



Botley West Solar Farm

Statement in respect of Statutory Nuisance

May 2025

PINS Ref: EN010147

Document Ref: EN010147/APP/3.4

Revision Rev 1

APFP Regulation 5(2)(f); Planning Act 2008; and Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations

Approval for issue

Jonathan Alsop

2 May 2025

The report has been prepared for the exclusive use and benefit of the Applicant and solely for the purpose for which it is provided. Unless otherwise agreed in writing by RPS Group Plc, any of its subsidiaries, or a related entity (collectively 'RPS') no part of this report should be reproduced, distributed or communicated to any third party. RPS does not accept any liability if this report is used for an alternative purpose from which it is intended, nor to any third party in respect of this report. The report does not account for any changes relating to the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report.

The report has been prepared using the information provided to RPS by its client, or others on behalf of its client. To the fullest extent permitted by law, RPS shall not be liable for any loss or damage suffered by the client arising from fraud, misrepresentation, withholding of information material relevant to the report or required by RPS, or other default relating to such information, whether on the client's part or that of the other information sources, unless such fraud, misrepresentation, withholding or such other default is evident to RPS without further enquiry. It is expressly stated that no independent verification of any documents or information supplied by the client or others on behalf of the client has been made. The report shall be used for general information only.

Prepared by:

RPS

**101 Park Drive,
Milton Park, Abingdon,
Oxfordshire, OX14 4RY
United Kingdom**

Prepared for:

**Photovolt Development Partners GmbH,
on behalf of SolarFive Ltd.**

Contents

1	INTRODUCTION	1
1.1	Introduction	1
1.2	Project Location	2
1.3	The Applicant	3
1.4	Overview of the Project	3
1.5	Legislative and Planning Policy Context	4
2	ASSESSMENT	9
2.1	Introduction	9
2.2	Air Quality	10
2.3	Noise and Vibration	13
2.4	Artificial Lighting	17
3	OVERALL CONCLUSION	18

Tables

No table of figures entries found.

Figures (See Volume 2: Figures)

Figure number	Figure title
1.1	Site Location and Order Limits Overview
1.2	Masterplan Overview

Glossary

Term	Meaning
The Applicant	SolarFive Ltd
The Project	The Botley West Solar Farm
The Site or Order Limits	The area of land encompassing the Project development and shown on the Site Location and Order Limits Overview plan (Volume 2, Figure 1.1 of the ES).

Abbreviations

Abbreviation	Meaning
DCO	Development Consent Order
EIA	Environmental Impact Assessment
EPA	Environmental Protection Act 1990
ES	Environmental Statement
HDD	Horizontal Directional Drilling
NETS	National Electricity Transmission System
NGET	National Grid Electricity Transmission plc
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
PA 2008	The Planning Act 2008
PINS	The Planning Inspectorate
PV	Photovoltaic
PVDP	Photovolt Development Partners GmbH
SPV	Special Purpose Vehicle

Units

Unit	Description
ha	Hectares
km	Kilometres
m	Metres
MWe	Megawatt electrical

1 Introduction

1.1 Introduction

- 1.1.1 This Statement in respect of Statutory Nuisance (SSN) has been prepared to present an assessment of potential statutory nuisance for the Botley West Solar Farm (Botley West), hereafter also referred to as the 'Project'. The document presents the assessment work that has been undertaken for the Project, in accordance with the Planning Act 2008 (PA 2008) and the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 (the "APFP Regulations").
- 1.1.2 The SSN has been prepared by RPS for Photovolt Development Partners GmbH (PVDP), on behalf of SolarFive Ltd (the "Applicant").
- 1.1.3 The Project 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)_R, 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. October 2027 is the current grid connection offer date, although the Applicant and National Grid Electricity Transmission (NGET) are in discussions for this to be amended to the beginning Q4 2028. October 2028 is therefore now the assumed date of connection for the purposes of assessment.
- 1.1.4 The Project is classed as a 'Nationally Significant Infrastructure Project' (NSIP) for the purposes of the 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.
- 1.1.5 The Project is also considered to be 'EIA development' as defined by the 'EIA Regulations', requiring EIA. Chapter 4 of the ES sets out the approach to EIA and includes a table which highlights how the ES complies with Schedule 4 of the EIA Regulations.
- 1.1.6 The Statement has been prepared to satisfy Regulation 5(2)(f) of the APFP Regulations, which requires the DCO application to be supported by *"a statement whether the proposal engages one or more of the matters set out in section 79(1) (statutory nuisances and inspections therefor) of the Environmental Protection Act 1990, and if so how the applicant proposes to mitigate or limit them."*
- 1.1.7 The parameters set out in Section 79(1) of the Environmental Protection Act 1990 (EPA), that are considered this Statement are:
- Air Quality
 - Noise and Vibration
 - Artificial Light
- 1.1.8 The likely significant effects for the Project have been studied systematically, in line with the EIA Regulations, appropriate methodologies and industry best

practice, and informed by the statutory consultation stage. The baseline for the assessment has been derived from surveys and studies within and around the Site.

- 1.1.9 This Statement should be read alongside other technical documents supporting the DCO submission, in particular:
- 1.1.10 Environmental Statement (ES) [EN010147/APP/6.4];
- 1.1.11 Outline Code of Construction Practice – including its Dust Management Plan appendix [EN010147/APP/7.6.1];
- 1.1.12 Outline Operational Management Plan [EN010147/APP/7.6.2]; and
- 1.1.13 Outline Decommissioning Plan [EN010147/APP/7.6.4].
- 1.1.14 This Statement is produced in accordance with Section 158 of the Planning Act 2008, which provides statutory authority for carrying out development or anything else which is authorised by the DCO. The Statement sets out appropriate mitigation measures, and indicates that the Project has no significant effects that would give rise to statutory nuisance.

1.2 Project Location

- 1.2.1 The Project will be located in the county of Oxfordshire, across an area of approximately 1,400 ha. The Project location extends from an area of land in the north, situated between the A4260 and the Dorn River Valley near Tackley and Wootton (the Northern Site), through a central section, situated broadly between Bladon and Cassington (the Central Site), and connecting to a section further south near to Farmoor Reservoir and north of Cumnor (the Southern Site), where the Project will connect to the National Grid transmission network. The name ‘Botley West’ is derived from the location of the grid connection point.
- 1.2.2 The Project lies within the administrative areas of Oxfordshire County Council, West Oxfordshire District Council, Cherwell District Council and Vale of White Horse District Council. The majority of the Project lies within West Oxfordshire and overlaps with some of the Oxford Green Belt.
- 1.2.3 The Project Site Location and Order Limits Overview (representing the extent of the Order Limits) are shown in Volume 2, Figure 1.1 [EN010147/APP/6.4]. The Project Masterplan Overview, which provides a design layout with key parameters, is shown in Volume 2, Figure 1.2 [EN010147/APP/6.4]. The area containing solar arrays will cover approximately 839 ha in total, unless the new substation which the Project will connect into is delivered outside the Order Limits (see section 1.4 below), in which case the area of solar arrays will cover approximately 843 ha. The remainder of the Site, comprising approximately 461ha, will continue in its use for agriculture in the form of conservation grazing, and for other benefits including Biodiversity Net Gain, community food growing, surface water management, and improved public access.
- 1.2.4 The existing baseline for the Project, and a more detailed description of the locations of the proposed development work, are set out in further detail in Chapter 2: The Existing Baseline [EN010147/APP/6.3].

1.3 The Applicant

- 1.3.1 The Applicant, and the proposed undertaker in the draft DCO **[EN010147/APP/3.1]**, is SolarFive Ltd, an electricity generation licence holder under the Electricity Act 1989 and a company registered in England and Wales (company no. 12602740). SolarFive Ltd is the 'special purpose vehicle' (SPV) for the Project and currently has a grid connection offer date with Nation NGET of October 2027.
- 1.3.2 SolarFive Ltd is jointly owned by the two founders of PVDP, a Berlin-based developer of solar farms. PVDP has been successfully developing solar assets in Europe and Japan for the last 18 years, with 1.0GW built to date. Further information on the Applicant's corporate structure is in the Funding Statement **[EN010147/APP/4.2]**.
- 1.3.3 PVDP acts on behalf of SolarFive Ltd and, in liaison with its technical consultant team, has helped to prepare and submit the DCO application, including the ES.

1.4 Overview of the Project

- 1.4.1 The Project is formed of three areas of solar installation (Northern Site, Central Site and Southern Site) with interconnecting cables, which together would generate renewable power through photovoltaic (PV) panels. The Project aims to deliver approximately 840MWe of power to the National Electricity Transmission System (NETS), which would provide secure and clean energy of an equivalent level to meet the needs of approximately 330,000 homes.
- 1.4.2 The Project's solar arrays (comprising all the mounting structures, frames and foundations) will be connected by underground electrical cables within each section of the Site, and via underground electric cables to the substation at the grid connection point. The interconnecting cable route will largely follow the public highway, but some parts will cross land controlled by the Applicant.
- 1.4.3 The interconnecting cables being proposed are approximately 24.6km in length. Approximately 14.6km is located on farmland; 7.5km is located in public highway; and approximately 2.5km within trenchless crossings, such as those located under rivers, the railway line, main highway corridors, or under hedgerow and tree belt features.
- 1.4.4 The consent being sought is a temporary one. It is anticipated that the Project will be constructed, operated and decommissioned within 42 years. At the end of this period all above ground infrastructure (excluding the NGET substation) and equipment will be removed, along with the cables beneath the main solar array areas, with the land reverting back to its previous agricultural use.
- 1.4.5 Cables located beneath the public highway or cables laid using horizontal directional drilling (HDD) are not, however, proposed to be removed following the decommissioning of the Project.
- 1.4.6 The approach that the Applicant has taken to its assessment is to define and describe the Project by reference to maximum (and where relevant, minimum) design parameters, commonly referred to as the 'Rochdale Envelope'.

- 1.4.7 The Project will connect to the National Grid, via a new National Grid 400kV substation, to be located close to the existing National Grid 400kV power line, which runs between Cowley, in Oxford, westwards to Walham in Gloucestershire. Discussions have been ongoing with NGET regarding the location and design for their substation based on their own assessment and evaluation work. Whilst, at the time of writing this SSN, a final decision has yet to be taken by NGET, it is likely that the NGET substation will be located in one of two possible locations;
1. On land within the Order Limits, at the Southern Site, at the western most extremity, south of the Farmoor Reservoir; or
 2. On land near and to the West of the Applicant's Southern Site, south of the Farmoor Reservoir.
- 1.4.8 For assessment purposes, the Applicant assumes that the NGET substation will be within the Site, as described in Option 1 above, and powers will be taken to consent that substation as part of the Applicant's DCO.
- 1.4.9 However, in the event of Option 2, the SSN has also cumulatively assessed:
- a. an alternative location for the NGET substation close to the Southern Site at its western end, with NGET seeking consent via the Town and Country Planning Act 1990; and
 - b. the substitution of solar panels for the substation on the land referred to in Option 1 above.
- 1.4.10 The area required to be set aside for the NGET substation amounts to an area of up to 3.8ha. Within that area it is assumed that the substation itself will occupy a footprint of approximately 87m by 30m, with a maximum building height of 12m, excluding connecting tower structures. This is secured in the Outline Layout & Design Principles (as submitted alongside this Procedural Deadline B submission). It is understood, from NGET, that the building containing the switchgear will be 14m high, 16m wide and 76m in length, with an annexe building alongside, which will be 3.6m high, 15m wide and 76m in length.
- 1.4.11 Chapter 6 of the ES: Project Description [EN010147/APP/6.3] sets out further details of the Project.

1.5 Legislative and Planning Policy Context

- 1.5.1 The UK Government has legislated under the Climate Change Act 2008 to commit the country to achieving net zero carbon emissions by 2050, and to de-carbonising electricity by 2035. These commitments mean that the UK urgently needs more renewable forms of electricity to be produced. The reliance on fossil fuels as part of the UK's energy mix will have to be displaced by cleaner and more secure sources of energy, resulting in greatly increased renewable electricity demand. Already, many conventional gas-fired power stations have closed and many of the older nuclear power stations will no longer be generating to support the nation's energy needs. The Project's anticipated generation output will be vitally important if the Government's commitments are to succeed, significantly helping to deliver the transition to net zero.

- 1.5.2 The Project is defined as an NSIP under paragraph 14(1)(a) and 15(2) of the PA 2008, which defines an NSIP as including the construction of an onshore generating station exceeding 50MWe in England.
- 1.5.3 The PA 2008 provides that the Secretary of State is responsible for determining the application for a DCO, with the power to appoint the Planning Inspectorate to manage and examine the Application (referred to as the ‘Examining Authority’). In its role, the Examining Authority will examine the Application and make a recommendation to the Secretary of State, who will then decide whether to grant a DCO for the Project.
- 1.5.4 The statutory framework for determining applications seeking development consent is provided by the PA 2008.
- 1.5.5 Section 104 (2) of the PA 2008 states that:
(2) “In deciding the application, the Secretary of State must have regard to —
a) any national policy statement which has effect in relation to development of the description to which the application relates (a “relevant national policy statement”),
b) any local impact report (within the meaning given by section 60(3)) submitted to the Commission before the deadline specified in a notice under section 60(2),
c) any matters prescribed in relation to development of the description to which the application relates, and
d) other matters which the Secretary of State thinks are both important and relevant to its decision.”
- 1.5.6 The Secretary of State is therefore required to have regard to any relevant National Policy Statement (NPS), amongst other matters, when deciding whether or not to grant a DCO.
- 1.5.7 The Overarching NPS for Energy (EN-1), the NPS for Renewable Energy Infrastructure (EN-3) and the NPS for Electricity Networks (EN-5) form the relevant NPSs with respect to the Project. As NPS EN-3 Renewable Energy includes specific policy relating to solar generating stations, including ground mounted solar projects, these policy documents have been taken into account in this SSN.
- 1.5.8 Paragraphs 4.15.1 – 4.15.4 of NPS (EN-1) state:
- 1.5.9 *“Section 158 of the Planning Act 2008 confers statutory authority for carrying out development consented to by, or doing anything else authorised by, a Development Consent Order.*
- 1.5.10 *Such authority is conferred only for the purpose of providing a defence in any civil or criminal proceedings for nuisance. This would include a defence for proceedings for nuisance under Part III of the Environmental Protection Act 1990 (EPA) (statutory nuisance) but only to the extent that the nuisance is the inevitable consequence of what has been authorised.*
- 1.5.11 *The defence does not extinguish the local authority’s duties under Part III of the EPA 1990 to inspect its area and take reasonable steps to investigate*

complaints of statutory nuisance and to serve an abatement notice where satisfied of its existence, likely occurrence or recurrence.

- 1.5.12 *The defence is not intended to extend to proceedings where the matter is “prejudicial to health” and not a nuisance.”*
- 1.5.13 Paragraph 4.15.5 states:
- 1.5.14 *“At the application stage of an energy NSIP, possible sources of nuisance under section 79(1) of the EPA 1990, and how they may be mitigated or limited, should be identified by the applicant so that appropriate requirements can be included in any subsequent order granting development consent (see Section 5.7 on dust, odour, artificial light etc. and Section 5.12 on noise and vibration)”.*
- 1.5.15 Paragraphs 4.15.6 – 4.15.8 go on to state:
- 1.5.16 *“At the application stage of an energy NSIP, possible sources of nuisance under section 79(1) of the EPA 1990 and how they may be mitigated or limited should be considered by the Secretary of State so that appropriate requirements can be included in any subsequent order granting development consent (see Section 5.7 on dust, odour, artificial light etc. and Section 5.12 on noise and vibration).*
- 1.5.17 *The Secretary of State should note that the defence of statutory authority is subject to any contrary provision made by the Secretary of State in any particular case in a Development Consent Order (section 158(3) of the Planning Act 2008). Therefore, subject to Section 5.7 and Section 5.12, the Secretary of State can disapply the defence of statutory authority, in whole or in part, in any particular case, but in so doing should have regard to whether any particular nuisance is an inevitable consequence of the development.”*
- 1.5.18 The other matters which the Secretary of State must have regard to include Local Impact Reports, prescribed matters, and any matters which the Secretary of State considers are both ‘important and relevant’ to their decision.
- 1.5.19 A DCO, if granted, has the effect of providing consent for development, in addition to a range of other consents and authorisations, where specified, as well as removing the need for some consents (such as planning permission). Section 115 of the PA 2008 also states that a DCO can include consent for ‘associated development’, which is development that is not an NSIP in its own right but is functionally related to the NSIP. This may be development that supports the construction, operation or decommissioning of the NSIP; which helps to address the impacts of the NSIP; or is of a type normally brought forward with the NSIP.
- 1.5.20 The Consenting Process is further explained in Chapter 3 of the ES [EN010147/APP/6.3].

National and Local Planning Policy

National Policy Statements

- 1.5.21 The application, including the SSN, has considered the NPS that will be important and relevant to the Secretary of State’s decision as to whether to grant a DCO for the Project.

- 1.5.22 The NPSs set out the Government's policy for the delivery of energy infrastructure, providing the policy framework for planning decisions. The current suite of designated NPS were published in November 2023 and designated in January 2024.
- 1.5.23 The designated energy NPSs comprise the overarching NPS for Energy (EN-1) alongside technology-specific NPS (EN-2 to EN-5). The SSN has been undertaken with reference to the following:
- EN-1: Overarching NPS for Energy;
 - EN-3: NPS for Renewable Energy Infrastructure; and
 - EN-5: NPS for Electricity Networks Infrastructure.
- 1.5.24 EN-1 sets out the 'need case' for energy infrastructure projects, and planning guidance on assessment criteria that are common across a number of technologies. EN-5 refers to the need case in EN-1 and includes planning guidance on the assessment of technology specific criteria.
- 1.5.25 EN-3 emphasises the central role that solar will play in decarbonising the energy sector. The scale of such proposals and their impacts are also recognised.

National Planning Policy Framework

- 1.5.26 The National Planning Policy Framework (NPPF), published in 2012 and revised most recently in December 2023, sets out the Government's planning policies for England and how these are to be applied, supported by the National Planning Practice Guidance (NPPG). Under the new Government elected in May 2024, a consultation on proposed amendments to the NPPF will close on 24 September 2024.
- 1.5.27 NPPF paragraph 5 sets out that an NSIP will be determined in accordance with NPSs. However, paragraph 5 goes on to confirm that the NPPF may be a matter that is both important and relevant for the purposes of assessing DCO applications. It reads;
- "The Framework does not contain specific policies for nationally significant infrastructure projects. These are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are relevant (which may include the National Planning Policy Framework). National policy statements form part of the overall framework of national planning policy, and may be a material consideration in preparing plans and making decisions on planning applications."*
- 1.5.28 Regulation 5(2)(f) of the Applications: Prescribed Forms and Procedure (APFP) Regulations sets out that an application for a DCO must be supported by *"a statement whether the proposal engages one or more of the matters set out in section 79(1) (statutory nuisances and inspections therefor) of the Environmental Protection Act 1990, and if so how the applicant proposes to mitigate or limit them"*.
- 1.5.29 Section 79(1) of the EPA 1990, provides that the following matters constitute "statutory nuisances":

- a) “any premises in such a state as to be prejudicial to health or a nuisance;*
- b) smoke emitted from premises so as to be prejudicial to health or a nuisance;*
- c) fumes or gases emitted from premises so as to be prejudicial to health or a nuisance;*
- d) any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance;*
- e) any accumulation or deposit which is prejudicial to health or a nuisance;*
- f) any animal kept in such a place or manner as to be prejudicial to health or a nuisance;*
- fa) any insects emanating from relevant industrial, trade or business premises and being prejudicial to health or a nuisance;*
- fb) artificial light emitted from premises so as to be prejudicial to health or a nuisance;*
- g) noise emitted from premises so as to be prejudicial to health or a nuisance;*
- ga) noise that is prejudicial to health or a nuisance and is emitted from or caused by a vehicle, machinery or equipment in a street or in Scotland, road;*
- h) any other matter declared by any enactment to be statutory nuisance.”*

2 Assessment

2.1 Introduction

- 2.1.1 Chapter 21 of the ES, 'Summary of Likely Significant Effects', **[EN010147/APP/6.3]** assesses the potential effects, including the residual effects, of the Project that could be classified as a statutory nuisance, as stipulated in Section 79(1) of EPA.
- 2.1.2 Based on the details of the Project provided in the Project Description, Chapter 6 of the ES **[EN010147/APP.6.3]** and the supporting masterplan **[EN010147/APP/6.4]**, the parameters set out in section 79(1) of the EPA, as referred to in paragraph 1.5.29 above, that are not considered relevant to this SSN are as follows:
- a) *any premises in such a state as to be prejudicial to health or a nuisance;*
 - b) *smoke emitted from premises so as to be prejudicial to health or a nuisance;*
 - c) *fumes or gases emitted from premises so as to be prejudicial to health or a nuisance;*
 - e) *any accumulation or deposit which is prejudicial to health or a nuisance;*
 - f) *any animal kept in such a place or manner as to be prejudicial to health or a nuisance;*
 - fa) *any insects emanating from relevant industrial, trade or business premises and being prejudicial to health or a nuisance;*
 - h) *any other matter declared by any enactment to be statutory nuisance.*
- 2.1.3 Dealing with the above further, for clarification, the Project does not incorporate any 'premises' that would be in such as state, or that would give rise to insects emanating from them, as to be prejudicial to health or a nuisance. The effects of the construction processes, including the use of the construction compounds and Horizontal Directional Drilling (HDD) compounds, are dealt with in the consideration of the effects of dust, air pollution, noise and vibration, and will be subject to a Code of Construction Practice. An Outline Code of Construction Practice **[EN010147/APP/7.6.1]** forms part of the application. No other 'premises' are being proposed as part of the Project, other than a potential Educational Area, for use by school groups, which has been suggested could be situated in proximity to the existing playground area and allotments in Bladon.
- 2.1.4 The Project is not projected to generate smoke, fumes of gases and, as such, the matter is not considered within the SSN. Furthermore, potential emergency situations, such as fire, are addressed within the Outline Operational Management Plan accompanying the DCO submission **[EN010147/APP/7.6.2]**.
- 2.1.5 The risk of any accumulations or deposits on the Project Site are considered in Chapter 11 'Ground Conditions' **[EN010147/APP/6.3]**, but the Chapter and its associated appendices do not predict any significant effects. The assessment has considered potential impacts on the underlying aquifers,

surface watercourses, human health (construction workers and future site users), land instability and mineral resources. The significance of effect ranges from temporary minor/moderate adverse effects with regard to off-site human health, to no change during the operational phase, which are not considered significant. The Outline Code of Construction Practice **[EN010147/APP/7.6.1]** also sets out methods for the control of pollution, site resources, waste and soil.

- 2.1.6 In relation to clause f), there will be a continuing agricultural use of much of the Project Site for conservation grazing, by sheep and cattle. This is in line with its existing agricultural use, and no animals will be kept in such a place of manner as to be prejudicial to health or a nuisance. Any grazing livestock will be managed in accordance with good practice guidance, which has been addressed within the Outline Landscape and Ecology Management Plan **[EN010147/APP/7.6]** and therefore not considered within the SSN.

Potential Sources of Statutory Nuisance

- 2.1.7 The potential sources of statutory nuisance in relation to this Project are those associated with air quality, dust, noise, vibration and artificial light emissions.
- 2.1.8 In relation to clause a), ES Chapter 19: Air Quality **[EN010147/APP/6.3]**, addresses potential air quality impacts of the Project, both in terms of its construction and operational phases. These relate to emissions from development-generated road traffic, and from dust and particles from the construction work. These matters are discussed in more detail in Section 2.2.
- 2.1.9 The Project will not result in any impacts due to steam, smell or other effluvial arising on industrial, trade or business premises, and so these matters have not been considered further.
- 2.1.10 In terms of clause g), ES Chapter 13: Noise and Vibration **[EN010147/APP/6.3]**, assesses the potential noise and vibration impacts of the Project, which is further considered within Section 2.3 below.
- 2.1.11 In terms of clause fb), ES Chapter 8: Landscape and Visual Impact Assessment **[EN010147/APP/6.3]**, assesses the impacts of temporary construction lighting and operational security lighting. Which has been further considered in section 2.4 below.

2.2 Air Quality

- 2.2.1 Section 79(1)(d) of the EPA states that the following constitutes a statutory nuisance:
- “any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance”*
- 2.2.2 An Air Quality Assessment has been undertaken and is reported in ES Chapter 19: Air Quality **[EN010147/APP/6.3]**. The chapter assesses the significance of potential air quality effects during the construction and decommissioning phases, and concludes that, with appropriate mitigation, there would be no significant effects in terms of the EIA Regulations.

Construction of the Project

- 2.2.3 Chapter 19: Air Quality of the ES **[EN010147/APP/6.3]** assesses the impact of construction and decommissioning phases of the Project on air quality. The assessment confirms that there is likely to be no significant impact on local air quality during construction or decommissioning, as a result of emissions from development-generated road traffic, and the predicted pollutant concentrations would have a negligible effect on human health.
- 2.2.4 During construction there is the potential for emissions of dust and particles due to the following:
- Earthworks (e.g. soil stripping, excavation etc);
 - Construction; and
 - Track out (movement of mud and soil out of the site by construction vehicles).
- 2.2.5 Qualitative Dust Assessments based on relevant industry (Institute of Air Quality Management (IAQM)) guidance have been undertaken for the Project together with the preparation of a Dust Management Plan (DMP) as Annex E to the Code of Construction Practice **[EN010147/APP/7.6.1]**. Construction of the Project will take place over a 24-month period within different parts of the Site (although a number of those works may overlap with each other). However, potential fugitive emissions may be lower than estimated within the Qualitative Dust Assessments, which are based on conservative assumptions with reference to the IAQM guidance.
- 2.2.6 The DMP adopts good site practice on controlling dust outlined within the IAQM's 'Guidance on the assessment of Dust from Demolition and Construction' document for high-risk sites. These measures represent good industry practice and are therefore embedded within the Project design.
- 2.2.7 During the Project construction, it is anticipated that dust sensitive receptors will potentially experience increased levels of dust and particulate matter which will result in 'medium' to 'high' risk of impacts without implementation of any mitigation and control measures. However, these are predicted to be short-term and temporary impacts. Throughout this period, the potential impacts from construction on air quality will be managed through site-specific mitigation measures set out within the DMP.
- 2.2.8 The construction traffic associated with the Project is expected to be above the thresholds outlined in the EPUK and IAQM Land-Use Planning & Development Control: Planning for Air Quality guidance document (EPUK and IAQM, 2017). A detailed assessment of emissions from the construction traffic has been carried out in Chapter 19: Air Quality **[EN010147/APP/6.3]**. Overall, the assessment concluded that the impacts of nitrogen dioxide (NO₂) and particulate matter (PM₁₀ and PM_{2.5}), from vehicle exhaust emissions, on the surrounding area during construction would be considered to be 'negligible' and that there would be no significant effect.
- 2.2.9 ES Chapter 19: Air Quality **[EN010147/APP/6.3]** sets out that decommissioning is expected to generate similar (if not slightly lower) effects to those anticipated during the construction phase, and therefore the mitigation

measures proposed for implementation during the construction phase will be appropriate for application throughout decommissioning.

- 2.2.10 A detailed Decommissioning Plan will be prepared prior to the commencement of decommissioning and secured by a Requirement in the DCO. The detailed Decommissioning Plan will be substantially in accordance with the Outline Decommissioning Plan **[EN010147/APP/7.6.4]** supporting the application.
- 2.2.11 The mitigation measures proposed for implementation during the construction phase (outlined in the DMP) will be included within the detailed Decommissioning Plan prior to decommissioning.

Operation

- 2.2.12 The operational traffic associated with the Project is expected to be very low. As the expected operation traffic is below the EPUK/IAQM thresholds, Chapter 19: Air Quality **[EN010147/APP/6.3]** concludes that the corresponding traffic emissions air quality impact can be scoped out.
- 2.2.13 The Project does not include any fixed plant which may give rise to emissions, such as Combined Heat and Power (CHP) or boilers, therefore there are no direct emissions associated with the proposed Project and the direct impacts on air quality are determined to be 'imperceptible'.
- 2.2.14 No likely significant effects on air quality are therefore predicted during the operational phase of the Project.

Conclusion

- 2.2.15 For the reasons explained above, and with implementation of the mitigation measures discussed in ES Chapter 19: Air Quality **[EN010147/APP/6.3]**, no significant effects are expected to occur in relation to air quality matters in EIA terms, including in relation to human receptors, as set out in ES Chapter 19: Air Quality **[EN010147/APP/6.3]**.
- 2.2.16 Subsequently, no claim against statutory nuisance in respect of dust is therefore envisaged in respect of a statutory nuisance under section 79(1)(d) of the EPA.

2.3 Noise and Vibration

2.3.1 The following constitute a statutory nuisance, as stated in the EPA 1990:

- Section 79(1)(g) – “noise emitted from premises so as to be prejudicial to health or a nuisance”; and
- Section 79(1)(ga) – “noise that is prejudicial to health or a nuisance and is emitted from or caused by a vehicle, machinery or equipment in street”.

2.3.2 If noise is excessive, prolonged or on a regular basis it may constitute a statutory nuisance. A statutory nuisance would exist if noise substantially interfered with the well-being, comfort or enjoyment of an individual’s property.

2.3.3 Subsequently, an assessment of noise and vibration impacts has been undertaken and is reported in Volume 1, Chapter 13: Noise and Vibration **[EN010147/APP/6.3]**. The chapter assesses the significance of potential noise and vibration effects during the construction, operational and decommissioning phases, and concludes that, with appropriate mitigation, there would be no significant noise or vibration effects, on sensitive receptors, in terms of the EIA Regulations.

2.3.4 The elements relevant to Section 79(1)(g) and (ga) of the EPA are those relating to noise emitted from premises (which includes land) and from vehicles, machinery and equipment in a street. Traffic noise is specifically excluded from consideration by section 79(6A)(a) of the EPA and is not considered further.

Construction and Decommissioning

2.3.5 Volume 1, Chapter 13: Noise and Vibration **[EN010147/APP/6.3]** predicts that construction noise levels at all receptors will be within the 65 dB(A) noise level limit. Construction noise and vibration is also temporary and the assessment assumes a maximum design scenario.

2.3.6 Construction and decommissioning noise levels at surrounding receptors will vary depending on the locations and types of works taking place. Due to the variation in work activities and locations across the Project, it is considered that any periods of regular construction noise levels experienced at a receptor would be of a limited short-term duration (i.e. less than one month). Occupants of nearby receptors are likely to be more tolerable of these events if they are regularly communicated to, and kept informed of timings and duration of high noise generating events.

2.3.7 Measures to control noise and vibration will be adopted. These measures represent Best Practicable Means and are included as embedded mitigation within the Outline Code of Construction Practice (CoCP) **[EN010147/APP/7.6.1]**. A detailed CoCP will be prepared prior to construction and decommissioning phase.

2.3.8 The construction contractor will follow Best Practicable Means (BPM) to minimise the noise impact upon the local sensitive receptors. These could include the following good practice measures:

- Ensuring that all appropriate processes, procedures and measures are in place to minimise noise before works begin and throughout the construction/decommissioning programme;
- All contractors to be made familiar with current legislation and the guidance in BS 5228 (Parts 1 and 2) which should form a prerequisite of their appointment;
- Ensuring that, where reasonably practicable, noise and vibration is controlled at source (e.g., the selection of inherently quiet plant and low vibration equipment), review of the construction/decommissioning programme and methodology to consider quieter methods, consideration of the location of equipment on-site and control of working hours;
- Use of modern plant, complying with applicable UK noise emission requirements;
- Hydraulic techniques for breaking concrete or rocks to be used in preference to percussive techniques, where reasonably practicable;
- Drop heights of materials will be minimised;
- Plant and vehicles will be sequentially started up rather than all together;
- Off-site prefabrication where reasonably practicable;
- Use of screening locally around significant noise producing plant and activities;
- Regular and effective maintenance by trained personnel will be undertaken to keep plant and equipment working to manufacturer's specifications;
- All construction/decommissioning plant and equipment to be properly maintained, silenced where appropriate, operated to prevent excessive noise and switched off when not in use;
- Loading and unloading of vehicles, dismantling of site equipment or moving equipment or materials to be conducted in such a manner as to minimise noise generation, as far as reasonably practicable;
- All vehicles used on-site shall incorporate reversing warning devices as opposed to the typical tonal reversing alarms to minimise noise disturbance where reasonably practicable;
- Provision of information to the relevant local authority and local residents to advise of potential noisy works that are due to take place;
- Unnecessary revving of engines will be avoided, and equipment will be switched off when not in use; and
- Plant will always be used in accordance with manufacturers' instructions. Care will be taken to site equipment away from noise-sensitive areas. Where possible, loading and unloading will also be carried out away from such areas.

- 2.3.9 Further, the following additional mitigation measures will be employed;
- A bespoke method statement will be prepared for the HDD works (and other high-noise emitting works) to be undertaken close to noise-sensitive receptors. This method statement will include details of the continuous monitoring of vibration from HDD3 and HDD6 which will be undertaken to protect local residents, and flood defences.
 - Where required, noise screens will be employed to reduce construction noise emissions at receptors.
- 2.3.10 Construction working hours on the Project will run from 07:00 to 19:00 Monday to Saturday. Where on-site works are to be conducted outside the core working hours, they will comply with the restrictions stated in the outline CoCP **[EN010147/APP/7.6.1]** and any other restrictions which may be agreed with the relevant planning authorities.
- 2.3.11 The construction phase assessment has found that the magnitude of the impact is low for all noise and vibration impacts, when assessed at the nearby sensitive receptors, with the embedded and additional mitigation measures implemented. With the measures adopted as part of the Project in place, the impacts result in an effect of minor adverse significance, which is not significant.
- 2.3.12 The decommissioning phase assessment has found that the magnitude of the impact is low for all noise and vibration impacts, when assessed at the nearby sensitive receptors, with the embedded and additional mitigation measures implemented. With the measures adopted as part of the Project in place, the impacts result in an effect of minor adverse significance, which is not significant.

Operation

- 2.3.13 An assessment of operational noise has been undertaken based on a maximum design scenario. Assessment has been undertaken in accordance with the guidance contained within BS 4142. The assessment has found that the predicted operational noise levels at the nearest receptors are equal to or below the existing background noise levels. However, for a small number of receptors, the noise from the substations has been found to slightly exceed the background sound level as has been assessed within Volume 1, Chapter 13: Noise and Vibration **[EN010147/APP/6.3]**. As such, additional mitigation is required to ensure noise levels during the operational phase do not result in significant impacts in accordance with WHO/BS 8233 and IEMA guidance.
- 2.3.14 The design will therefore incorporate noise control measures, where practicable or feasible, to ensure compliance with the operational noise limits to be secured as part of the DCO. As such, indicative mitigation measures which may be incorporated as a primary mitigation measure (as part of the design) have been included within the assessment. These include acoustic enclosures around the HV transformers in the Southern Site Area but may also include:
- acoustic barriers; and

- quieter plant selections.

- 2.3.15 The operational phase assessment has found that the magnitude of the impact is low for all noise impacts, when assessed at the nearby sensitive receptors, and with the embedded mitigation measures implemented. With the measures adopted as part of the Project in place, the impacts result in an effect of minor adverse significance, which is not significant.
- 2.3.16 No major vibration sources are envisaged to be introduced as part of the Project and as such there will be no associated operational vibration effects. No further assessment of operational vibration has been included in Volume 1, Chapter 13: Noise and Vibration **[EN010147/APP/6.3]**.

Conclusion

- 2.3.17 For the reasons explained above and with these mitigation measures in place, no significant effects are expected to occur in relation to noise and vibration matters in EIA terms, including in relation to the health of human receptors, as set out in Volume 1, Chapter 13: Noise and Vibration **[EN010147/APP/6.3]** during the construction, operation (and maintenance) and decommissioning phases of the Project.
- 2.3.18 Subsequently, no claim against statutory nuisance in respect of noise and vibration is therefore envisaged in respect of a statutory nuisance under section 79(1)(g) or (ga) of the EPA.

2.4 Artificial Lighting

- 2.4.1 Section 79(1)(fb) of the EPA provides that the following constitutes a statutory nuisance, “*artificial light emitted from premises so as to be prejudicial to health or a nuisance*”.
- 2.4.2 If artificial lighting is excessive, prolonged, continuous or on a regular basis it may constitute a statutory nuisance. A statutory nuisance would exist if artificial lighting substantially interfered with the well-being, comfort or enjoyment of an individual’s property.
- 2.4.3 Subsequently, an assessment of artificial lighting impacts has been undertaken and is reported in Volume 1, Chapter 8: Landscape and Visual Impact Assessment **[EN010147/APP/6.3]**. The chapter assesses the significance of potential artificial light effects during the construction, operational and decommissioning phases.

Operation

- 2.4.4 During operation, no part of the Project will be continuously lit, no permanent operational lighting will be installed, lighting will be a combination of manually operated and Passive Infra-Red (PIR) motion sensor security lighting to avoid permanent lighting and a sensitive lighting scheme will be developed ensuring inward distribution of light and avoiding light spill onto existing boundary features.
- 2.4.5 Manually operated lighting will be limited to use in emergency, and primarily in connection with the security and maintenance of the main project sub-stations.

Conclusion

- 2.4.6 The Landscape and Visual Impact Assessment (Chapter 8) **[EN010147/APP/6.3]**, concludes that, given the proposed artificial lighting provision and measures to mitigate the effects, the Project would not result in artificial light that will be prejudicial to health or a nuisance.

3 Overall Conclusion

- 3.1.1 In line with Regulation 5(2)(f) of the APFP Regulations, this Statement has identified whether the Project has engaged one or more of the matters set out in Section 79(1) of the EPA, and thus considered whether the Project would cause a statutory nuisance.
- 3.1.2 The matters in the EPA that have been engaged by the Project are general air quality, noise and vibration, and artificial light during all phases of the Project. The embedded design and additional mitigation measures identified in the ES are secured by Requirements contained within the draft DCO, and will be controlled by relevant Management Plans, during construction, operation and decommissioning of the Project.
- 3.1.3 It is not envisaged that the construction, operation (and maintenance) and decommissioning of the Project would give rise to any claim in respect of statutory nuisance under Section 79(1) of the EPA.