

Botley West Solar Farm

STATEMENT OF COMMON GROUND -

Civil Aviation Authority

EN010147/APP/11.7/2

10 November 2025

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Approval for issue

Jon Alsop 10 November 2025

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SIGNATURES

This Statement of Common Ground has been prepared and agreed by SolarFive Ltd and the Civil Aviation Authority.

Civil Aviation Authority



Principal Aerodrome Inspector Airspace, ATM and Aerodromes UK Civil Aviation Authority

SolarFive Ltd



Director of Project Development
On behalf of
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1 Introduction

1.1 DCO Reference

1.1.1 EN010147/APP/11.7/2

1.2 Date of Examination

1.2.1 May 2025 – November 2025

1.3 Proposed Development

- 1.3.1 The Applicant is seeking development consent for Botley West Solar Farm (the 'Project'), which in summary will comprise the construction, operation, maintenance and decommissioning of a photovoltaic ('PV') solar farm and associated infrastructure with a total capacity exceeding 50 megawatts ('MW'), in parts of west Oxfordshire, Cherwell and Vale of White Horse districts. The Project will export electricity for connection to the National Grid at Botley West.
- 1.3.2 The Project is classed as a 'nationally significant infrastructure project' ('NSIP') for the purposes of the Planning Act 2008 (PA 2008) and requires an application for a Development Consent Order (DCO). The application for development consent is being submitted to the planning inspectorate ('PINS'), with the decision on whether to grant a DCO to be made by the Secretary of State for Energy Security and Net Zero (the 'Secretary of State'), as required under the PA 2008.
- 1.3.3 This Statement of Common Ground (SoCG) has been prepared to accompany the DCO application made to the Secretary of State under section 37 of the PA 2008 for the proposed Project. The Application has been submitted by SolarFive Ltd (the Applicant).
- 1.3.4 A Location Plan can be found in the Examination Library at [AS-024] and a full description of the Project can be found at ES Chapter 6 Project Description [APP-043].

1.4 Statement Overview

- 1.4.1 This Statement of Common Ground ('SoCG') comprises a record of consultation held with the relevant SoCG organisation to date as appropriate, and is designed to evolve, representing the ongoing nature of these discussions throughout the Examination period.
- 1.4.2 This SoCG has been prepared between (1) the Applicant and (2) Civil Aviation Authority (jointly referred to as the Parties).
- 1.4.3 An overarching Statement of Commonality **[EN01047/APP/11.6]** has been submitted alongside this document and should be referred to in conjunction with this SoCG.
- 1.4.4 The Examining Authority has requested that the SoCGs include the following matters as set out in the Rule 6 Letter [PD-006]:
 - Methodology for environmental assessments;

- Data collection methods:
- Baseline data:
- Data/statistical analysis, approach to modelling and presentation of results;
- Expert judgements, assumptions and worst case scenario;
- Assessment of alternatives;
- Design development;
- Identification and sensitivity of relevant features and receptors;
- Construction and operational effects;
- Embedded and additional mitigation;
- Cumulative effects and mitigation; and
- Relevant wording in the draft Development Consent Order (dDCO)
- 1.4.5 It can be taken that any matters not specifically referred to in sections 3 and 4 of this SoCG are not of material interest or relevance to Civil Aviation Authority's representations and therefore have not been considered in this document.
- 1.4.6 For the avoidance of doubt, this SoCG comprises contributions from the following environmental topic disciplines:
 - Aviation and Glint and Glare
- 1.4.7 This statement addresses the following areas of common ground in relation to the Applicant Project Team's engagement with the Civil Aviation Authority to date:
 - a. Relevant submission documents and plans
 - b. Record of relevant correspondence to date
 - c. Matters that are agreed
 - d. Matters yet to be agreed
 - e. Matters that are not agreed
- 1.4.8 As referenced above, c, d, and e (sections 4), summarises issues that are 'agreed', 'yet to be agreed' or are 'not agreed'. 'Not agreed' indicates a final position where the parties have agreed to disagree. 'Agreed' indicates that an issue has been resolved.

2 Relevant Submissions Documents and Plans

2.1.1 A list of DCO documents and plans of relevance to engagement with the Civil Aviation Authority is identified in the tables below for ease of reference.

Table 2.1: Draft DCO submission documents and plans record pursuant to Civil Aviation Authority discussions – Aviation and Glint and Glare

Document/Plan Ref.	Title	Examination Library reference	Rev./Dated
EN0101/APP/6.5	ES Appendix 4.4: Glint 7 Glare Study Rev 1	REP4-012	22 August 2025
EN010147/APP/17.14	Thermal Impact Report	REP6-066	20 October 2025
EN010147/APP/17.15	Thermal Plume Primary Radar Refraction Report	REP6-067	20 October 2025
EN010147/APP/17.3	Applicant's written summary of oral submissions at ISH2 – Appendix 3 – Bird Strike Technical Note	REP6-047	20 October 2025

3 Record of Relevant Correspondence

- 3.1.1 The Project has been the subject of pre-application engagement with the Civil Aviation Authority, and both parties continue to engage throughout and beyond the submission of the DCO application for the Project.
- 3.1.2 **Appendix A** identifies the discussions and correspondence that have taken place between the Applicant's project team and the Civil Aviation Authority to date.

4 Areas of Discussion between the Parties

Table 4.1: Areas of Discussion between the Parties – Aviation and Glint and Glare

Ref	Relevant Application Document	Summary of Description of Matter	Civil Aviation Authority Current Position	Applicant Current Position	Status
		Safety of commercial, passenger and training aircraft.	As the EFATO areas now appear to have been agreed we have no additional comments.	The Applicant has discussed proposals to create an extended safeguarding zone for EFATO directly with OASL.	As the EFATO areas now appear to have been agreed the
				On the 19th June the Applicant advised London Oxford Airport that removal of panels, as proposed above, required the re-siting of the existing secondary substation and the existing construction compound. It has been agreed that the substation is moved -	CAA have no additional comments
				50m to the north, which itself will be reduced in height to approximately 5m, with associated lattice structure lightning rods being no higher than 10.5m. The Applicant has proposed that the construction compound is rotated through 90 degrees from its current position, this has been presented in CR2.	
				This was progressed as part of the Applicant's Change Request 2 Application at Deadline 5 and the London Oxford Airport has accepted this change.	
		Glint and Glare		The Applicant has discussed Glint and Glare impacts towards Oxford Airport with OASL and consider options to mitigate effects.	The CAA accept that the glint and glare issues have been
			attractant areas which the panels may cause	The Applicant agrees to reorientate an area of panels to eliminate any risk of reflections toward the ATCT.	acted on as have the matters relating to wildlife attractant areas. On this basis the CAA have no further comments to
				Following the reorientation of an area of panels the Applicant has agreed to undertake a new Glint and Glare analysis.	
				This analysis was completed and shared with London Oxford Airport on 21st July.	make.
				The updated Glint and Glare report was submitted to PINS at DL4Consideration has been given to wildlife attractant areas and no detrimental effect is believed to arise.	
				The Applicant has updated the Ecology Strategy of the Outline Landscape and Ecology Management Plan to include a technical note to the management of land outside of the panel arrays with the following:	
				Recognising the proximity of Oxford Airport to the Central Site Area, landscape design within 1.5km of the airport and within the Order Limits, will be designed in general accordance with the principles set out in CAA CAP 772 Wildlife Hazard Management at Aerodromes. This will include ensuring that there are no water features present, no additional scrub/tree planting along hedgerows and grassland areas outside of the panel	

Ref **Relevant Application Summary of Description of Matter Civil Aviation Authority Current Position Applicant Current Position** Status **Document** maintaining a sward height of circa 220-300mm. In addition, once operational, the Applicant will ensure ongoing dialogue with the airport with respect to the management of wildlife risk, in line with CAST Renewable energy developments: solar photovoltaic developments CAST Aerodrome Safeguarding Guidance Note. The Applicant has agreed to the removal 39 ha of Solar Panels from the project site closest to the Airport boundary. This freed-up land will continue to be used for agricultural purposes, managed by the landowner. The Applicant's position is that there will not be an increased population of birds in the area. For Deadline 6 (20 October 2025), the Applicant submitted "The Applicant's Written Summary of its Oral Submissions at Issue Specific Hearing 2". This submission includes the "Bird Strike Technical Note" as Appendix 3 [REP6-047] Below is a summary of this Bird Strike Technical Note: The Applicant's position with respect to the change in bird strike risk as a result of the Project is that the development of a solar site in this location would either not change or slightly decrease the overall risk in the area. The baseline within the Project site comprises agricultural land which is a specific land use type listed within the CAA CAP772 Guidance as being high risk with respect to bird strike. As such, removal of the arable land use and its replacement with a less intensive land management within the Project site in and around the panel areas will mean that similar flocks of birds (especially gulls) aren't attracted to the Project site in the same manner A feature of the Project site is the River Evenlode

and the Flood area. The Corridor is

forage.

approximately 84ha and will comprise restoration of flood meadow grassland and associated habitats. This restoration will create habitat that is highly suitable for foraging birds such as lapwing and curlew. As such, it is likely that this feature within the Project site will attract birds to

Ref	Relevant Application Document	Summary of Description of Matter	Civil Aviation Authority Current Position	Applicant Current Position	Status
				Notwithstanding, as a precaution, the Applicant has agreed in principle—subject to reasonable costs—to functive provision of an additional bird-scaring unit. At present, London Oxford Airport operates one such unit.	i
		Thermals	The CAA accept that work has been undertaken that addresses this issue. In the absence of any view to the contrary, it is assumed the London Oxford Airport will	The Applicant agreed to draft a scope for an independent review of the impact Heat Induced Turbulence, for London Oxford Airport to agree.	The CAA accept that work has been undertaken that
			accept its findings and on this basis the CAA has no further comment to make.	London Oxford Airport agreed with the Applicant the scope of the report on the 16 th July.	addresses this issue In the absence of any expert view to the contrary, and subject to a final peer review by the LOA to verify the conclusions of the reports, the CAA ha
				A Thermal Modelling Report was shared with London Oxford Airport before the 17th October and was submitted to the ExA for DL6 [REP6-066]	
				On the basis of the numerical modelling, the following conclusions have been drawn:	
				The maximum increase in air temperature associated with the thermal effect of the solar farm is 1.1 °C, with an average increase across all assessed cases of 0.6 °C.	no further comment to make.
				It is estimated that the resulting increase in exceedance of the vertical turbulence threshold commonly applied to building induced turbulence is of the order of 1.1% over the course of the year, across the assessed wind directions. Consequently, it is expected that the impact of the proposed solar farm will be minor, and thus may not be considered significant.	
				Based on the findings of the report, the issue of Heat Induced Turbulence will not adversely impact upon the airports operation in any material way.	
				London Oxford Airport also raised potential concerns over primary radar refraction caused by thermal plume from solar panels as part of their representations in the examination period.	
				A Radar Refraction Report was shared with London Oxford Airport before the 17 th October and was submitted to the ExA for DL6 REP6-067	
				The Radar Refraction Report concluded that impact significance is negligible, with the maximum change in perceived height position of aircraft observed by radar at Oxford Airport expected to be no more than three metres at 100km	
				The Radar Refraction calculations used formulas, data and analysis from The International Telecommunications Union (ITU).	

Ref Relevant Application Summary of Description of Matter Civil Aviation Authority Current Position Applicant Current Position Status

Document

The International Telecommunication Union (ITU) is the United Nations agency for digital technologies, including radar and communications networks, and develops technical standards to ensure that these technologies work effectively. The ITU-R is the Radiocommunication Sector of the ITU. The ITU-R manages the radiofrequency spectrum and produces recommendations covering many uses, including tracking aircraft using radar. These recommendations provide the basis for operators and other parties to determine radar impacts.

Documents produced by the ITU describe and explain the potential effects upon radio-frequency waves caused by changes in atmospheric conditions, including increases in air temperature as are predicted to occur over the Botley West Solar Farm. These ITU documents establish that the possible effects from increased air temperature would be limited to low levels of refraction which would change the perceived height of aircraft.

REP6-067 uses the calculations and formulae set out in ITU-R P.452 and ITU-R P.453 to quantitively assess the potential effects upon primary radar returns at Oxford Airport, which would result in a small change in the perceived height of aircraft (approximately 2.3m for an aircraft 100km away from the radar). This is not considered to be significant relative to the size and speed of a typical aircraft.

These results are based on a worst-case analysis of 100% humidity, 15°C ambient air temperature (rising to 16°C over the solar farm) and assumes that thermal effects apply to the whole path of propagation; the results are therefore likely to overstate the possible effects

Calculations undertaken suggest that impact significance is negligible, with the maximum change in perceived position of aircraft observed by radar at Oxford Airport expected to be no more than 2.27 metres for an aircraft 100km away from the radar and this is not deemed to be significant relative to the size and speed of a typical aircraft

The reports submitted by the applicant are the only studies undertaken in respect of the impact on turbulence and radar. Given the stage in the Examination in which they were made available for review, the Airport has not been in a position to commission a peer review to assess the soundness of either study. Oxford Aviation Services Limited acknowledges that the Examining Authority can only make their recommendation on the basis of the evidence available to it. However, the Airport is unable to validate the conclusions drawn on these matters of aviation safety in the absence of the reports being subject to a peer review

Ref	Relevant Application Document	Summary of Description of Matter	Civil Aviation Authority Current Position	Applicant Current Position	Status

Appendix A Record of Relevant Correspondence

Date	Form of Correspondence	Topics Discussed	Outcomes				
Aviation and G	Aviation and Glint and Glare						
16/04/25	Email	CAA requests draft SoCG including Matters; Safety, Glint and Glare and Thermal Turbulence					
20/05/25	Email	The Applicant's draft of SoCG.	Draft of SoCG				
04/06/25	Email	CAA comment on SoCG					
08/09/25	Email	Updated SoCG sent to CAA					
10/10/25	Email	Updated SoCG sent to CAA					