proportionate. The ExA concludes that the CA tests are met in respect of M J Mitcham as Trustee of the Heritage SIPP interests in Plots 18-09, 18-10 and 18-11.

23 Bidwells for M R and T A Mitcham and Lonsdale Pensions Trustees [RR-1262]

Location:	Goosehall Farm, Burwell.
Interests:	Parts 1, 2 and 3 rights.
Plots:	CA of rights over Plots 18-16, 18-17, 18-18, 19-02, 19-03, 19-04.
Objection:	Lack of information on working practices, degree of variation in rights to be acquired, lack of incentive to negotiate, poor scheme design, impact on Goosehall Solar Farm: also [REP2-255].
Status summary:	The objection has not been withdrawn.

7.5.63. These objections were elaborated on in a written representation submitted on behalf of the Mitcham family by Bidwells [REP2-255].

- The ExA notes the objection. The rights sought by the Applicant relate to the subsurface cable which will remain in the ground after decommissioning, and to the associated cable route access points, and the ExA is satisfied that the proposed interference with M R and T A Mitcham and Lonsdale Pensions Trustees rights is proportionate. The ExA concludes that the CA tests are met in respect of M R and T A Mitcham and Lonsdale Pensions Trustees interests in Plots 18-16, 18-17, 18-18, 19-02, 19-03 and 19-04.

24 Bidwells for M R Mitcham [RR-1263]

Location:	Breach Farm, Burwell.
Interests:	Parts 1, 2 and 3 rights.
Plots:	CA of rights over Plots 17-03, 18-01, 18-02, 18-16, 18-17, 18-18, 19-02, 19-03, 19-04.
Objection:	Lack of information on working practices, degree of variation in rights to be acquired, lack of incentive to negotiate, poor scheme design, impact on Goosehall Solar Farm: also [REP2-255].
Status summary:	The objection has not been withdrawn.

7.5.64. These objections were elaborated on in a written representation submitted on behalf of the Mitcham family by Bidwells [REP2-255].

- The ExA notes the objection. The rights sought by the Applicant relate to the subsurface cable which will remain in the ground after decommissioning, and to the associated cable route access points, and the ExA is satisfied that the proposed interference with M R Mitcham’s rights is proportionate. The ExA concludes that the CA tests are met in respect of M R Mitcham.

25 Bidwells for Mitcham Contracts (Burwell) Ltd [RR-1275]

Location:	Breach Farm, Burwell.
Interests:	Parts 1, 2 and 3 rights.
Plots:	CA of rights over Plots 17-03, 18-01, 18-02, 18-16, 18-17, 18-18, 19-02, 19-03, 19-04.
Objection:	Lack of information on working practices, degree of variation in rights to be acquired, lack of incentive to negotiate, width of easement, injurious affection due to width of easement (extant planning permission for commercial premises): also [REP2-255].
Status summary:	The objection has not been withdrawn.

7.5.65. These objections were elaborated on in a written representation submitted on behalf of the Mitcham family by Bidwells [REP2-255].

- The ExA notes the objection. The rights sought by the Applicant relate to the subsurface cable which will remain in the ground after decommissioning, and to the associated cable route access points, and the ExA is satisfied that the proposed interference with Mitcham Contracts (Burwell) Ltd is proportionate.

The ExA concludes that the CA tests are met in respect of Mitcham Contracts (Burwell) Ltd.

26 Suffolk County Council (SCC) [RR-1340]

Location:	West Row, Freckenham, Worlington, Red Lodge.
Interests:	Parts 1, 2 and 3 freeholder and occupier.
Plots:	CA of all interests and rights including freehold of Plots 1-02, 1-03, 3-06, 5-03, 5-11. CA of rights over Plots 1-04, 3-07, 3-08, 4-03 (Crown land), 4-04, 5-02, 5-04, 5-08, 5-09, 5-10, 6-02, 6-05, 6-07, 6-08, 7-06, 7-07, 8-02, 21-01, 21-02, 21-03.
Objection:	Supports renewable and low carbon generation but objects to this application due to size, time, mitigation and inadequate assessments, particularly re landscape and visual amenity, transport and access, socioeconomics and land use, community impacts including on agriculture and horseracing, cultural heritage, ecology, flood risk and battery safety; detailed comments on transport and access: also [REP2-246].
Status summary:	Protective provisions for the benefit of the drainage authority agreed. The objection has not been withdrawn.

7.5.66. Plot 6-05 was removed during the Examination when proposals for East B site access J were revised.

7.5.67. SCC's written representation recognises in paragraph 3 that *"the delivery of Net Zero carbon emissions in the UK by 2050 is required to limit the future impacts of climate change, and that this will result in a succession of electricity generation and connection projects in Suffolk."* and notes in paragraph 4 that *"Suffolk County Council has considerable experience of engaging with energy infrastructure projects under the Planning Act 2008 regime. Informed by this experience the Council considers it is essential that projects do not lead to avoidable, unmitigated or uncompensated detriment to the communities and environment of Suffolk, and its existing businesses."*

and then, with reference to the joint LIR [REP1-024] expands on its key concerns:

- xix. Cultural Heritage (archaeology);
- xx. Landscape and Visual Amenity;
- xxi. Socio-economics;
- xxii. Transport (Highways and Public Rights of Way);
- xxiii. Battery Fire Safety; and
- xxiv. Flood Risk, Drainage and Water Resources.

noting in particular that

- a. in paragraph 14 that the Applicant's assessment of socioeconomic impacts is *"technically flawed"*;
- b. in paragraph 17 that its key transport concerns relate to site accesses, HGV and AIL, statutory works on the highway, impacts on PRoW users and damage to the highway from HGV and AIL;

- c. in paragraph 21 as fire and rescue authority its main battery fire safety concern is with response planning and mitigation rather than technical specifications; and
- d. in paragraph 26 that *“it is important that SuDS features are sized ... at an early stage, as they can occupy a large area and it is difficult to make amendments to the order limits ... after a Development Consent Order is made.”*

7.5.68. The Applicant now seeks the freehold and rights over

- Plots 1-02 and 1-03 which are highway verge, to be used for access to Sunnica East Site A;
- Plot 3-06, which is part of Sunnica East Site A;
- Plot 5-03, which is part of Sunnica East Site B; and
- Plot 5-11, which is on U6006 and contiguous with Plots 5-09 and 5-10.

7.5.69. The Applicant also seeks rights over

- Plots 1-04, 3-07, 3-08, 4-04, 6-07, 6-08, 7-07, 21-01, 21-02 and 21-03 which relate to access; and
- Plots 4-03 (Crown land), 5-09 and 8-02 which relate to the subsurface cable which will remain in the ground after decommissioning; and
- Plots 5-02, 5-04, 5-08, 5-10, 6-02, 7-06, which relate to both access and to the subsurface cable.

7.5.70. The ExA notes the objection, and that the Applicant generally only seeks rights rather than freehold over land required for access or for the cable route.

7.5.71. Along with Plot 1-04, Plots 1-02 and 1-03 are only needed for the Ferry Lane access to Sunnica East Site A (Plot 1-01). The Applicant only seeks access rights in relation to Plot 1-04.

- Consequently, the ExA is not persuaded of the need for CA of the freehold title of Plots 1-02 and 1-03, which are listed in the BoR as *“verge and ... overhead telecommunications lines (Unnamed Road)”* or of Plot 5-11, which is listed in the BoR as *“public bridleway and byway (U6006) and hedgerow ...”* but concludes that the CA tests are met in respect of the necessary access rights.
- The ExA is otherwise satisfied that the proposed interference with SCC interests and rights is proportionate. The ExA concludes that the CA tests are met in respect of SCC’s remaining interests in all these plots.

27 R F Turner and Son [RR-1348]

Location:	Chippenham.
Interests:	Part 1 freeholder and tenant.
Plots:	CA of all interests and rights including freehold of Plots 13-03, 13-04, 14-02, 14-03. CA of rights over Plots 9-02, 9-03, 9-04, 9-05, 14-04, 14-07, 15-01.
Objection:	Battery storage safety, soil quality, permanent loss of productive farmland: also [REP2-217] and [REP10-076, REP10-076a].
Status summary:	The objection has not been withdrawn.

7.5.72. The written representation from R F Turner and Son [REP2-217] describes the nature of the farming operation which is currently in the third and fourth generations and is a mixed farming enterprise producing cereals, root crops and beef. It also provides facilities for the local horseracing industry.

7.5.73. The further written submissions from R F Turner and Son [REP10-076, REP10-076a] relate to agricultural land classification (ALC). The submissions support detailed submissions from AG Wright [REP10-057] and also comment on the further letter from Natural England (NE) [REP8-057] and on NE's approach, explaining in detail why NE's approach is considered to be flawed and submitting that it has been unfair and illogical. Particular reference is made to NE's acceptance of the Applicant's (DBSC) report and to ALC as a key issue in planning terms.

7.5.74. The Applicant seeks the freehold and rights over Plots 13-03, 13-04, 14-02 and 14-03, which are agricultural land forming part of the Chippenham Park estate.

The Applicant also seeks rights in respect of Plot 14-04, which relate to access to Plots 13-03, 13-04, 14-02 and 14-03.

The Applicant also seeks rights over Plots 9-02, 9-03, 9-04, 9-05, 14-04, 14-07 and 15-01, which relate to the cable route and associated access.

7.5.75. The ExA notes the objection and the detailed submissions. After careful consideration of submissions, the ExA finds that

- the land over which the Applicant seeks freehold and rights is currently productively farmed, and expected to be so for the foreseeable future;
- of the land over which freehold and rights are sought, only half would be used for solar arrays, the rest being ecological mitigation land;
- even if the land were to be returned after decommissioning, the loss of productive farmland over the intervening 45-50 years (construction, operation and decommissioning) would be effectively permanent, because
 - the farm might no longer be a going concern after two generations without R F Turner and Son being able to enjoy the use of the land; and
 - there would be no guarantee that after decommissioning the land would be of the same soil quality or capable of producing the same or similar quality of crops;

7.5.76. The ExA has carefully considered and weighed

- the degree of importance to be attributed to the existing uses of these plots;
- the consequent permanent loss of food production against the public benefit in terms of energy production; and
- any potential private loss of ECHR rights against the public benefit.

7.5.77. The ExA finds that

- the effectively permanent loss of food production outweighs the public benefit;
- the Applicant's purposes in respect of Plots 13-03, 13-04, 14-02 and 14-03 are not proportionate or sufficient to justify interfering with the human rights of those with an interest in them; and
- to deprive R F Turner and Son of its possessions would not be in the public interest.

7.5.78. Consequently, the ExA concludes that

- the need to acquire the freehold and rights in respect of plots 13-03, 13-04, 14-02 and 14-03 is not made out, and hence the need to acquire rights in plot 14-04 falls away as it is only required for access to plots 13-03, 13-04, 14-02 and 14-03. The ExA hence concludes that the CA tests are not met in respect of R F Turner and Son's interests and rights in respect of Plots 13-03, 13-04, 14-02, 14-03 and 14-04.
- However, the rights sought by the Applicant in respect of Plots 9-02, 9-03, 9-04, 9-05, 14-07 and 15-01 relate to the subsurface cable which will remain in the ground after decommissioning, and to the related access, and the ExA is therefore satisfied that the proposed interference with R F Turner and Son interests and rights is proportionate. The ExA concludes that the CA tests are met in respect of R F Turner and Son's interests in Plots 9-02, 9-03, 9-04, 9-05, 14-07 and 15-01.

Issues arising during the Examination

7.5.79. The following issues arose during the Examination:

- Rochdale envelope;
- Timetabling and phasing of construction works;
- Access for construction and maintenance;
- Interfaces with other neighbouring projects and proposals;
- The current uses of the land to be subject to permanent acquisition and/or temporary possession;
- Temporary possession, and whether the powers sought are no more than are reasonably necessary, and are proportionate, both in terms of land required and duration;
- Extent of land requirement at the solar panel and grid connection sites;
- Interference with land use, particularly the impact on agricultural operations;
- consideration of alternatives and design flexibility; and whether all of the Order land is required for the delivery of the project, with a clearly defined purpose, with particular reference to the solar panel sites, the grid connection routes and the grid connection location;
- clarification of the nature and extent of the land and permanent rights being sought, and whether the powers of compulsory acquisition sought are no more than are reasonably necessary, and are proportionate in terms of land required;
- Final extent of land, rights and powers to be acquired within the Order limits;
- funding and guarantees for compensation;
- Book of Reference;
- human rights considerations;
- the PSED; and
- consideration of changes to the application.

7.5.80. These matters were considered under the following principal issues:

- Principle and nature of the development;
- Air quality and human health;
- Environmental Statement - general matters;
- Socio-economics and land use;
- Traffic, transport and highway safety; and
- Compulsory acquisition.

7.5.81. These principal issues formed part of our initial assessment of principal issues, published at Annex C to the Rule 6 letter [PD-009].

SoCGs

7.5.82. SoCGs were requested from various parties in Annex F to the Rule 6 letter [PD-009]. Those which were of particular relevance to CA and TP were the SOCGs requested

- between the Applicant and both National Highways and relevant local authorities in respect of access to works, access to land and property, and other effects on the PRow network; and
- between the Applicant and NGET regarding the grid connection at Burwell.

Written questions

7.5.83. Following the Panel's consideration of the issues to be examined, including those arising from the Applicant's first change application submitted before the start of the Examination [AS-243], the following topics were explored with the Applicant in the Examination through Written Questions [PD-017]:

- access to land, negotiations with landowners and others affected by the project, and the acquisition of the necessary land, rights over land and temporary use of land, whether by agreement or otherwise;
- outstanding objections to the exercise of CA or TP powers;
- Crown land and consent;
- Special category land and land subject to special Parliamentary procedure;
- Statutory undertakers' land, rights and apparatus;
- Private rights;
- how and why temporary possession of land would first be taken;
- the extent of temporary interference with land, public rights of way and open space land, during construction, maintenance and decommissioning;
- funding, including guarantees;
- accuracy of the Book of Reference; and
- the extent of creation of new rights and acquisition of existing rights;

7.5.84. In respect of statutory undertakers' land, rights and apparatus, the ExA requested (ExQ1.3.8) the Applicant to review relevant representations and written representations made in the Examination alongside its land and rights information systems, and to produce a table identifying and responding to any representations made by statutory undertakers with land or rights to which PA2008 s127 applies, the table to be updated at each successive deadline.

7.5.85. In respect of statutory undertakers' land, rights and apparatus, the ExA also requested (ExQ1.3.9) the Applicant to review its proposals relating to CA or TP of land and/or rights and to prepare and at each successive deadline update a table identifying if these proposals affect the relevant rights or relevant apparatus of any statutory undertaker to whom PA2008 s138 applies.

Requests to change the application

7.5.86. The Applicant submitted two proposed changes to the application. The first change application was submitted before the start of the Examination [AS-243] and the second change application was submitted during the Examination [REP5-059].

7.5.87. The first proposed change reduced the extent of land and rights sought by

- removing the Burwell National Grid connection Option 1 from the proposed development;

- changing the cabling within the grid connection routes (Cable Routes A and B) to 400kV to enable direct connection to the national grid at Burwell; and
- changing the electrical configuration and therefore the general arrangement and layout at Sunnica East A, Sunnica East B and Sunnica West A, with a shunt reactor introduced at Sunnica East Site B, due to the introduction of a 33kV/400kV transformer in place of the 33kV/132kV transformer at each site: in addition, the transporting of the shunt reactor and each of the larger 33kV/400kV transformers from the Strategic Road Network (SRN) to each of the onsite substations.

7.5.88. The ExA noted that the first proposed change resulted in the removal of or reduction in size of plots and/or rights sought compared with the original application, except for the addition of plot 21-04 for temporary use only while transporting the larger 33kV/400kV transformer to Sunnica East Site A.

7.5.89. The ExA also noted that the Applicant had conducted a non-statutory consultation in respect of the first proposed change.

7.5.90. The ExA considered that the first proposed change did not constitute a request for the compulsory acquisition of additional land or rights. Consequently the ExA concluded that the CA Regulations were not engaged and there were no new Affected Persons.

7.5.91. The second proposed change also reduced the extent of land and rights sought by

- removing the Burwell National Grid Substation Extension Option 2 from the proposed development;
- removing Sunnica West Site B from the proposed development;
- the inclusion of additional archaeological offset areas within the Order limits; and
- the removal of Cable Route Access L and use of the Campus Access Road to HPUT's premises to access the cable route corridor between the former Sunnica West Site B and Burwell Substation.

7.5.92. The ExA noted that the second proposed change resulted in the removal or reduction in size of plots and/or rights sought compared with the original application, and that no further consultation was required [PD-020].

7.5.93. The ExA considered that the second proposed change did not constitute a request for the compulsory acquisition of additional land or rights. Consequently the ExA concluded that the CA Regulations were not engaged and there were no new Affected Persons.

7.5.94. Each change was considered fully by the ExA and accepted into the Examination [PD-016] [PD-023]. All affected persons requesting to be heard were heard in respect of these proposed changes.

Conclusions in respect of changes to the application and additional land

- The ExA concluded that the first proposed change [AS-243] did not request additional land and was not a material change which engaged the CA Regulations.
- The ExA concluded that the second proposed change [REP5-059] did not request additional land and was not a material change which engaged the CA Regulations.
- The ExA concluded that PA s123 is not engaged in respect of the changes.

- The ExA decided to accept both the proposed changes into the Examination [PD-016] [PD-023].

Hearings

- 7.5.95. The ExA considered all the responses to written questions, changes to the application and representations made by Affected Persons, and decided to explore the compulsory acquisition and related issues arising from both the original application and the changes at two Compulsory Acquisition hearings.
- 7.5.96. The first Compulsory Acquisition hearing (CAH1) was held on 6 December 2022 [EV-031, EV-032, EV-036 to EV-039] and 14 February 2023 [EV-062, EV-068 to EV-071] in accordance with section 92 of PA2008 to examine orally the Applicant's strategic case.
- 7.5.97. The second Compulsory Acquisition hearing (CAH2) was held on 14 February 2023 [EV-062, EV-066, EV-097 to EV-075] in accordance with section 92 of PA2008 to hear from Affected Persons.

Compulsory Acquisition Hearing 1 (CAH1)

- 7.5.98. Under this heading the ExA reports on matters raised at CAH1 and then follows progress and reports the position at the end of the Examination. Where the ExA has not concluded on a particular topic or issue, it has been carried forward as a matter outstanding at the end of the Examination.
- 7.5.99. The first Compulsory Acquisition hearing (CAH1) was held on 6 December 2022 [EV-031, EV-032, EV-036 to EV-039] and 14 February 2023 [EV-062, EV-068 to EV-071] in accordance with section 92 of PA2008 to examine orally the following issues:
- The Applicant's strategic case;
 - Alternatives and design flexibility;
 - The compulsory acquisition and related provisions in the Order;
 - Statutory conditions and general principles;
 - Outstanding objections;
 - Funding;
 - Statutory Undertakers;
 - Crown land;
 - Public open space;
 - Human rights and the Public Sector Equality Duty.
- 7.5.100. The principal focus of this first hearing was the Applicant's case, in respect of the original application and the changes, both those changes submitted before the start of the Examination [AS-243] and those submitted during the Examination [REP5-059]. Questions were put by the ExA to the Applicant, and other parties present were also invited to comment and to put questions through the ExA, both in respect of the original application and the changes.
- 7.5.101. In addition to the topics covered by written questions, the following issues were also probed by the ExA:
- what reasonable alternatives to CA had been explored;
 - grid connection route corridor width and variations;
 - the extent of CA and the process to secure permanent rights both generally along the cable route (in terms of the standard working width) and also for the

land for the solar panels and associated infrastructure, and the grid connection options at Burwell;

- what would happen to any Order land found not to be required;
- further aspects of funding, including the Contract for Difference (CfD) process, company structure, contingent liability, blight and guarantees.

The Applicant's strategic case

7.5.102. The Applicant was asked to put its strategic case both for CA and TP of land and/or rights and responded briefly with reference to

- policy on new renewable energy generation and net zero carbon emission targets to 2050;
- the need for the powers to assemble the Order land, build, maintain and operate the proposed development, and achieve government policy objectives;
- acquisition of freehold (pink on the land and Crown land plan) for the solar panel sites, including landscaping and ecological mitigation;
- taking temporary possession but only acquiring permanent rights (blue on the land and Crown land plan) over that part of the Order land eventually required for construction, operation and maintenance of the grid connection routes;

7.5.103. In response to questions from the ExA, the Applicant confirmed that

- it had been in discussion with Network Rail, and the width of the cable route at the rail crossing is sufficient;
- it will cross check the BoR against Schedule 8 of the dDCO to ensure that the category of rights sought is correct;
- it is satisfied that no person outside the Order limits may make a possible claim, and therefore nobody outside the Order limits needs adding to Part 2 of the BoR;
- green has been shown on the land and Crown land plan to indicate land which is only to be possessed temporarily (plot 21-04), and not replacement land as is usually the case;
- negotiations continue over a licence agreement for plot 21-04, but Article 28 will be relied on if necessary; and
- the changes to the application do not affect the strategic case, but further changes suggested by the local authorities would result in a significant loss of benefit.

Alternatives and design flexibility

7.5.104. In response to questions from the ExA, the Applicant explained that

- the Statement of Need [APP-260] was the starting point for the assessment of alternatives;
- the need for and scale of land was driven by the availability of a 500MW connection to the national grid at Burwell;
- three cable route options were considered and option 1 chosen, but there was a need to retain the options at Lee Farm (plots 1-07 and 2-01 or plot 3-10 connecting the west and east parts of Sunnica East Site A) and La Hogue Farm (plots 10-12 and 10-17 or plot 10-33 and part of plot 11-01 connecting the west and east parts of Sunnica West Site A) to ensure sufficient flexibility at detailed design stage;
- the width of permanent easement required for the cable route (coloured blue on the land and Crown land plan) might reduce as the technology evolves but rights currently sought were nevertheless necessary;

- the land subject to freehold acquisition was needed in any event to ensure BESS separation distances and that best use was made of the 500MW connection;
- connection option 3 was feasible, and the changed substation designs (for 400kV) were within the stated parameters, so
 - there was now no need for freehold acquisition at Burwell substation although permanent rights were still sought; and
 - option 3 was the preferred option as it would require less CA than option 2; and
- protective provisions were being negotiated with NGET.

7.5.105. The ExA then invited oral submissions on alternative cable routes on behalf of HPUT A and HPUT B as owners and DDS, LGC and LGC Bioresearch as occupiers of the campus site at Fordham, enlarging on previous written submissions [REP2-144], and with particular reference to the Applicant's choice of route and to HGV access through the campus. The Applicant said that it was satisfied with its response [REP3A-035] and was negotiating protective provisions to resolve any outstanding concerns.

7.5.106. By invitation from the ExA, further information was requested on behalf of the Mitcham family on cable design (depth, width, diameter), anticipated timescales and agricultural drainage, as this is important to them for planning crop rotations. The Applicant said that available information would be provided and that consideration of agricultural drainage would be included in the CEMP. In response to a question from the ExA, the Applicant confirmed that an agricultural liaison officer would be appointed and that this matter would be addressed in the CEMP.

The compulsory acquisition and related provisions in the Order

7.5.107. The Applicant confirmed that Articles 18 to 31 inclusive engage CA and TP powers and explained the need for the 100m corridor width for the grid connection routes, confirming that following detailed survey and cable installation new rights would only be acquired over the land necessary to repair and maintain the cable. Minor revisions were made following the removal of the Burwell options (1 and 2) from the dDCO.

7.5.108. The ExA asked how the DCO would operate in the context of other nearby projects, such as other projects planning to connect at Burwell and planned improvements to the A11. The Applicant responded that it will be liaising with NGET at Burwell, as NGET will be carrying out the necessary works both for Sunnica and for other projects and consequently the precise connection arrangement is not yet known: in respect of the A11 the Applicant expects the A11 gap closure work between the A14 and Red Lodge to be complete before work commences on Sunnica and that any National Highways diversions and changes in traffic patterns would have minimal impact on access routes.

7.5.109. In response to a question from the ExA, the Applicant confirmed that the compensation provisions at Schedule 9 would not change entitlement to compensation, citing the Cleve Hill Solar Park Order 2020.

7.5.110. The Applicant then gave an update on the current position with protective provisions, including the additional protective provisions being negotiated with HPUT and side agreements with the local highway authorities.

7.5.111. In response to questions from the ExA, the Applicant said that as the relevant provision in the NPA had not yet been consulted upon it was felt preferable to continue to use the tried and tested TP regime, and to confirm that it considered that the 14-day notice period was sufficient as there will be proper liaison with landowners in advance to make them aware of the construction programme: there would also be a stakeholder community plan as part of the CEMP so that landowners know why rights are being sought.

Statutory conditions and general principles

7.5.112. In response to questions from the ExA, the Applicant confirmed that the application included a request for CA powers in accordance with PA2008 s123(2) and that the Statement of Reasons sets out why the land and rights requested are needed. The Applicant has endeavoured to acquire the necessary land and rights by agreement where possible; this is part of the rationale for grid connection option 3 being preferred as no CA of freehold would be required at Burwell.

7.5.113. The Applicant also stated that the rights to be acquired were considered to be necessary and proportionate, making reference to the Statement of Reasons and the Works plan, and to areas where the grid connection route corridor has been reduced in width to take account of particular constraints. The changes to the application have also reduced the extent of land and rights required and now sought.

7.5.114. The ExA asked about the post-decommissioning environment and whether the powers in article 18(1) of the dDCO are capable of being used to discharge Requirements, for instance replacing planting and other landscaping and land management measures in the LEMP. The Applicant said that it would not be possible to rely on CA powers once the proposed development had been decommissioned. Land over which CA powers were exercised would be decommissioned in accordance with the DEMP, the cables remaining in the ground, and the land may then returned to the landowner. If the land and rights had been acquired by agreement, then CA powers would have lapsed under the statutory time limit and the Applicant's interests would expire at the end of the agreed period.

7.5.115. In response to questions from the ExA, the Applicant concluded on this item by stating that the need for the proposed development is urgent and very significant, and confirmed that the national policy referred to in the Statement of Reasons supports this conclusion.

Outstanding objections

7.5.116. The Applicant gave an update on the current situation and said that continuing negotiations would enable further objections to be withdrawn during the Examination. The ExA noted the Applicant's submissions.

7.5.117. In response to an invitation from the ExA, a representative of DDS, LGC and LGC Bioresearch asked that they be included in the Schedule of Negotiations and Powers Sought, and the Applicant undertook to do this.

Funding

7.5.118. The Applicant had provided an update to the application version of the Funding Statement to take account of a change of ownership of the parent company [REP5-004]. In response to questions from the ExA the Applicant said that this

would not affect the ability of the parent company to fund the proposed development or its decommissioning.

- 7.5.119. In response to questions from the ExA, the Applicant said that there was a possibility that the proposed development might be delivered without CfD, and that it was not dependent on CfD, but that if it were to be funded using CfD then it would be after AR5. As an alternative, a power purchase agreement would be considered at the proper time.
- 7.5.120. The ExA noted that there was no property cost estimate within the Funding Statement, and inquired into reserves and the ability of the Applicant and parent company to fund compulsory acquisition and other compensation; and also blight, given that there are no entries in Part 2 of the BoR for parties outside the Order limits. The Applicant stated that there was £25 million set aside and that all such costs and claims were included in the total project cost and were capable of being funded either by the Applicant or its parent company.
- 7.5.121. Referring to its ExQ1.3.22 [PD-017] and to the Funding Statement, the ExA asked about a guarantee or other form of security given that the parent company reserves were significantly below the legally required minimum. The Applicant responded that Article 43 in the dDCO requires a guarantee to be in place before the powers in Articles 18, 20 and 27 in the dDCO can be exercised and any liability for compensation arises.
- 7.5.122. In view of the low level of reserves in the parent company and the possibility of the guarantee having to be honoured by the SoS, the ExA then asked whether the guarantee could be secured prior to any grant of development consent. The Applicant said that this would be unusual, that the SoS has been content with the Article 43 wording in other made DCOs, and that the satisfaction of the SoS would depend on the extent of land interests still unresolved: the Applicant considered that the crucial issue was that no affected person had their land or rights taken away without compensation.
- 7.5.123. The ExA asked about the temporary nature of the proposed development and whether the figures quoted in the Funding Statement included a decommissioning bond to ensure that decommissioning costs can be met at the relevant time. The Applicant responded that decommissioning costs will be included as an operating liability, ie the operator will set aside funds during the operation of the proposed development to meet the cost of decommissioning as a term of the relevant Requirement in the DEMP which will be enforceable at the time of decommissioning, citing paragraphs 12.3.49 and 12.3.50 of the Cleve Hill Solar Park recommendation report to the SoS.
- 7.5.124. The ExA then asked Mr Richardson for his comments. Mr Richardson's concerns related to
- Inaccurate estimates of actual delivery cost, eg the Cambridgeshire Guided Busway initial estimate was £73m but the cost on delivery was £126m and further repairs etc. may lead to the final cost reaching over £200m; even though there was a parent company guarantee CCC has had to spend £26 million to rectify issues;
 - There are significant safety hazards on the proposed development, notably the BESS, and allowing the proposed development to proceed with a contractor with no track record is a significant risk for the SoS.

- 7.5.125. The Applicant responded that
- it assumed that the risk referred to Article 43 and that is open to the SoS not to allow CA until there is a suitable guarantee in place; and
 - although the Applicant has not developed a solar farm, the majority shareholder in the parent company, PS Renewables, has built more than 350MW of ground mounted solar and currently has over 5GW under development, nearly all of it with BESS, making it one of the most experienced developers of solar infrastructure in the UK.
- 7.5.126. The ExA then invited submissions on behalf of the Say No To Sunnica action group (SNTS) and the Newmarket Horsemen's Group who commented that the Funding Statement, although updated, still has insufficient information, including a breakdown of CA costs and overall construction costs and an assessment of scheme viability to enable the ExA to advise the SoS.
- 7.5.127. Mr Smith, at the invitation of the ExA, then made the following points:
- Following the change of ownership, it is not clear from the Funding Statement who now owns the Applicant, Sunnica Limited, and who will be responsible for the CA liabilities;
 - the four UK companies do not have the resources, so it is dependent on the four Spanish companies, but there is currently insufficient information provided on those companies; and
 - LDP was only incorporated in October 2022 and is therefore a start-up company in respect of attracting funding; and
 - The audited accounts for 2022 for the four UK companies are not yet available and therefore cannot be scrutinised by the public.
- 7.5.128. The Applicant said in response that it considered that it had provided sufficient detail, that following a sale of assets not relevant to the Examination the UK interests in Sunnica are now held by a successor company which has the same four shareholders as before, and that a financial audit of companies is not within the relevant guidance and the main point is that obligations in respect of compensation will be met and that the proposed development is viable.
- 7.5.129. The Applicant provided a revised Funding Statement following CAH1 [REP7-007]. There were no further revisions to the Funding Statement before the close of the Examination. Consequently at the close of the Examination there was no signed funding agreement between the Applicant and its parent company Los Dalton de Pozoseco S.L. (NIF B72617475) (LDP), a company registered in Spain.
- 7.5.130. The ExA has given careful consideration to the application documents and to all submissions made into the Examination, including the Applicant's responses to written questions and oral submissions, and finds that there outstanding concerns in respect of
- Lack of information, particularly in respect of
 - Construction and decommissioning costs;
 - Audited accounts;
 - The Applicant's ability to fund the proposed development and decommissioning, including a signed funding agreement;
 - No property cost estimate;
 - No assessment of blight;
 - Who is responsible for meeting CA and TP liabilities; and

- How this will be achieved to the satisfaction of the SoS.
- The low level of reserves;
- The consequent risk of the the guarantee having to be honoured by the SoS (ie the taxpayer) in order to ensure that no Affected Person has their land or rights taken away without compensation.

Conclusions in respect of funding

- The ExA concludes that there are outstanding concerns with the Applicant's Funding Statement as detailed above; and
- Consequently, the ExA recommends that prior to any grant of development consent the SoS should obtain further information in order to be in a position to conclude whether or not there is a reasonable prospect of the requisite funds for acquisition becoming available within the necessary timescale, capable of meeting all financial liabilities arising from the exercise of the CA and TP powers sought.

Statutory undertakers and protective provisions

- 7.5.131. The ExA noted that FHPUT had made a written submission into the Examination shortly before CAH1 [REP7-100]. At CAH1 the Applicant confirmed that
- there was now an agreed position on Protective Provisions and that the FHPUT objection would be withdrawn once commercial access arrangements had been agreed; and
 - Anglian Water and the Environment Agency are satisfied with their protective provisions.
- 7.5.132. The FHPUT matter was heard further at CAH2.
- 7.5.133. Airwave Solutions Ltd, BT Group, Openreach Ltd and GTC Pipelines did not respond to the Applicant during the Examination [REP11-017]. City Fibre Ltd [REP2-038] and Vodafone [REP11-017] had both responded pre-application to say that they did not believe that their assets were affected. The Applicant has included standard Protective Provisions in Parts 1 and 2 of Schedule 12 to the dDCO [REP10-005].
- 7.5.134. Protective Provisions were agreed during the Examination between the Applicant and Anglian Water, Cadent Gas, Eastern Power Networks, Environment Agency, National Grid Electricity Transmission (NGET), National Gas Transmission (formerly National Grid Gas) (NGT), National Highways, Network Rail, South Staffordshire Water and Swaffham IDB [REP11-004].
- 7.5.135. The following withdrew their representations or objections towards the end of the Examination, as follows:
- South Staffordshire Water on 8 March 2023 [AS-327];
 - Cadent Gas on 22 March 2023 [AS-328];
 - Environment Agency on 23 March 2023 [AS-330];
 - NGET on 28 March [AS-332];
 - NGT on 28 March 2023 [AS-333]; and
 - Network Rail on 28 March 2023 [AS-334].
- 7.5.136. At the close of the Examination, protective provisions were agreed with the following statutory undertakers and any objections withdrawn:
- Anglian Water;

- Cadent Gas;
- Eastern Power Networks;
- Environment Agency;
- NGET;
- NGT;
- National Highways;
- Network Rail;
- South Staffordshire Water;
- Swaffham Internal Drainage Board; and
- UK Power Networks.

7.5.137. Protective provisions were also agreed with Cambridgeshire County Council and Suffolk County Council as drainage authorities [REP11-014].

7.5.138. Cityfibre responded during the Examination to say that they did not consider their interests to be affected: however, the Applicant has included protective provisions in its dDCO in respect of any interests discovered.

7.5.139. No response was received from Airwave Solutions, BT Group or GTC Pipelines: however, the Applicant has included protective provisions in respect of their interests and considers that any such interests are adequately protected.

- The ExA notes the position and the outcome of the Applicant's negotiations with Statutory Undertakers, and concludes that at the close of the Examination there were no representations from statutory undertakers outstanding and not withdrawn.

Crown land and consent

7.5.140. The only Crown land is plot 4-03 and the owner of the Crown interest is the Secretary of State for Transport [REP6-004, REP8-004]. The Applicant reported that significant progress has been made and that it expects both the s135 consent and agreement to an option for easement to be forthcoming before the end of the Examination.

7.5.141. In its letter to the Applicant dated 27 March 2023 on behalf of the Secretary of State for Transport, and included in the Applicant's response [REP11-012] to the ExA's R17 question [PD-031], the Government Legal Department (GLD) states that:

"We confirm that the appropriate Crown authority to give Crown authority consent is the Secretary of State for Transport and that the Department for Transport is empowered to give such consent on behalf of the Secretary of State but only to the extent that the Secretary of State owns or holds land within plot 4-03.

We note that you do not intend to acquire compulsorily any interests in the Crown land which are held by the Secretary of State for Transport, but only the interests which others may have in the Crown land.

Accordingly, please accept this letter as Crown authority consent under section 135(1) of the PA 2008 for: (a) the inclusion of the Crown land in the DCO; and (b) the compulsory acquisition of non-Crown interests in the Crown land."

7.5.142. Consequently the Applicant has s135 consent. The necessary negotiations for a property agreement were continuing at the close of the Examination.

- The ExA notes that the Applicant has reported that s135 consent has been obtained from the Secretary of State for Transport in respect of Crown land and concludes that Crown consent has been obtained in respect of that land.

Public open space

7.5.143. In response to a question from the ExA, the Applicant confirmed that there is no special category land.

- The ExA is satisfied with the Applicant’s confirmation and concludes that there is no special category land within the Order limits.

Human rights and the Public Sector Equality Duty (PSED)

7.5.144. No submissions were made on this item on the basis that the matter would be raised again at CAH2.

Compulsory Acquisition Hearing 2

7.5.145. Under this heading the ExA reports on matters raised at CAH2 and then follows progress and reports the position at the end of the Examination. Where the ExA has not concluded on a particular topic or issue, it has been carried forward as a matter outstanding at the end of the Examination.

7.5.146. The second Compulsory Acquisition hearing (CAH2) was held on 14 February 2023 in accordance with section 92 of PA2008 [EV-062, EV-066, EV-097 to EV-075], principally to hear from Affected Persons in respect of the original application and the changes, both those changes submitted before the start of the Examination [AS-243] and those submitted during the Examination [REP5-059].

7.5.147. Representations already made by Affected Persons have been summarised above as objections numbered 1 to 27 under the heading “Outstanding objections from Affected Persons”.

7.5.148. At CAH2 the ExA invited all Affected Persons present to make their representations, both in respect of the original application and the changes, with the Applicant having the opportunity to respond to each representation. Affected Persons were also invited to make representations in respect of human rights and PSED issues either as part of their oral submissions at this point in the proceedings or as post-hearing submissions.

7.5.149. These are summarised below: after the name of each objector is reference to the above summary of that person’s objection, the Relevant Representation and to that person’s post-hearing submission.

Graham Reeve (14) [RR-1009] [REP7-080]

7.5.150. Mr Reeve explained that he farmed land near the proposed connection to the existing NGET substation at Burwell. He is not against green energy in general but is against the waste of food producing arable land for solar panels.

7.5.151. He said that communication with the Applicant had been unsatisfactory and the Applicant’s behaviour had been “disgraceful”, giving a chronology and confirming that there are no “continuing negotiations” with the Applicant as he has made it quite clear to the Applicant’s representatives on a number of occasions that he is not interested. His land is not a “ransom strip” as there are other routes to connect at Burwell.

- 7.5.152. The Applicant responded agreeing that CA powers will be needed as there is no prospect of reaching an agreement, and that the selected route is required as it is the most direct.
- 7.5.153. In a post hearing submission, the Applicant also detailed its chronology of events relating to service of PA 2008 s53 and HPA 2016 s172 notices [REP7-061].
- The ExA notes the further submissions made and the Applicant's responses. No freehold is to be acquired, and the ExA is satisfied that the proposed interference with Graham Reeve's rights is proportionate. The ExA concludes that the CA tests are met in respect of Graham Reeve.

Nick Wright for A G Wright and Son (Farms) Ltd (AGW) (19) [RR-1102] [REP7-077]

- 7.5.154. Mr Wright said that he had read the latest version of the Schedule of Negotiations and Powers Sought [REP6-021] and did not agree that it accurately reflected negotiations between AGW and the Applicant: it was incomplete and misleading and the Applicant had not behaved in a fair or reasonable manner.
- 7.5.155. He explained why, citing issues relating to failure to log the land interest questionnaire; a meeting which did not take place; no discussion; a request for access to an excessively large area of the farm; failure to supply accurate plans; problems with PA 2008 s53 and HPA 2016 s172 notices and intrusive surveys over extensive areas, with consequent damage to crops, although no ALC survey; and failure to pay professional fees.
- 7.5.156. He said that AGW was offered an option agreement but did not sign as there was insufficient detail and AGW would then not be permitted to comment on the application.
- 7.5.157. Mr Wright's submission also expressed continuing concern with the Applicant's carbon calculation, and with the Applicant's ALC survey with reference to the Ripon inquiry, and asked that the Applicant be held to account for the outstanding issues.
- 7.5.158. The Applicant responded that it has sought to agree rights of entry for surveys, that fees would be paid if the access licence were agreed, and that heads of terms have been issued but not signed by Mr Wright who is unwilling to agree to an easement.
- The ExA notes the further submissions made and the Applicant's responses. No freehold is to be acquired, and the ExA is satisfied that the proposed interference with AGW's rights is proportionate. The ExA concludes that the CA tests are met in respect of A G Wright and Son (Farms) Ltd.

Mrs Elizabeth Mary Garget (7) [RR-0568] [REP7-096]

- 7.5.159. Mr Ian Garget spoke for Mrs Elizabeth Garget. He said that the land boundaries have been shown incorrectly throughout, despite her correcting the documentation on many occasions.
- 7.5.160. The Applicant requested access to the entire farm to conduct surveys which she considered to be totally unnecessary and unacceptable, and the area was eventually reduced to the proposed cable route and river crossing. While negotiations were going on, surveys were conducted without notice and without Mrs Garget's permission.

- 7.5.161. Also a member of Mrs Garget's family was repeatedly approached to sign an access agreement and told the Applicant repeatedly that they were not the landowner and could and would not give permission to access someone else's property.
- 7.5.162. Mr Garget said that the Heads of Terms are unacceptable as the fee offered is very low and the conditions are unacceptable, amounting to a gagging order. Sunnica had used bully boy tactics throughout this process.
- 7.5.163. The Applicant explained the HPA 2016 s172 process and acknowledged that there would be disagreements over what is recorded in the Schedule of Negotiations and Powers Sought, but that the Applicant has sought to engage with landowners, this being a case where CA powers will be required.
- 7.5.164. The Applicant explained that it had understood the member of Mrs Garget's family to be the occupier of the land, which was why she was approached.
- The ExA notes the further submissions made and the Applicant's responses. No freehold is to be acquired, and the ExA is satisfied that the proposed interference with Elizabeth Mary Garget's rights is proportionate. The ExA concludes that the CA tests are met in respect of Mrs Elizabeth Mary Garget.

The Mitcham family (20, 22-25) [RR-1170, 1261-1263, 1275] [REP7-087]

- 7.5.165. A representative of the Mitcham family made oral representations on behalf of all the separate interests. The points made are common to all the interests:
- the rights requested are excessively wide; it is unacceptable to go into a DCO without having done the necessary work to properly design the cable route;
 - there is no substantive clarity in respect of timing of construction work, causing difficulties in planning the farming business;
 - the suggestion that the land is of relatively limited agricultural value when the prevalence of local farming businesses growing high value crops indicates higher quality agricultural land: further soil testing could address this issue; also no testing has been carried out along the cable route but intrusive cable laying will have long term impacts on soil quality and the land is Grade 2 being very high quality and some of the best in the country;
 - negotiations are one-sided which exasperates landowners and agents, and to say that they are "ongoing" is not a fair description; also the Mitcham family does not believe that all reasonable attempts at negotiation have been made;
 - scheme iterations: the Sunnica DCO application has been updated a number of times: the alterations suggest a scheme which was not ready for submission. That is not the intent of the DCO process. Experience of the A14 improvement scheme showed how a scheme which has not been comprehensively designed results in a wholly unacceptable impact on landowners.
- 7.5.166. The Applicant responded that its proposals have not changed in respect of the Mitcham family land, and explained the need for a wider cable route at the railway crossing, with the permanent easement only over the cables as laid and not over the wider corridor. There is no prospect of construction in this harvest, and the ALO will deal with such matters when there is more information on the timing of works.
- 7.5.167. The Applicant did not explain impacts on land drainage but defended its position in respect of ALC surveys, stating that the test does not apply to the cable routes because of the scope for reinstatement and that soil management will be an important part of the CEMP.

- The ExA notes the further submissions made and the Applicant's responses. No freehold is to be acquired, and the ExA is satisfied that the proposed interference with the separate interests is in each case proportionate. The ExA concludes that the CA tests are met in respect of the Mitcham family.

Trustees of the Charity of Katharine Shore [REP7-085]

- 7.5.168. The Trustees of the Charity of Katharine Shore did not formally object but sought further information. The interests of the Trustees of the Charity of Katharine Shore relate to subsoil rights in Plots 21-02 and 21-03 up to half width of highway, and as owner/occupier of Plot 21-04. The representation made related to Plot 21-04, described in the Book of Reference as "*agricultural land and hedgerow, Mildenhall Road*".
- 7.5.169. A representative of the Charity explained that it was set up in 1710 by Katharine Shore to alleviate poverty in the village of Freckenham. It is a very small charity employing no staff. The land affected is a long term tenancy, in respect of an asparagus crop which will take 4 years to re-establish if disturbed.
- 7.5.170. The representative explained that the Applicant contacted the Charity in July 2022 to negotiate a licence agreement for the temporary use of the land in connection with the transformer delivery. However, the information provided is insufficient to enable the Charity to agree the terms of a licence to allow the temporary use of the land, and it may be that at detailed design stage it is shown that temporary oversail of the Charity's land is not required, for instance if it is possible to use more of the south side of the B1102 Mildenhall Road, so the Charity has decided to reserve its position.
- 7.5.171. The Applicant responded that the Charity's interest relates to an oversail over a small portion of agricultural land to enable a single AIL transformer delivery movement on one day during the construction phase. Consequently the interference is extremely limited: nevertheless the Applicant would seek to agree a licence if possible but that the powers in the DCO would authorise this temporary interference and any damage would be compensatable.

The ExA notes the position and the submissions made, and is satisfied that the Applicant only seeks temporary possession over land required for AIL delivery over a very short period.

- The ExA is satisfied that the proposed interference with the rights and interests of the Trustees of the Charity of Katharine Shore is proportionate. The ExA concludes that the CA tests are met in respect of all rights and interests of the Charity of Katharine Shore.

Joanna Reeks (12) [RR-0881] [REP7-081]

- 7.5.172. Joanna Reeks made a written representation [REP2-161]. She confirmed that she owns jointly 100 acres of land to the east of the A11 (which will form part of the Sunnica West A site). She thinks that the scheme as a whole is too large and the negative impact on the local community too great. However the threat of CA means that the family is currently negotiating a lease. She said that the negotiations have been very difficult at times, with the Applicant adopting an unreasonable stance over many clauses and that there are two outstanding points so the lease remains unsigned.
- 7.5.173. Joanna Reeks continued to object because

- she does not understand the need for the land as it separated from the rest of the proposed development by a major highway, the A11;
- she does not want the land, which is part of an arable farming business, to be lost to solar panels; and
- she does not think in respect of her land that there is compelling evidence of the need for her land or that the public benefits outweigh the private loss.

7.5.174. The Applicant responded that it understands that negotiations for a lease are at an advanced stage and expects the agreement to be completed shortly, so that CA powers will only be needed in case of any breach of the agreement.

7.5.175. Joanna Reeks signed the option agreement on 28 March 2023 immediately prior to the close of the Examination but did not formally withdraw her submissions into the Examination [REP11-004].

7.5.176. The ExA notes from all these submissions and from site inspections (location A [EV-003] and location 8 [EV-013]) that

- The land is to the east of the A11;
- The land is separated from the remainder of the proposed development by the A11;
- consequently there are two HDD cable routes under the A11 connecting it with the remainder of Sunnica West Site A;
- The land is currently productively farmed;
- The Applicant proposes to acquire all interests and rights in the land, and thereby take it out of agricultural use permanently; and
- the objection had not been withdrawn at the close of the Examination.

7.5.177. The ExA has taken all this into account and finds that

- the land is productively farmed, and that compulsory acquisition of all interests and rights will mean that Joanna Reeks will no longer be able to continue farming the land;
- the land is severed from the remainder of the proposed development; and
- complex connections under the A11 dual carriageway will be required to connect this part of the proposed development to the remainder of the proposed development

7.5.178. Taking all these matters together, and giving careful consideration to the degree of importance to be attributed to the existing farming operation, and to the need to weigh any potential infringement of individual ECHR rights against the public benefit, the ExA concludes that

- the need for the land in the public interest in terms of the cost of connections and installation of the solar arrays together with the loss of farming operations and value to the nation of food production set against the energy produced over the lifetime of the project has not been established; and
- the Applicant's purposes in respect of these plots are not proportionate or sufficient to justify interfering with the human rights of those with an interest in them.

7.5.179. Consequently

- the ExA is not satisfied that the case for including all interests and rights in farmland Plots 10-06, 10-07, 10-08, 10-09, 10-10 and 10-11 in the application is made out;

- the ExA is not satisfied that the case for seeking rights in plots 10-01, 10-02, 10-03, 10-04 and 10-05 in respect of access to the above farmland plots from Dane Hill Road is made out; and
- the ExA is not satisfied that the case for acquiring cable rights in respect of Plots 10-12, 10-13, 10-14, 10-15, 10-16, 10-17, 10-18, 10-19, 10-20, 10-29, 10-30, 10-31, 10-32 and 10-33 in order to connect the land to the remainder of the Proposed Development is made out, save for that portion of Plot 10-33 still needed to connect Sunnica East Site B to the remainder of Sunnica West Site A.

***Federated Hermes Property Unit Trust (HPUT A and HPUT B) [RR-1017]
[REP2-144]***

- 7.5.180. As requested by the ExA, the Applicant gave a brief update. FHPUT as freehold owners of the Campus site had decided that it was not necessary for their representative to attend the hearing, as negotiations were well advanced and it was expected that protective provisions would be agreed shortly: in the meantime FHPUT maintained its objection [REP7-100].
- 7.5.181. At the close of the Examination, FHPUT wrote to the ExA to confirm that protective provisions had been agreed but that it had not been possible to complete the option agreement and easement [REP11-029].

- The ExA concludes that the CA tests are met in respect of all rights and interests of the Federated Hermes Property Unit Trust (HPUT A and HPUT B).

Human rights and the Public Sector Equality Duty (PSED)

- 7.5.182. No representations were made in respect of human rights or the PSED.
- 7.5.183. The Applicant confirmed its position as stated in the Statement of Reasons [REP2-018] and the Equality Impact Assessment [REP3-020]. These documents were updated prior to the close of the Examination [REP7-005] [REP10-039].
- The ExA concludes that all persons wishing to be heard have had an adequate opportunity to be heard.
 - The ExA has considered all representations made and finds that human rights and PSED matters have been adequately considered by the Applicant.

Human rights

- 7.5.184. The ExA considered human rights throughout the Examination with reference to:
- Article 6 of the ECHR (fair and public hearing);
 - Article 8 of the ECHR (respect for private and family life, home and correspondence);
 - Article 1 of the First Protocol to the European Convention on Human Rights (ECHR) (peaceful enjoyment of possessions);
 - the degree of importance to be attributed to the existing uses of the land which is to be acquired; and
 - the weighing of any potential loss of ECHR rights against the public benefit.
- 7.5.185. The ExA considered these matters in relation to the application as amended. We note that the Applicant followed the statutory procedures in respect of the preparation and examination of the application and conducted proper consultations. Those affected by the proposed project have had various opportunities to make representations and to be heard, including at Open Floor Hearings and Compulsory

Acquisition Hearings. Consequently, the ExA is satisfied that there has been no interference with Article 6 rights.

7.5.186. With regard to Article 8, the ExA has considered the effects of the project on the living conditions of local residents both during construction and operation. Although there would be impacts on living conditions, the ExA finds that such impacts would be controlled and mitigated through

- Requirement 6 (detailed design approval);
- Requirement 7 (fire safety management);
- Requirement 8 (LEMP);
- Requirement 14 (CEMP);
- Requirement 15 (OEMP);
- Requirement 16 (CTMP and TP);
- Requirement 17 (operational noise); and
- Requirement 22 (decommissioning and restoration).

These requirements apply to the construction, operation and decommissioning of the Proposed Development. We do not consider that the residual impacts would be such as to amount to an interference with Article 8 rights.

7.5.187. The exercise of CA and TP powers would amount to an interference with the right to peaceful enjoyment of possessions under Article 1 of the First Protocol to the ECHR which states that

“No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law.”

7.5.188. The ExA finds that the interference is generally the minimum necessary to facilitate the part of the proposed development in question, those whose land is affected would be entitled to compensation in accordance with the law, and the Applicant has committed to mitigate the effects of uncertainty through provision of good and timely information through measures and controls in the CTMP [REP7-017] and plans and procedures in the CEMP [REP7-032].

7.5.189. However, the ExA is not satisfied that the Applicant’s proposals strike a fair balance between the public benefit and the interference with individual rights in all cases. These cases are considered and concluded on below.

The Public Sector Equality Duty (PSED)

7.5.190. In response to a written question from the ExA [PD-017] the Applicant submitted an Equality Impact Assessment [REP3-020]. This was updated prior to the close of the Examination [REP10-039] in response to a written submission from the Travellers’ Community [REP8-060].

7.5.191. No submissions were made at either CAH1 or CAH2. The ExA has considered the Applicant’s Equality Impact Assessment [REP3-020] in respect of the desirability of reducing inequalities of outcome, and the responses to it, and considers that the Applicant’s approach is reasonable.

Conclusions in respect of human rights and the PSED

- The ExA has considered that the Applicant’s Public Sector Equality Statement was submitted by the Applicant at Deadline 3 rather than with the application, and concludes that the ability of other parties to comment on the Applicant’s

Equality Impact Assessment has not been significantly hindered by its late submission.

- The ExA concludes that all persons wishing to be heard have had an adequate opportunity to be heard and to make representations.
- The ExA has considered all representations made and finds that human rights and PSED matters have been adequately considered by the Applicant.
- The ExA also concludes that there is no evidence of any differentiated or disproportionate impacts on groups with protected characteristics and that the Public Sector Equality Statement will assist the SoS in discharging its duty as a public authority under the Equality Act 2010.
- The ExA therefore concludes that, if the SoS decides that development consent should be granted and that compulsory acquisition is necessary to facilitate the proposed development, that any infringement of ECHR rights would generally be proportionate and justified in the public interest and that any interference would be in accordance with the law, and that the provisions in the dDCO would generally strike a fair balance between the public interest in the development going ahead and the interference with the rights of those affected.
- However, the ExA is not satisfied that the Applicant's proposals strike a fair balance between the public benefit and the interference with individual rights in all cases. These are concluded on below.

Matters outstanding at the end of the Examination

Affected Persons and the CA tests

7.5.192. At the close of the Examination, representations from the following Affected Persons had not been withdrawn:

- John James [RR-0018];
- Dr Harry Sidebottom [RR-0203];
- Lisa Sidebottom [RR-0222];
- Susan Chapman [RR-0287];
- George Gibson [RR-0290];
- Louise Andreasen [RR-0417];
- Elizabeth Mary Garget [RR-0568];
- Priscilla McDonagh [RR-0723];
- Hannah Murphy [RR-0780];
- Huw Neal [RR-0870];
- Ian Garget [RR-0871];
- Joanna Reeks [RR-0881];
- East Cambridgeshire District Council (ECDL) [RR-0998];
- Graham Reeve [RR-1009];
- Bryan Cave Leighton Paisner for Federated Hermes Property Unit Trust (HPUT A Ltd and HPUT B Ltd) (FHPUT) [RR-1017];
- Kathryn Jane James [RR-1028];
- Katherine Stewart [RR-1045];
- Lesley Haird [RR-1054];
- Nick Wright for A G Wright and Son (Farms) Ltd [RR-1102];
- Bidwells for B C Mitcham Farms Ltd [RR-1170];
- Cambridgeshire County Council (CCC) [RR-1178];
- Bidwells for M J Mitcham as Trustee of the Heritage SIPP [RR-1261];
- Bidwells for M R and T A Mitcham and Lonsdale Pensions Trustees [RR-1262];
- Bidwells for M R Mitcham [RR-1263];
- Bidwells for Mitcham Contracts (Burwell) Ltd [RR-1275];
- Suffolk County Council (SCC) [RR-1340];and
- R F Turner and Son [RR-1348].

7.5.193. Representations were also made at CAH2 by

- Graham Reeve [REP7-080];
- Nick Wright for A G Wright and Son (Farms) Ltd (AGW) [REP7-077];
- Mrs Elizabeth Mary Garget (7) [REP7-096];
- The Mitcham family [REP7-087];
- Trustees of the Charity of Katharine Shore [REP7-085]; and
- Joanna Reeks [RR-0881] [REP7-081].

Conclusions in respect of Affected Persons and the CA tests

- The ExA has given careful consideration to all the above representations, and to the Applicant's responses, and concludes that the concerns of some Affected Persons are capable of being addressed satisfactorily through the CTMP and the CEMP.
- However, after careful consideration of all written and oral representations made and the Applicant's responses, the ExA considers that the CA tests are not met in respect of several plots as summarised below.
- **Plots 9-07, 11-05 and 11-06:** With reference to written submissions from CCC and following its own consideration of the issues, the ExA is not persuaded of the need for CA of the freehold title of Plots 9-07, 11-05 and 11-06 at La Hogue Road, and concludes that access rights over these plots would be adequate;
- **Plots 1-02 and 1-03:** With reference to written submissions from SCC and following its own consideration of the issues, the ExA is not persuaded of the need for CA of the freehold title of Plots 1-02 and 1-03, which are highway, and concludes that access and cable rights over these plots would be adequate;
- **Plots 13-03, 13-04, 14-02, 14-03 and 14-04:** With reference to written submissions from R F Turner and Son, the ExA is not persuaded of the need to acquire either the freehold or rights in respect of plots 13-03, 13-04, 14-02 and 14-03, and hence the need to acquire rights in plot 14-04 falls away;
- The ExA however recognises the need for rights over the eastern portion of Plots 14-02 and 14-03 sufficient for the grid connection cable;
- **Plots 10-06, 10-07, 10-08, 10-09, 10-10 and 10-11:** With reference to written and oral submissions from Joanna Reeks, and following its own site observations and consideration of the issues, the ExA concludes that the case for acquisition of either freehold or rights in Plots 10-06, 10-07, 10-08, 10-09, 10-10 and 10-11 at Sunnica West Site A is not made out;
- **Plots 10-01, 10-02, 10-03, 10-04 and 10-05:** Consequently the case for seeking access rights in plots 10-01, 10-02, 10-03, 10-04 and 10-05 falls away;
- **Plots 10-12, 10-13, 10-14, 10-15, 10-16, 10-17, 10-18, 10-19, 10-20, 10-29, 10-30, 10-31, 10-32, 10-33:** The case for acquiring cable rights in respect of Plots 10-12, 10-13, 10-14, 10-15, 10-16, 10-17, 10-18, 10-19, 10-20 and Plots 10-29, 10-30, 10-31 and 10-32 also falls away and
- **Plot 10-33:** rights are required in only that part of Plot 10-33 necessary for the grid connection between Sunnica East Site B and the remainder of Sunnica West Site A to the west of the A11.

The SCC Alternative Proposal

7.5.194. During the Examination, and with the backing of the other host local authorities, SCC formally submitted alternative proposals: please see earlier chapters in this report.

7.5.195. The SCC case is set out in

- the LIR [REP1-024];

- SCC ISH2 post hearing submissions [REP4-124];
- SCC ISH3 post hearing submissions [REP4-125];
- SCC response to ExQ2.0.9 [REP5-085] signposting the LIR; and
- SCC response to the Applicant's response to ExQ2.0.11 [REP6-076].

7.5.196. As explained in SCC's post hearing submission [REP7-073] in response to Action Point 7 at ISH4, the proposals align with the first step (avoidance) of the LIR mitigation hierarchy and propose the removal of all above ground infrastructure from the following parcels as shown on the Parameter Plans [APP-135, APP-136]:

- Parcel E05 in Sunnica East Site A;
- Parcels E12 and E13 in Sunnica East Site B; and
- Parcels W03 to W12 inclusive in Sunnica West Site A.

7.5.197. SCC's submission [REP7-073] also includes an amended version of Schedule 1 to the dDCO.

7.5.198. Parcels W01 and W02 were removed from the Proposed Development following the Applicant's Second Change Request [REP5-059].

7.5.199. Following the Applicant's Second Change Request, which along with its first change request was accepted for examination, the effect of the SCC alternative proposal is that at the close of the Examination the following land parcels would remain, along with the unchanged Grid Connection Routes A and B:

- E01 to E04, E08 to E10, E33 and EC01, EC02 in Sunnica East Site A;
- E14 to E32 and EC03 in Sunnica East Site B; and
- W15, W17, unlabelled green infrastructure and EC05 in Sunnica West Site A.

7.5.200. The ExA notes that the SCC alternative proposal retains land parcel W15. However, this would be the only land parcel containing solar generating capacity remaining in Sunnica West Site A and would still be separated from the remainder of the SCC alternative proposal, requiring two HDD drives under the A11.

7.5.201. The ExA also notes that land parcel W17 would contain a BESS and substation, and that the only solar generating capacity feeding into it would be from land parcel W15.

7.5.202. The ExA has examined how the unchanged grid connection cable routes through to the existing Burwell substation would serve the SCC alternative proposal, noting particularly the configuration and location of the remaining solar energy generating capacity, and notes that the existing grid connection routes would not be the shortest available.

Conclusions on the SCC alternative proposal

7.5.203. The ExA has given very careful consideration to the SCC alternative proposal and to the Applicant's responses [REP7-064], and concludes as follows:

- The removal of parcel E05, which would contain solar arrays, means that ecological mitigation of parcel E05 would no longer be required. The need and hence the CA case for ecological mitigation parcels EC01 and EC02 is therefore no longer made out.
- The removal of parcels E12 and E13, which would contain solar arrays, means that ecological mitigation of parcels E12 and E13 would no longer be required. The need and hence the CA case for ecological mitigation parcel EC03 is therefore no longer made out.

- The removal of parcels W03 to W12 inclusive, which would contain solar arrays, means that the only remaining land parcel containing solar generating capacity would be land parcel W15: consequently
 - the need for parcel W17 in Sunnica West Site A, which contains a substation, would not be made out; and
 - parcel EC05 and the remaining land west of the A11 which contain ecological mitigation would not be needed either.
- Hence the CA case for the remaining land in Sunnica West Site A other than land parcel W15 is not made out.
- The ExA has already concluded elsewhere that CA powers in respect of parcel W15 should not be granted, principally on grounds of need and impact on the existing farming business, but the SCC alternative proposal means that it would now contain the only solar generating capacity in Sunnica West Site A: consequently the ExA's view is that the need case is weakened and is still not made out.
- The grid connection cable routes through to the existing Burwell substation would not be the shortest available. This would amount to over-acquisition and therefore the CA tests would not be satisfied in respect of the grid connection routes.

7.5.204. Consequently, the ExA therefore concludes for the reasons given above that the CA tests would not be met in respect of the SCC alternative proposal.

7.6. CONCLUSIONS

CA and TP powers sought

- The Applicant seeks CA powers within its final preferred dDCO [REP10-005] for both land and rights over land.
- The Applicant sought CA powers within the original application [APP-001]. The requirements of section 123(2) of PA 2008 are therefore satisfied in respect of land (including new rights over land) over which CA was sought in the original application.
- The changes to the application did not seek or require any additional land. The requirements of section 123 of PA2008 are therefore satisfied in respect of all the land and rights over land now sought in the Applicant's final preferred dDCO [REP10-005].

The application documents

- No land or new rights are sought, either over National Trust land held inalienably or over commons, open space or fuel or field garden allotments as defined in sections 130, 131 and 132 of PA2008.
- The Applicant does not appear to state explicitly that adequate funding would be available for compulsory acquisition within the statutory time period.
- Human rights and PSED matters have been considered by the Applicant.

Changes to the application and additional land

- The ExA concluded that the first proposed change [AS-243] did not request additional land and was not a material change which engaged the CA Regulations.
- The ExA concluded that the second proposed change [REP5-059] did not request additional land and was not a material change which engaged the CA Regulations.

- The ExA concluded that PA s123 is not engaged in respect of the changes.
- The ExA decided to accept both the proposed changes into the Examination [PD-016] [PD-023].

Funding

- The ExA concludes that there are outstanding concerns with the Applicant's Funding Statement as detailed above: consequently, the ExA recommends that prior to any grant of development consent the SoS should obtain further information in order to be in a position to conclude whether or not there is a reasonable prospect of the requisite funds for acquisition becoming available within the necessary timescale, capable of meeting all financial liabilities arising from the exercise of the CA and TP powers sought.

Human rights and the PSED

- The ExA concludes that all persons wishing to be heard have had an adequate opportunity to be heard.
- The ExA has considered all representations made and finds that human rights and PSED matters have been adequately considered by the Applicant.
- The ExA concludes that the Applicant's approach to PSED issues was reasonable, and that adequate opportunity was provided for representations on PSED to be made.
- The ExA also concludes that there is no evidence of any differentiated or disproportionate impacts on groups with protected characteristics and that the Public Sector Equality Statement will assist the SoS in discharging its duty as a public authority under the Equality Act 2010.
- The ExA therefore concludes that, if the SoS decides that development consent should be granted and that compulsory acquisition is necessary to facilitate the proposed development, that
 - any infringement of ECHR rights would generally be proportionate and justified in the public interest;
 - any interference would be in accordance with the law; and
 - the provisions in the dDCO would generally strike a fair balance between the public interest in the development going ahead and the interference with the rights of those affected.
- However, the ExA also concludes that the Applicant's proposals do not strike a fair balance between the public benefit and the interference with individual rights in certain cases. These are concluded on below.

Final position

- The ExA notes that the Applicant has reported that s135 consent has been obtained from the Secretary of State for Transport in respect of Crown land [REP11-012] and concludes that Crown consent has been obtained in respect of that land.
- The ExA concludes that there is no special category land within the Order limits.
- At the close of the Examination, there were no representations from statutory undertakers outstanding and not withdrawn.
- The ExA has given very careful consideration to all objections and representations, and to the Applicant's responses, and concludes that
 - the acquisition of the powers sought would in most cases be proportionate and justified by the public interest in facilitating the Proposed Development outweighing the private loss;

- concerns of some Affected Persons are capable of being satisfactorily addressed and resolved through the CTMP and the CEMP; and
- consequently the CA tests are met in most cases.

Final position in respect of Affected Persons

- At the close of the Examination, the Applicant had been unable to acquire all the land and rights required by agreement: there were 27 objections outstanding and not withdrawn.
- After very careful consideration of all representations made and the Applicant's responses, the ExA considers that the CA tests are not met in respect of the following Plots:
 - **Plots 9-07, 11-05 and 11-06:** The ExA is not persuaded of the need for CA of the freehold title of Plots 9-07, 11-05 and 11-06 at La Hogue Road, and concludes that access rights over these plots would be adequate.
 - **Plots 1-02 and 1-03:** The ExA is not persuaded of the need for CA of the freehold title of Plots 1-02 and 1-03 (highway), and concludes that access and cable rights over these plots would be adequate.
 - **Plots 13-03, 13-04, 14-02, 14-03 and 14-04:** The ExA is not persuaded of the need to acquire either the freehold or rights in respect of land farmed by R F Turner and Sons, ie plots 13-03, 13-04, 14-02 and 14-03, although rights will be needed over the eastern part of plots 14-02 and 14-03 for the grid connection;
 - Hence the need to acquire rights in plot 14-04 falls away; and
 - **Plots 10-06, 10-07, 10-08, 10-09, 10-10 and 10-11:** The ExA concludes that the case for acquisition of either freehold or rights in land in which Joanna Reeks has interests and rights, namely Plots 10-06, 10-07, 10-08, 10-09, 10-10 and 10-11 at Sunnica West Site A is not made out:
 - **Plots 10-01, 10-02, 10-03, 10-04, 10-05, 10-12, 10-13, 10-14, 10-15, 10-16, 10-17, 10-18, 10-19, 10-20, 10-29, 10-30, 10-31 and 10-32:** Consequently the case for seeking access rights in land required to access the Joanna Reeks land from Dane Hill Road, namely plots 10-01, 10-02, 10-03, 10-04 and 10-05 falls away, as does the case for acquiring cable rights in respect of Plots 10-12, 10-13, 10-14, 10-15, 10-16, 10-17, 10-18, 10-19, 10-20 and Plots 10-29, 10-30, 10-31, 10-32 to connect the Joanna Reeks land to the remainder of the proposed development; and
 - **Plot 10-33:** The case for acquiring cable rights over the full extent of Plot 10-33 also falls away, as only part of it is required to connect Sunnica East Site B to the remainder of Sunnica West Site A.

Overall conclusion in respect of CA and TP

- The ExA's overall recommendation is that development consent should not be granted, for reasons given elsewhere in this report. It follows that, if that recommendation is accepted, the compelling case in the public interest which is required to justify CA and TP powers has not been made out.
- Nevertheless, the ExA is mindful that the SoS may conclude that development consent ought to be granted and has examined the case for CA and TP on that basis, concluding that relevant regulations and guidance relating to CA and TP have been followed by the Applicant: if the SoS concludes that development consent should be granted, the ExA nevertheless concludes that the case for CA and TP powers has not been made out in respect of
 - the freehold title of Plots 9-07, 11-05 and 11-06; rights are adequate;
 - the freehold title of Plots 1-02 and 1-03; rights are adequate:

- either freehold or rights in Plots 13-03, 13-04, 14-02 and 14-03, save for rights in sufficient land in Plots 14-02 and 14-03 for the grid connection;
 - access rights in Plot 14-04;
 - either freehold or rights in Plots 10-06 to 10-11 inclusive;
 - access rights in plots 10-01 to 10-05 inclusive;
 - cable rights in respect of Plots 10-12 to 10-20 inclusive, Plots 10-29 to 10-32 inclusive and part of Plot 10-33.
- The ExA therefore recommends that
 - Plots 10-01 to 10-20 inclusive, Plots 10-29 to 10-32 inclusive, and Plots 13-03, 13-04 and 14-04 be removed from the Order land, and the Book of Reference and land plan be modified accordingly;
 - Plots 14-02 and 14-03 be reduced in size to the land necessary for rights only, not freehold acquisition, for the cable route, and the Book of Reference and the land plan be modified accordingly;
 - The extent of rights sought over Plot 10-33 be modified so as to include only the extent of land necessary for the remainder of the cable route, and the Book of Reference and land plan be modified accordingly;
 - CA proposals in respect of Plots 1-02, 1-03, 9-07, 11-05, 11-06, 14-02 and 14-03 be amended to indicate that only necessary access and cable rights are sought and not the freehold, and the Book of Reference and land plan be modified accordingly;
 - CA powers be granted over the remainder of the Order land; and
 - TP powers be granted over the remainder of the Order land.
 - The ExA has also considered the SCC Alternative Proposal and concludes that the CA tests would not be met where those plots identified above for removal from the DCO or for modification to rights only in the Book of Reference would remain. We also note that the APs were not specifically consulted on the SCC AP in terms of their individual rights and this would be a matter for the SoS to consider if they were minded to grant the DCO in the revised form for the SCC AP.

8. DRAFT DEVELOPMENT CONSENT ORDER AND RELATED MATTERS

8.1. INTRODUCTION

8.1.1. Version 00 of the draft Development Consent Order (dDCO) [APP-019] and revision 00 of the accompanying Explanatory Memorandum (EM) [APP-020] were submitted by the Applicant as part of the application.

8.1.2. Five further revisions of the dDCO were submitted, culminating in Rev 05 submitted on 24 March 2023, along with tracked change versions and schedules of changes, as follows:

- Rev 01, 30 August 2022 Changes Application [AS-293];
- Rev 02, 11 November 2022 Deadline 2 [REP2-012] (tracked [REP2-013]);
- Rev 03, 18 December 2022 Deadline 4 [REP4-005] (tracked [REP4-006]);
- Rev 04, 30 January 2023 Deadline 6 [REP6-013] (tracked [REP6-014]); and
- Rev 05, 24 March 2023 Deadline 10 [REP10-005] (tracked [REP10-006]).

8.1.3. Rev 05 dDCO [REP10-005] comprises 46 articles and 15 schedules. It is based on model provisions (the now-repealed Infrastructure Planning (Model Provisions) (England and Wales) Order 2009) but also draws on made Orders for similar development under the Planning Act 2008 (PA2008).

8.1.4. This Chapter comments on the structure and content of the dDCO and its examination, and signposts where to find the changes made to the dDCO during the Examination that were either not the subject of contention or were subsequently resolved to the satisfaction of the parties. It reports in more detail on any matters not resolved to the satisfaction of the main parties at the close of the Examination, and where no changes to the Applicant's final preferred version are considered necessary these issues are highlighted in Table 8.1. Any changes to the Applicant's final preferred version of the dDCO [REP10-005] considered necessary are highlighted in Table 8.2.

8.2. THE STRUCTURE AND CONTENT OF THE ORDER

8.2.1. The content of the dDCO [REP10-005] appears on its face. The Examining Authority (ExA) is satisfied that the structure is fit for purpose, and does not recommend any changes to the structure.

8.2.2. The Applicant has not included a maximum limit on generating capacity in the dDCO, explaining that total generation capacity is linked to the size of the site and the Grid Connection offer it has accepted (500MW). This would allow it to take advantage of future technologies and innovation to make the Proposed Development as efficient as possible.

8.2.3. This approach would comply with draft National Policy Statement (dNPS) EN-3 which states that installed export capacity should not be seen as a tool to constrain the impacts of a solar farm. Rather, applicants should use other measurements, such as panel size, total area and percentage of ground cover to set the maximum extent of development when determining the planning impacts of an application.

8.2.4. A "Rochdale Envelope" approach has been used which assesses the maximum (or where relevant minimum) parameters of the Proposed Development, an approach used in electricity generation projects where flexibility is required. A set of Design

Principles (DP) [REP6-037] has been established that would permit flexibility in the design and set the limits within which the Proposed Development could be built and operated. The DP correspond to the physical areas set out in the works plans (Works Plans - Revision: 04 [REP6-006]) and would be secured in Requirement 6 and Schedule 10 in the dDCO [REP10-005].

8.2.5. In addition to the DP, other DCO Requirements, certified documents and plans would control and manage the detailed design of the Proposed Development, its construction, operation (including maintenance) and decommissioning. Sections 2.6 and 3 of the EM [REP10-007] explain further how such mechanisms would work together as an envelope within which the Proposed Development would be undertaken.

8.2.6. Article 3 (Development consent etc. granted by this Order) and Schedule 2 (Requirements) create a "consent envelope" within which the Proposed Development would be brought forward. Briefly:

- the Proposed Development is described in Schedule 1 of the Order, where it is referred to as the "authorised development". The authorised development is granted consent pursuant to Art 3(1).
- in Schedule 1, the Proposed Development is divided into a series of numbered works, eg "Work No. 1A";
- Art 3(2) requires that the numbered works authorised by the Order are situated in the areas and within the limits of deviation shown on the Works Plans;
- the design of the Proposed Development would also be controlled through Requirement 6 (Detailed design approval) which requires approval of details of the final design and details to accord with the DP;
- In addition to the DP, the design of the Proposed Development is also controlled by:
 - in the case of Work No. 2 (battery energy storage), the design requirements set out in the "battery fire safety management plan" (BFSMP) (pursuant to Requirement 7);
 - approval of the Landscape and Ecology Management Plan (LEMP) (Requirement 8);
 - approval of permanent fencing and means of enclosure (Requirement 11);
 - approval and implementation of a surface and foul water drainage scheme (Requirements 12 and 19);
 - approval of a Construction Environmental Management Plan (CEMP) (Requirement 14);
 - approval of an Operational Environmental Management Plan (OEMP) (Requirement 15);
 - approval of the construction traffic management plan and travel plan (Requirement 16);
 - approval of an operational noise assessment (Requirement 17);
 - approval of a detailed archaeology mitigation strategy (Requirement 13);
 - provision of permissive paths (Requirement 21); and
 - approval of a reinstatement plan for public rights of way (PRoW) (Requirement 24).
- The construction phase of the Proposed Development (as set out in Schedule 1 of the dDCO and which is required to be constructed within the areas on the Works Plans) would be controlled by:
 - implementation of the BFSMP (Requirement 7);

- implementation of temporary fencing and means of enclosure (Requirement 11);
 - implementation of the surface and foul water drainage scheme (Requirements 12 and 19); -
 - implementation of the detailed archaeology mitigation strategy (Requirement 13);
 - implementation of the LEMP (Requirement 8);
 - implementation of the CEMP (Requirement 14);
 - implementation of an operational noise assessment (Requirement 17);
 - implementation of the construction traffic management plan and travel plan (Requirement 16);
 - approval and implementation of the PRoW Management Plan (Requirement 18); and
 - approval and implementation of the water management plan (Requirement 19).
- the operation and maintenance of the Proposed Development would be controlled by:
 - approval and implementation of the BFSMP (Requirement 7);
 - approval and implementation of the LEMP (Requirement 8);
 - approval and implementation of the surface and foul water drainage scheme (Requirements 12 and 19); and
 - approval and implementation of an OEMP (Requirement 15).

8.2.7. The application seeks flexibility to undertake the Proposed Development within the above envelope, in particular in the maximum areas and parameters secured via the Works Plans and DP. As set out in the ES and individual technical chapters, the environmental impact assessment has assessed the upper extent of the areas and sizes allowed by the Works Plans and DP. As a result, the ES has assessed a worst case, and has considered and confirmed that any scheme built within the maximum areas and parameters would have effects no worse than those assessed.

8.3. CHANGES DURING EXAMINATION

8.3.1. Discussions related to the DCO took place at Issue Specific Hearing (ISH)1 [EV-004] and ISH4 [EV-067]. The ExA asked written questions on various matters relating to the DCO and received responses from the Applicant, the host local authorities who were concerned with several DCO-related issues, and a few other IPs. In consequence the Applicant revised its dDCO as described above.

8.3.2. The ExA published its Schedule of Changes to the Applicant's draft DCO [PD-029]. It has considered the responses received and reviewed the matters canvassed at earlier stages of the Examination and the written and oral submissions made.

8.3.3. This section of the Report addresses matters which remained outstanding subsequent to the changes made by the Applicant to the DCO in its final preferred draft Order [REP10-005] (Rev 05), in a tabulated format:

- **Table 8.1** sets out the provisions in respect of which the ExA has accepted the Applicant's detailed submissions at ISH4 (see Deadline 7 Submission - Written Summary of Applicant's Oral Submissions at ISH4 [REP7-060]), and has therefore decided to recommend that no changes are required, for the reasons summarised in the third column. A fuller explanation of the reasoning can be found in the Applicant's written summary [REP-060] which includes post-hearing notes.

- **Table 8.2** sets out the provisions in respect of which the ExA has recommended changes to the Applicant’s final preferred dDCO (Revision 05) [REP10-005].

Table 8.1 DCO Provisions Not Recommended to be Changed

Provision	Examination Issue	ExA Reasoning
Article 2 (Interpretation)	‘permitted preliminary works’ could cover creation or alteration of accesses which would need consent of traffic management authority.	The side agreement would require authority for changes to the highway, and the Applicant’s preferred final DCO was amended to insert “and access” into the definition of “permitted preliminary works traffic management plan” obviating the need for amendment to the “permitted preliminary works” definition.
Article 27 (temporary use of land for constructing the authorised development):	ECDC had concerns as to flexibility of phrase “temporary use of land” regarding the lack of precision	Use of TP minimises amount of CA required in line with policy; no certain mechanism that would justify substitution of compensation for use of TP powers on a quantum meruit basis.
Schedule 2 (new requirement requested to be inserted)	scope of the definition of ‘maintain’ and proposed an alternative definition and a new requirement that requires the undertaker to get consent when ‘replacing’ part of the Scheme.	FOEMP [REP5-107] requires annual schedule of planned maintenance. The power to maintain could not enable replacement works having new or materially different effects (Article 5(3)). Also, definition of maintain to include ‘remove’, ‘replace’ and ‘reconstruct’ has precedent in other DCOs: Cleve Hill Solar Park Order 2020, Little Crow Solar Park Order 2022 and Riverside Energy Park Order 2020.
Article 9 (Power to alter layout, etc., of streets) and Article 11 (Temporary stopping up of public rights of way):	CCC requested change to Article 9(3)1 so that restoration of temporarily altered street to street authority’s satisfaction should include “through inspection and certification by the street authority in accordance with the procedure set out in the legal agreement	7.2.15 – 7.2.16 of the FCTMP [REP5-041] requires pre-construction condition surveys and reinstatement works, sufficient to address the concern. Paragraph 7, Local Highway Authorities Protective Provisions [AS-319] provides for inspection by the relevant local highway authority of the highway works.

Provision	Examination Issue	ExA Reasoning
	between the relevant parties”	
Article 9(3)	Suggested addition at end of “ <i>in accordance with the protective provisions in Schedule 13, Part 13</i> ” (the suggestion should rather have referred to Schedule 12, Part 13).	Unnecessary as the Applicant would need to comply with the protective provisions pursuant to Article 40 unless they fall away in favour of a side agreement with the local highway authorities.
Article 9, 11 and Schedule 2 to the draft DCO	CCC concern that these provisions and the side agreement or protective provisions are interlinked: rights of way are highways needing same level of protection as roads.	Applicant has inserted a new Article 24 which relates to the restoration of rights of way similar to Article 9 but specifically relating to Article 11 (in addition to its being mentioned in the CEMP).
Article 9(1) and 9(4)	SCC concern that the level of detail in Schedule 5 is insufficient for works to be undertaken without the consent of the street authority, as it doesn’t specify detail about the alteration to the layout of the streets. If the side agreement didn’t deal with this, the control in Article 9(4) should also apply to the power in Article 9(1).	The change would be secured in paragraph 3 of the protective provisions if the side agreement were not completed.
Article 9(1)(b)	Insert “ <i>and Schedule 6</i> ” adequately to control reinstatement of public rights of way affected.	Unnecessary as the Applicant’s final DCO was amended to add a reinstatement provision, into Article 11 (Article 11(8)) stating that “ <i>the undertaker must restore any public right of way that has been temporarily altered under this Order to the reasonable satisfaction of the street authority</i> ”.
Article 11 (temporary stopping up of public rights of way):	CCC request Article 11 is amended so powers in Article 11(1) relating to temporary stopping up of any public right of way would be only as a	ExA accepts there would be difficulty in determining how, and to whom, the undertaker would demonstrate that closure of the public right of way is a last resort. The Framework Construction

Provision	Examination Issue	ExA Reasoning
	<p>“last resort” in accordance with the detailed CTMP.</p>	<p>Traffic Management Plan and Travel Plan [REP7-017] now adequately covers the matter in stating at paragraph 6.3.4: <i>“the local highway authority will be consulted on PRow management or closures in accordance with the provisions of article 11 of the DCO”</i> and <i>“PRow will only be closed temporarily in the event of there being no reasonable alternative to closure that would enable the works to be carried out safely and expeditiously within the limits of deviation for that work.”</i></p>
<p>Article 18 (compulsory acquisition of land)</p> <p>and Article 22 Decommissioning Environmental Management Plan (DEMP)</p>	<p>whether CA powers in Article 18(1) should be used to carry out works in the post-decommissioning environment, should they be imposed on the undertaker.</p> <p>Whether Requirement 22 should be expanded to ensure DEMP secures such works and establish the default position of criminal liability for breaching this Requirement.</p>	<p>The ExA considers that the undertaker should not be compelled to use CA powers for ecological or landscape reasons after decommissioning has ended in reference to land within the Order Limits.</p> <p>Amendments were made to the DEMP to deal with environmental matters once decommissioning has taken place.</p>
<p>See above Article 22 (DEMP)</p>	<p>The wording included in the Decommissioning Environmental Management Plan at Deadline 7 is not agreed</p>	<p>It is not necessary to require long term retention of any particular features in circumstances where the measures in the Decommissioning Environmental Management Plan and the terms of the DCO will secure the restoration of the land at the end of the life of the project.</p>
<p>Article 27 (Temporary use of land for constructing the authorised development)</p> <p>Requirement 6 (Arboricultural</p>	<p>The scope of and need for the power to remove trees (vegetation) in Article 27(1)(b) - having regard to Articles 36 and 37.</p> <p>Whether Requirement 6 should clarify what</p>	<p>The concern was not that the power in Article 27(1)(b) should be removed but about more certainty as to what trees would require works.</p> <p>Articles 36 and 37 are needed during operation as works to trees may be required, eg if they</p>

Provision	Examination Issue	ExA Reasoning
Impact Assessment (AIA) [REP5-052]	trees would require works, with a view to making powers under Article 36s and 37 and the removal of vegetation pursuant to 27(1)(b) unnecessary.	<p>become a danger to those carrying out the authorised development.</p> <p>Requirement 6 and the LEMP provide the necessary assurance that the detailed design, to be approved by relevant planning authorities, must consider the AIA or updated tree surveys for locations in the phase where arboricultural impacts would be likely, the surveys to be done prior to submission of these details, and the LEMP must be approved by the relevant planning authorities prior to commencement of the authorised development.</p>
Requirement 6 (Detailed design approval)	Whether Requirement 6 should require pre-commencement condition surveys to be completed of all public rights of way and cable route crossings.	<p>Applicant agreed to update Article 11 to add an equivalent of Article 9(3) into the dDCO requiring undertaker to restore any public right of way that has been temporarily altered under the DCO to the reasonable satisfaction of the street authority.</p> <p>(However, the ExA considers a further change is needed: see Table 2).</p>
Requirement 6 (Detailed design approval)	Whether Requirement 6 should require use of Environmental Colour Assessment	Adequately dealt with in LEMP and Requirement 6(2) was updated so that the detailed design must accord with the provisions of the plan.
Requirement 10 (stone curlew):	a contingency fund for the stone curlew provision was sought by WSC as a last resort to account for a situation where the objectives for the offsetting land are not met, which is a risk as there are constraints on archaeology in that area; and because it is difficult and challenging in practice to secure suitable mitigation land outside the Order	Ecology Advisory Group will oversee measures required to achieve biodiversity objectives, including in respect of stone curlew, including whether further measures are needed. A contingency approach could be achieved in the LEMP which might not be a fund or on the face of the DCO.

Provision	Examination Issue	ExA Reasoning
	Limits. In first instance a contingency plan should be sought but in similar applications there was offsetting land identified as back up land.	
Requirement 23 (Isleham plane crash site exclusion area)	CCC concern that the Isleham plane crash site interpretation board and commemorative plaque “ <i>must be on a highway</i> ” in Requirement 23(5)(a).	Wording was deleted from Requirement 23(5)(a) in the Applicant’s final preferred DCO as the scheme would not be on a highway but on a permissive path that provides a circular route around parcel E05. The framework DEMP provides for the memorial to be moved elsewhere following eventual decommissioning.
Schedule 1 paragraph 2 Work No 10 subparagraph (a)(i)	after “ <i>or verge within the street</i> ” delete “ <i>including removal of any vegetation</i> ” (two instances).	Same as above, for Article 27 (temporary use of land for constructing the authorised development).
Schedule 12, Part 13 (protective provisions) and the “side agreement”	Given no completed side agreement at close of Examination, whether the protective provisions would be adequate.	If the side agreement is completed and notified to the SoS, he may wish, on any eventual grant of consent, to delete Part 13 of Schedule 12. If the side agreement remains incomplete, the ExA is satisfied that the protective provisions effectively protect the interests of the relevant local authorities as set out in Schedule 12, Part 13.
Schedule 13, (procedure for discharge)	Fee schedule acceptable in principle but detail not agreed	The counter proposals in Applicant’s final preferred DCO are not accompanied by a robust justification. Reasonable to base fees on NSIP example as proposed by the district local authorities.
Requirements 7,8,14,15 and 16	Concern that “substantially” should instead read “entirely” in interests of certainty	The plans are currently in outline or framework format. Both Applicant and discharging authorities must have the ability to update the plan in question to take account of final detailed

Provision	Examination Issue	ExA Reasoning
		designs and updated legislation and guidance.

Fees for discharge of requirements

- 8.3.4. WSC and ECDC proposed a fee schedule in identical form that sets out the various fees. The District Councils agreed that the maximum fee for discharging Requirement 6 (detailed design approval) of £300,000 should be split so it would be £150,000 for each authority. The Applicant is willing to agree to pay fees to the district councils, but the fees based on the Sizewell C (Nuclear Generating Station) Order 2022, are not in its view comparable. Cleve Hill Solar Park Order 2020 and Little Crow Solar Park Order 2022 did not include a fee schedule. In view of the scale of the Proposed Development and the precedent set by another DCO, in the absence of further evidence from the Applicant as to why fees comparable to a planning application under a different regime should form the basis of a schedule, the ExA considers that the fees based on the Sizewell DCO would be a reasonable starting point on which to fix a fee schedule. The ExA recognises that further representations might be made by the Applicant directly to the SoS on this matter.

The Suffolk County Council Alternative Proposal (SCC AP)

- 8.3.5. As described above in Chapter 6 on the case for development consent, the ExA concludes that the application as examined would have significant adverse impacts that outweigh its benefits. Therefore, the ExA does not recommend that the DCO in the Applicant's preferred form should be granted consent.
- 8.3.6. The ExA notes that any reduced scheme is not that of the Applicant; that the Applicant has neither accepted it nor put forward an alternative substantive reduction in the Proposed Development as examined, nor is there any accompanying ES or set of revised application documents such as a Land plan or Book of Reference.
- 8.3.7. It is important also to bear in mind that where an alternative is first 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 the evidence for its suitability as such and the SoS should not necessarily expect the applicant to have assessed it (paragraph 4.4.3 of NPS EN-1). However, the final decision must rest with the SoS.
- 8.3.8. Given the level and urgency of need for new energy infrastructure, the SoS is advised in paragraph 4.4.3 of NPS EN-1, subject to any relevant legal requirements to follow the following principles when deciding what weight should be given to alternatives:
- the consideration of alternatives in order to comply with policy requirements should be carried out in a proportionate manner; and
 - only alternatives that can meet the objectives of the proposed development need to be considered.
- 8.3.9. In the event, the SCC Alternative Proposal was openly examined and evidence taken from the host local authorities, the Applicant and other IPs who wished to make representations. Apart from the technical considerations relevant to the DCO, the substantive issues which underpin the desire for a reduced scale in development relate to ecology and biodiversity, cultural heritage, historic environment, and landscape and visual impact matters, and are dealt with in Chapter 4 of this Report.

8.3.10. Although the Applicant produced an alternative DCO in response to the SCC Alternative Proposal, the Applicant's position is clear. It rejects any further reduction in scale of the Proposed Development for the reasons set out in key documents including:

- Written Summary of Applicant's Oral Submissions at the Issue Specific Hearing on Environmental Matters on 16 and 17 February 2023 [REP7-060];
- Response to Examining Authority's schedule of changes to the draft DCO [REP9-006];
- Response to ExA's Rule 17 Request [REP9-005]; and
- End of Examination Summary Position Paper [REP10-032].

However, with particular reference to its conclusions in Chapter 4 on the harms principally but not exclusively related to landscape setting and the heritage assessment, the ExA finds that the evidence from the Applicant is not robust, particularly in respect of the fact that the Proposed Development would still be over 50MW. Consequently, the ExA is not persuaded that the scale of reduction sought is such that, should the SoS be minded to grant development consent for the Application, it would result in a development that was commercially unviable. Paragraph 4.4.3 of NPS EN-1 in its sixth bullet point addresses the matter as follows:

"alternative proposals which mean the necessary development could not proceed, for example because the alternative proposals are not commercially viable or alternative proposals for sites would not be physically suitable, can be excluded on the grounds that they are not important and relevant to the...decision".

8.3.11. The implications of such a reduced scale of development so far as the ExA can ascertain, are set out in the following section.

Implications of a reduced scale of development

8.3.12. As set out in paragraph 4.4.1 of NPS EN-1:

"As in any planning case, the relevance or otherwise to the decision-making process of the existence (or alleged existence) of alternatives to the proposed development is in the first instance a matter of law, detailed guidance on which falls outside the scope of this NPS. From a policy perspective this NPS does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option".

8.3.13. That position is broadly reflected in dNPS EN-1 as well as in the revised draft National Policy Statement (rdNPS) EN-1.

8.3.14. The SCC Alternative Proposal was designed to facilitate deletion of one or more parcels of land from the Proposed Development, whilst retaining the overall structure and form of the DCO, although amendments to Schedule 1 were proposed.

8.3.15. The positions of the host local authorities is explained in SCC's response to Action Point 7 of ISH4 [REP7-073] and the Applicant made comments on page 43, section 2, in its response to LPA Deadline 6 Submissions [REP7-057].

8.3.16. The Applicant's detailed submissions on these proposals are found in its:

- Response to SCC's amendments to Schedule 1 [REP7-064];

- Response to the “general” theme of the ExA’s Third Written Questions [REP7-055]; and
- Response to the ExA’s Rule 17 Request [REP9-045].

8.3.17. The Applicant made points about the complex mechanics of any removal, and also stated that there is no requirement for these parcels to be removed, and any removal would be illogical, unjust, and manifestly contrary to planning policy. It notes the ExA is invited to recommend a refusal of development consent for significant quantities of renewable energy generation - almost 50% of the installed capacity if all parcels mooted are removed. It considers the reasons cited by the IPs, which focus on one or more of landscape and visual, ecology, and heritage matters, “do not come close to justifying the removal of parcels and the energy generated more than outweighs those reasons”:

- Parcel E05: would generate 43.5MW of renewable energy;
- Parcels E12 and E13: constitute 56.2MW of low carbon energy generation; and
- Parcels W3-W12: constitute 228.6MW of low carbon energy generation.

8.3.18. However, it is significant in the ExA’s view that in its detailed End of Examination Summary Position Paper [REP10-032], the Applicant omits any mention of the residual effects of the eventual removal of these parcels on the overall viability of the Proposed Development. If a DCO were granted with such a reduced scale of development, the ExA’s view is that it would still be a development for the purposes of s115 PA2008, for which development consent could be granted.

8.3.19. There is not alternative arrangement for the connection cable route in the SCC Alternative Proposal, as it would still be provided as originally proposed by the Applicant through Sunnica West A: the ExA notes that in respect of good design it would no longer be the shortest route.

8.3.20. As NPS EN-1 states (paragraph 5.9.21):

“Reducing the scale of a project can help to mitigate the visual and landscape effects of a proposed project. However, reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint and reduction in function – for example, the electricity generation output. There may, however, be exceptional circumstances, where mitigation could have a very significant benefit and warrant a small reduction in function. In these circumstances, the IPC may decide that the benefits of the mitigation to reduce the landscape and/or visual effects outweigh the marginal loss of function.”

8.3.21. However, as envisaged in paragraph 5.10.13 of NPS EN-1, the SoS will have to judge whether the adverse effects, including landscape and visual effects, outweigh the benefits of the Proposed Development or any amended form.

8.3.22. The ExA published its Schedule of Changes to the Applicant’s draft DCO [PD-029], reflecting in part the submissions made to date principally by the host authorities. Relevant responses received were:

- [REP9-006] Sunnica Ltd Deadline 9 Submission - 8.116 Response to Examining Authority’s schedule of changes to the draft Development Consent Order;
- [REP9-007] East Cambridgeshire District Council and Cambridgeshire County Council (PDF, 171 KB) Deadline 9 Submission - Comments on Document Index the Examining Authority’s schedule of changes to the draft Development Consent Order (dDCO)

- [REP9-009] Say No To Sunnica Action Group Ltd Deadline 9 Submission - Comments on the Examining Authority's schedule of changes to the draft Development Consent Order (dDCO)
- [REP9-010] Suffolk County Council Deadline 9 Submission - Comments on the Examining Authority's schedule of changes to the draft Development Consent Order (dDCO)
- West Suffolk Council Deadline 9 Submission - Comments on the Examining Authority's schedule of changes to the draft Development Consent Order (dDCO).

DCO Provisions recommended to be changed

- 8.3.23. The Applicant submitted its Response to Examining Authority's Schedule of Changes to the draft Development Consent Order at D9 [REP9-006]. Where the ExA agrees with the Applicant's response and the matter was still disputed by others, the position is noted in Table 8.1 above as no recommended change.
- 8.3.24. The last iteration of Schedule of Changes to the dDCO (rev 03 from D6 to D10) [REP10-038] prefaced the final submission of the Applicant's preferred DCO at D10 on 24 March 2023 [REP10-005].
- 8.3.25. The Applicant also submitted an Alternative Without Prejudice DCO which took account of the SCC Alternative Proposal [REP10-034] by illustrating potential amendments in [].
- 8.3.26. After considering all the submissions on the matters raised, and in the event that the SoS decides to grant development consent, the ExA recommends that changes be made to the Applicant's Alternative Without Prejudice DCO as set out in Table 8.2 below.

Table 8.2 DCO Provisions Recommended to be Changed

Examination Issue	Recommended Change	ExA reasoning
Requirement 6 (detailed design approval)	<u>Add subparagraph “(k) the pre-commencement condition survey of all public rights of way affected by haul road/cable route crossings has been completed in accordance with 5.2.11 of the Construction and Traffic Management Plan, and a reinstatement plan of the public rights of way surfaces and widths agreed.”</u>	In addition to the Applicant's changes as noted in Table 8.1 above, the ExA considers, given the importance of a comprehensive reinstatement plan for PROWs, and the nature of response in the Examination made to clarification of these issues, that confidence in an effective overall design would be secured by requiring approval to be given at pre-commencement stage to such a reinstatement plan.
Requirement 6 (detailed design approval)	add a sub-paragraph “(l) how the design of that phase has taken account of predicted noise and vibration effects and mitigation proposed therefor”.	To give confidence that at detailed design stage the relevant local authorities would be in a position to scrutinise, before approval, the extent to which the then specific design

Examination Issue	Recommended Change	ExA reasoning
		of the infrastructure within the operational sites at each phase of the authorised development would have taken due account of noise as a design issue.
Removal of parcels of developable land	Subject to the recommended changes to Requirement 6 above, the recommended DCO for any eventual consent is the Applicant's Deadline 10 Submission - Alternative Without Prejudice Development Consent Order (Clean) [REP10-034]	See commentary below. To give flexibility in the event of the SoS being minded to grant consent for the Proposed Development reducing its scale in respect of one or more parcels of land within the Application Site.

- 8.3.27. The ExA has considered carefully the proposed amendments put forward, principally by SCC on behalf of the host local authorities which related mainly to amendments to Schedule 1 and the description of the works.
- 8.3.28. However, in essence the various permutations to the Proposed Development which were put in the host local authorities' LIR [REP1-024] that originally suggested reducing its scale through the removal of parcels E05, E12, E14 and W03-W12 appear to assume that there could be just one variation consisting of the wholesale removal of all those parcels. In suggesting that these parcels are removed, there are different permutations that the SoS might consider (Response to the ExA's Rule 17 letter [REP11-012] and Response to ExA's Schedule of Changes to the DCO [REP9-006]).
- 8.3.29. The ExA is of the view that the various permutations do not need to be referenced in Schedule 1 as they will be reflected in the corresponding Works Plans and Land and Crown Land Plan that it would be necessary to amend. As the Applicant has pointed out in its response above, the numbered works in Schedule 1 would be defined by reference to the sites, e.g. 'East A Site' and 'East B Site', which in turn would refer to the Works Plans. As to Work No 10. (works to create and maintain stone curlew reserve), if parcels E5, E12 and E13 are removed from the Proposed Development, this can be placed in square brackets.
- 8.3.30. It would therefore be necessary for the Applicant to produce a number of updated and revised plans and a revised Book of Reference and Explanatory Memorandum to accompany any such revised scheme and consideration would need to be given as to the impact of these on the Affected Persons and the IPs as they were not available during the examination process.
- 8.3.31. The Without Prejudice Explanatory Memorandum (EM) [REP10-036] prepared to explain the Alternative Without Prejudice DCO [REP10-034] submitted by the Applicant at Deadline 10 takes into account possible changes to the Order following the ExA's Rule 17 Letter dated 10 March 2023 (the "Rule 17 Letter") and the Applicant's response dated 17 March 2023 (the "Response to the Rule 17 Letter"). It sets out in its tracked changes form at [REP10-037] what the changes to the dDCO are focussed on. In summary these are:

- changes to the definitions of the relevant plans and documents that would need to be updated to reflect any changes to the Scheme;
- changes to the requirements in Schedule 2 of the Order;
- changes to Schedule 8 that would need to reflect amended Land and Crown Land Plans;
- changes to Schedule 10 that would need to reflect the updated list of documents and plans to be certified under the Order; and
- changes to Schedule 15 that would need to reflect the updated list of tree subject to tree preservation orders that are impacted by the authorised development.

8.3.32. In summary the SoS has discretion to:

- Refuse consent (as recommended by the ExA); or
- Grant consent (contrary to ExA recommendation) for the Proposed Development; or
- Grant consent (contrary to ExA recommendation) for the SCC AP but subject to natural justice requirements for APs and IPs where consequential amendments could not be fully considered in the Examination and which was not supported by the Applicant, or
- Grant consent for any other combination of changes but with consideration of natural justice requirements to all parties.

CONCLUSIONS

8.3.33. Should the SoS be minded to grant development consent for the Proposed Development, the ExA recommends that the Applicant's Alternative Without Prejudice DCO submitted by the Applicant should be adopted with the addition of two new paragraphs (k) and (l) in Requirement 6 (detailed design approval) as described in Table 8.2 above and as attached at Appendix D.

8.3.34. Should the SoS be minded to grant development consent for the SCC AP in the terms examined by the ExA, the DCO to be used should be in the form attached at Appendix D deleting the items in [] together with consequential amendments to Schedules and the submission of revised plans, Book of Reference and other reference documents.

9. SUMMARY OF FINDINGS AND CONCLUSIONS

9.1. INTRODUCTION

9.1.1. The Proposed Development (and the SCC Alternative Proposal) is for a solar generation project of greater than 50MW together with associated cable connections. This meets the definition of a generating station under the Planning Act 2008 s14(1)(a) and is above the threshold capacity of s15(2). The Battery Energy Storage System (BESS) also proposed has a capacity greater than 50MW. This does not contribute to the threshold for an NSIP (s15(3C)) but can be included in an NSIP as associated development as is the case here. The cable connections themselves are not NSIPs but can also be included as associated development.

9.1.2. Solar generation is not covered by the currently designated National Policy Statement for Renewable Energy (EN-3). Solar generation (and associated generation from storage) is within the definition of renewable energy covered by the Overarching NPS for Energy (EN-1) and cable connections are also included within the definitions of EN-5 for Network Infrastructure. The draft NPSs published in September 2021 do include solar generation within the specific technology for the draft Renewables NPS (dEN-3) and the draft Overarching NPS (dEN-1) has continued to emphasise the urgent need for new generation capacity and specifically for renewable sources in accordance with the ambition for Net Zero on carbon emissions. Revised draft NPSs for energy were published by the Department for Energy Security and Net Zero (DESNZ) after the close of the Examination.

9.1.3. Hence, s104 does not apply to the Proposed Development, as the currently designated EN-3 does not cover solar generation. S105 applies for NSIPs where a specific NPS does not have effect and the current NPSs and the draft NPSs are important and relevant in the Secretary of State's (SoS) decision making. Under the Planning Act 2008 s105(2), the SoS must have regard to:

- any local impact report (within the meaning given by section 60(3)) submitted to the SoS before the deadline specified in a notice under section 60(2);
- any matters prescribed in relation to development of the description to which the application relates; and
- any other matters which the Secretary of State thinks are both important and relevant to the Secretary of State's decision.

9.1.4. The consideration of the joint Local Impact Report (LIR) submitted by the four host local authorities, important and relevant policy matters, relevant law and caselaw and effects of the Proposed Development and the Suffolk County Council (SCC) Alternative Proposal are set out in the Chapters above together with the implications of the Habitats Regulations 2010, the powers requested under the DCO and the human rights of Affected Persons and in the context of the Public Sector Equality Duty (PSED). The ExA's findings are summarised here.

Summary of findings

9.1.5. In relation to the Proposed Development, the Examining Authority (ExA) concludes in summary that:

- The in-principle need for the Proposed Development in terms of the provision of renewable energy, including storage and distribution, is accepted. There is a strong need case for renewable energy generation including large-scale solar powered generation and the Proposed Development and the SCC Alternative Proposal would bring significant public benefits. Reasonable alternatives have been considered and the final selection of the site is justified according to the objective criteria set out in NPS EN-1;
- there is support for the principle of renewable energy generation in the LIR but other elements of the Proposed Development conflict with policies in relation to landscape, ecology and biodiversity, cultural heritage and the local economy;
- in relation to the Habitats Regulations Assessment (HRA), no adverse effects on integrity (AEol) were considered on the majority of sites engaged but there is insufficient information to enable the ExA to reach a positive conclusion that there would be no adverse effects on integrity (AEol) to Breckland Special Protection Area (SPA);
- the Applicant has not presented any information in relation to alternatives, Imperative Reasons of Overriding Public Interest (IROPI) and compensation. The inability to rule out AEol under the Habitats Regulations to the stone curlew (*Burhinus oedicephalus*) qualifying feature of the Breckland SPA, and the lack of any information in relation to alternatives, IROPI and compensation means that the ExA concludes that to agree to a plan or project in these circumstances could be a breach of the Habitats Regulations;
- there would be less than substantial harm to heritage assets but this would be at the high end of the scale;
- there would be widespread and significant effects upon landscape character and visual amenity due to the design of the scheme including its large scale: significant localised landscape character effects would result;
- A reduction in the scale of the Proposed Development would need to be extensive to achieve adequate mitigation of landscape and visual effects;
- all traffic, transport and highway safety effects could be satisfactorily dealt with via the mitigation measures secured by the various Requirements in the ExA's recommended DCO;
- air quality matters have been adequately assessed: air quality objectives would not be breached and adequate mitigation arising from dust would be secured by the Requirements in the ExA's recommended DCO;
- noise and vibration matters have been adequately assessed;
- water resources, flood risk and drainage matters have been adequately assessed;
- loss of Best and Most Versatile and other agricultural land, and the consequent effects on farming operations, have been carefully considered in light of the significant economic and public benefits of the Proposed Development;
- there could be significant operational impacts due to glint and glare which have not been adequately assessed and which may affect equestrian and other users unless satisfactorily mitigated;
- any potential impacts on tourism have not been firmly established by a strong evidential link; and
- the Proposed Development would potentially have adverse effects on the horse racing industry that could cause harm to the economy locally and beyond.

9.1.6. In relation to the application for Compulsory Acquisition (CA) and Temporary Possession (TP) powers requested for the Proposed Development, the ExA in summary concludes that:

- the NPSs identify a national need for renewable electricity generating capacity;

- the overall need to secure the land and rights required, and to construct the Proposed Development within a reasonable commercial timeframe, is justified;
- the private loss to those affected is to some extent mitigated through the cable route selection, choice of the application land, the undergrounding of cables and the extent of the rights and interests proposed to be acquired;
- the Applicant has explored all reasonable alternatives to the CA of land, rights and interests sought and there are no alternatives that ought to be preferred;
- prior to any grant of development consent, the SoS should obtain further information in order to be in a position to conclude whether or not there is a reasonable prospect of the requisite funds for acquisition becoming available within the necessary timescale, capable of meeting all financial liabilities arising from the exercise of the CA and TP powers sought; and
- the proposed interference with the human rights of individuals would in most cases be for legitimate purposes that could justify such interference in the public interest and to a proportionate degree: however, the case for exercise of CA and TP powers has not been made out in all cases - see recommendation below.

Outstanding Issues at the Close of the Examination

9.1.7. These include:

- The issue of whether the SoS, as Competent Authority, needs to determine whether further consultation is required in regard to Appropriate Assessment and outstanding information from Natural England;
- In relation to the local highway authorities, the side agreement remains to be completed between the Applicant and CCC and SCC whereupon the protective provisions contained in Schedule 12 of the DCO would be removed as unnecessary;
- The Applicant has undertaken to obtain a licence from the Joint Casualty and Compassionate Centre (JCCC) that would confirm the extent of the exclusion zone around the Isleham plane crash site;
- The Applicant has not reached a conclusive view on whether the BESS would fall under one of the three categories in Schedule 1 of the Health and Safety Regulations as details regarding its design are yet to be determined;
- The Deed of Obligation purports to be dated 28 March 2023 [REP11-011] between Sunnica Limited, Cambridgeshire County Council and Suffolk County Council: it provides for the payments of a Public Right of Way (PRoW) contribution, and a contribution to fund Stone Curlew Research to be administered by the Royal Society for the Protection of Birds (RSPB) or the Applicant with the County Councils as enforcing authority, and the ExA strongly recommends that the SoS satisfies themselves that the Deed is properly completed in circumstances where the SoS is minded to grant consent;
- The glint and glare assessment as applied to the Proposed Development has been found by the ExA not to be fit for purpose.

9.1.8. As reported above, the ExA's conclusion that an AEoI cannot be ruled out and the lack of information on alternatives, IROPI and compensation leads the ExA to conclude that it cannot recommend that the DCO is made. In these circumstances the ExA is unable to conclude that there would be a compelling case in the public interest as is required to be demonstrated to justify the exercise of CA and TP powers.

9.1.9. In relation to the other outstanding consents recorded above, the ExA has considered the available information bearing on these and, without prejudice to the exercise of discretion by future decision-makers, has concluded that there are no

apparent impediments to the implementation of the Proposed Development, should the SoS grant the application.

Conclusions if the SoS finds the HRA position is satisfactory

- 9.1.10. In relation to s105 PA2008, the ExA has considered:
- the joint LIR submitted by the four host local authorities,
 - any matters prescribed in relation to development of the description to which the application relates; and
 - any other matters which the Secretary of State thinks are both important and relevant to the Secretary of State's decision.
- 9.1.11. The principal planning issues are set out in Chapter 4 of this Report and the ExA has made findings in relation to these matters. The in-principle need for the development, in terms of the provision of renewable energy is accepted. There is a strong need case for renewable energy generation infrastructure in NPS EN-1 and in the dNPS EN-3. There is support for the principle of renewable energy in the LIR.
- 9.1.12. The production of solar generated renewable energy on a large scale accords with NPS policy, provides a clear public benefit and weighs heavily in favour of the Proposed Development. The ExA considers that the Proposed Development could make a significant contribution in meeting this need and assisting in the transition to a low carbon system. As such the principle of the Proposed Development is supported by EN-1 and by dEN-1 and dEN-3.
- 9.1.13. However, the ExA has concluded that there would be very considerable adverse impacts that weigh against the Proposed Development: these significant and widespread adverse impacts are generated principally in terms of landscape and visual amenity, and effects on the setting of heritage assets, the horseracing industry and agriculture. The ExA considers that all these adverse impacts clearly outweigh the public benefits that would accrue from the Proposed Development.
- 9.1.14. Therefore, the ExA concludes that:
- The Proposed Development is in conflict with the joint LIR submitted by the four host local authorities, with particular reference to employment (including the horse racing industry), landscape, nature conservation and heritage;
 - the Proposed Development would have significant adverse effects that would outweigh its benefits;
- 9.1.15. As the Proposed Development is not recommended for consent, the powers requested in relation to CA and TP are not considered to be justified by their public benefit.

Consideration of the SCC Alternative Proposal

- 9.1.16. The SCC Alternative Proposal was considered during the examination and a Schedule of Changes to the DCO was circulated by the ExA for comments and considered at hearings. Where the SCC Alternative Proposal affected the impacts these have been identified in Chapter 4 and Chapter 5 for the Habitats Regulations.
- 9.1.17. The SCC Alternative Proposal would have a reduced generation capacity but would still meet the threshold for an NSIP and it would still represent a contribution to the urgent need for generation and renewable sources in particular. As such there is still

a substantial public benefit from the SCC Alternative Proposal. It would reduce or remove the following disbenefits identified:

- the Isleham plane crash site would be removed from the development, so the licence from the Joint Casualty and Compassionate Centre (JCCC) would no longer be required;
- the land identified as important for stone curlew would be removed from the development;
- the impact on landscape character and overall visual intrusion would be reduced;
- the extent of the impact on the setting of Chippenham Park RPG would be reduced;
- the potential impacts on the horse racing industry would be reduced;
- the extent of glint and glare would be reduced, but the inadequacy of the original assessment would remain; and
- it would reduce the impact on farming operations

9.1.18. However, it would retain the remaining disbenefits identified in Chapter 4 and the scale of benefits from employment from construction would also be reduced.

9.1.19. The uncertainty in relation to the potential AEoI for Breckland SPA would remain.

9.1.20. The SCC AP would still have a degree of conflict with the LIR in relation to the impacts identified above.

9.1.21. The Applicant's initial response to the SCC Alternative Proposal was that is unviable and uncommercial. They did comment in more detail on the proposal and on the ExAs Schedule of Changes to the DCO which reflected the potential changes to the DCO (and as shown in Appendix D by [] brackets). However, the Applicant did not accept the SCC Alternative Proposal as an alternative that they wished to promote and there are no amended application documents to support the revised scale and effects of the alternative other than the SCC submission. Affected Persons were not specifically consulted on the revisions in terms of their land rights and interests.

9.1.22. Taken together the ExA concludes that the disbenefits of the SCC Alternative Proposal would still outweigh the benefits of the proposal and that there is insufficient information available to determine the implications of the proposal on Affected Persons.

9.1.23. As such, the powers requested in relation to CA and TP are not considered to be justified on public interest grounds.

9.2. RECOMMENDATION

9.2.1. For all of the above reasons, and in the light of its findings and conclusions on important and relevant matters set out in this Report, the ExA, under the Planning Act 2008 (as amended), recommends that the Secretary of State does not make the Sunnica Energy Farm Order 202* in the form of the Proposed Development.

9.2.2. For the above reasons and in the light of its further findings and conclusions on important and relevant matters, the ExA does not recommend that the SoS make the order in a revised form of the SCC Alternative Proposal.

9.2.3. In the event that the Secretary of State concludes that the Sunnica Energy Farm Order 202* should be made, the ExA recommends that the Secretary of State make the Order in the form recommended at Appendix D.

9.2.4. In the event that the SoS concludes that the order should be made in an amended form the ExA has set out its views on the implications of the SCC Alternative Proposal which are shown as [] potential amendments.

In circumstances where the SoS concludes that these matters should not preclude development coming forward, the ExA has considered all the other material considerations in the planning balance set out in Chapter 6 of this Report. The ExA has examined the case for CA and TP on this basis and concludes that the Applicant has complied with all relevant legislation. In these circumstances the ExA concludes that there would generally be a compelling case in the public interest for the CA powers sought in respect of the land shown on the Land plan (as amended) and that the Proposed Development would comply with s122(2) and s122(3) of PA2008 in most cases.

9.2.5. However, the ExA is not satisfied that the CA and TP powers are justified in all cases, and therefore recommends that:

- Plots 10-01 to 10-20 inclusive, Plots 10-29 to 10-32 inclusive, and Plots 13-03, 13-04 and 14-04 be removed from the Order land, and the Book of Reference and land plan be modified accordingly;
- Plots 14-02 and 14-03 be reduced in size to the land necessary for rights only, not freehold acquisition, for the cable route, and the Book of Reference and the land plan be modified accordingly;
- The extent of rights sought over Plot 10-33 be modified so as to include only the extent of land necessary for the remainder of the cable route, and the Book of Reference and land plan be modified accordingly;
- CA proposals in respect of Plots 1-02, 1-03, 9-07, 11-05, 11-06, 14-02 and 14-03 be amended to indicate that only necessary access and cable rights are sought and not the freehold, and the Book of Reference and land plan be modified accordingly.

9.2.6. The recommended DCO would need to be amended accordingly if the SoS proceeds to make it.

9.2.7. The ExA recommends that in circumstances where development consent is granted a pre-condition of any grant should ensure that the potential effects of glint and glare on non-motorised users including horse riders be re-assessed and to ensure any mitigation is adequate to reduce any predicted adverse effects to an acceptable level where this is technically possible.

APPENDICES

APPENDIX A: THE EXAMINATION

APPENDIX B: EXAMINATION LIBRARY

APPENDIX C: LIST OF ABBREVIATIONS

APPENDIX D: THE RECOMMENDED DCO