
FENWICK SOLAR FARM

Fenwick Solar Farm
EN010152

Environmental Statement

Volume III Appendix 11-1: Legislation, Policy and Guidance (Noise and Vibration)

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1. Introduction

1.1 Purpose of This Appendix

- 1.1.1 This Environmental Statement (ES) appendix identifies and describes the legislation, policy and supporting guidance considered relevant to the assessment of the likely significant effects of the Scheme on noise and vibration.
- 1.1.2 Legislation and policy are considered at national and local levels.
- 1.1.3 This appendix does not assess the Scheme against legislation and policy; instead, the purpose of considering legislation and policy is twofold:
 - a. To identify legislation and policy that could influence the sensitivity of receptors (and therefore the significance of effects) and any requirements for mitigation; and
 - b. To identify legislation and policy that could influence the methodology to be used within the Environmental Impact Assessment (EIA) presented in the Environmental Statement (ES). For example, a policy may require the assessment of an impact or the use of a specific methodology.
- 1.1.4 The relevant legislation and policy will be assessed within the Planning Statement. The following sections identify and describe the legislation, policy and supporting guidance considered specifically relevant to the noise and vibration assessment.

2. National Legislation, Policy and Guidance

2.1.1 Legislation, policy and guidance relating to noise and vibration, and pertinent to the Scheme, is outlined below.

2.2 Legislation

2.2.1 The legislation relevant to noise and vibration, and pertinent to the Scheme, includes the following:

- a. The Control of Pollution Act 1974 (CoPA) (Ref. 1) requires that Best Practicable Means (BPM), as defined in Section 72 of the CoPA, are adopted to control construction noise on any given site. Sections 60 and 61 of the CoPA provide the main legislative direction regarding enabling works and construction site noise and vibration. If noise complaints are received, a Section 60 notice may be issued by the local planning authority with instructions to cease work until specific conditions to reduce noise have been adopted. Section 61 of the CoPA provides a means to apply for prior consent to carry out noise generating activities during construction. Once prior consent has been agreed under Section 61, a Section 60 notice cannot be served provided the agreed conditions are maintained on-site.
- b. The Environmental Protection Act 1990 (EPA) (Ref. 2) prescribes a statutory nuisance as noise (and vibration) emitted from premises (including land) that is prejudicial to health or a nuisance. Local authorities are required to investigate any public complaints of noise, and if they are satisfied that a statutory nuisance exists, or is likely to occur or recur, they must serve a noise abatement notice. A notice is served on the person responsible for the nuisance. It requires either simply the abatement of the nuisance or works to abate the nuisance to be carried out, or it prohibits or restricts the activity. In determining if a noise complaint amounts to a statutory nuisance the local authority can take account of various guidance documents and existing case law as no statutory noise limits currently exist for defining a statutory nuisance. Demonstrating the use of BPM to minimise noise levels is an accepted defence against a noise abatement notice.

2.3 Policy

National Policy

2.3.1 The EIA takes account of the following NPSs, which are considered to be matters that will be important and relevant to the Secretary of State's decision as to whether to grant a DCO for the Scheme:

- a. Overarching National Policy Statement for Energy (EN-1) (November 2023) (Ref. 3) with particular reference to Section 5.12, in relation to the assessment of noise; and
- b. National Policy Statement for Renewable Energy Infrastructure (EN-3) (November 2023) (Ref. 4), with particular reference to Paragraph 2.5.2, in relation to the design of a project to mitigate noise impacts.

- 2.3.2 National Policy Statement for Electricity Networks Infrastructure EN-5 (November 2023) (Ref. 5) advises that generic noise effects are covered in Section 5.12 of EN-1 which are summarised in Table 1. EN-5 provides further guidance on the assessment of noise from overhead lines, however as the Scheme does not include these, these are not relevant to the assessments presented in **ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1]**.
- 2.3.3 The NPSs set out the Government's energy policy, the need for new energy (particularly renewable energy) infrastructure and guidance for determining an application for a Development Consent Order (DCO). The NPSs include specific criteria and issues which should be covered by applicants' in their assessments of the effects of their scheme, and how the decision maker should consider these impacts.
- 2.3.4 The relevant NPS requirements, together with an indication of where in the ES the information provided to address these requirements, is provided in Table 1.

Table 1: Relevant NPS Requirements for the Noise and Vibration Assessment

Relevant Paragraph Reference	Requirement of the NPS	Location of Information Provided to Address This
NPS EN-1		
Paragraph 5.11.15	Developments should contribute to and enhance the natural and local environment by preventing new and existing developments from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability.	An assessment of the effect of predicted changes to the noise environment at noise sensitive receptors are summarised in Section 11.8 of ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1] . No unacceptable levels of noise pollution are identified.
Paragraph 5.12.6	Where noise impacts are likely to arise from the proposed development, the applicant should include the following in the noise assessment: <ol style="list-style-type: none"> a. a description of the noise generating aspects of the development proposal leading to noise impacts, including the identification of any distinctive tonal characteristics, if the noise is impulsive, whether the noise contains particular high or low frequency content or any temporal characteristics of the noise; b. identification of noise sensitive receptors and noise sensitive areas that may be affected; c. the characteristics of the existing noise environment; d. prediction of how the noise environment will change with the proposed development; <ol style="list-style-type: none"> i. in the shorter term, such as during the construction period; 	A description of noise generating aspects of the Scheme, identification of noise sensitive receptors, a prediction of how the noise environment will change with the Scheme in the short and long-term during multiple periods of the day are highlighted in Section 11.4 of ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1] . The characteristics of the existing noise environment is highlighted in Section 11.6 of ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1] . An assessment of the effect of predicted changes to the noise environment at noise sensitive receptors are summarised in Section 11.8 of ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1] .

Relevant Paragraph Reference	Requirement of the NPS	Location of Information Provided to Address This
	<ul style="list-style-type: none"> ii. in the longer term, during the operating life of the infrastructure; iii. at particular times of the day, evening and night (and weekends) as appropriate, and at different times of year. e. an assessment of the effect of predicted changes in the noise environment on any noise-sensitive receptors, including an assessment of any likely impact on health and quality of life/well-being where appropriate, particularly among those disadvantaged by other factors who are often disproportionately affected by noise-sensitive areas; f. if likely to cause disturbance, an assessment of the effect of underwater or subterranean noise; and g. all reasonable steps taken to mitigate and minimise potential adverse effects on health and quality of life. 	<p>Measures to employ in mitigating noise are highlighted in Section 11.9 of ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1].</p>
Paragraph 5.12.7	The nature and extent of the noise assessment should be proportionate to the likely noise impact.	A Study Area has been defined within which noise effects have been assessed. See Section 11.4 of ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1] .
Paragraph 5.12.8	Applicants should consider the noise impact of ancillary activities associated with the development, such as increased road and rail traffic movements, or other forms of transportation.	An assessment of the noise impact of ancillary activities (including transportation) is scoped out. See Section 13.4 of ES Volume I Chapter 13: Transport and Access [EN010152/APP/6.1] .

Relevant Paragraph Reference	Requirement of the NPS	Location of Information Provided to Address This
Paragraph 5.12.9	Operation and maintenance noise, with respect to human receptors, should be assessed using the principles of the relevant British Standards and other guidance. Further information on assessment of particular noise sources may be contained in the technology specific NPSs. In particular, for renewables (EN-3) and electricity networks (EN-5) there is assessment guidance for specific features of those technologies. For the prediction, assessment and management of construction noise, reference should be made to any relevant British Standards and other guidance which also give examples of mitigation strategies.	All relevant British Standards have been referenced in the assessment of construction, operation and maintenance, and decommissioning noise. See Table 11-1 of ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1] .
Paragraph 5.2.13	The Secretary of State should consider whether mitigation measures are needed both for operation and maintenance and construction noise over and above any which may form part of the project application. In doing so the Secretary of State may wish to impose mitigation measures. Any such mitigation measures should take account of the National Planning Policy Framework (NPPF) or any successor to it and the Planning Practice Guidance on Noise.	Embedded mitigation measures are covered in Section 11.9 of ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1] .
Paragraph 5.12.14	Mitigation measures may include one or more of the following: a. engineering: reducing the noise generated at source and/or containing the noise generated	Embedded mitigation measures such as optimising the layout of Field Stations (in terms of noise) and inclusion of control measures during the construction phase in the Framework Construction Environmental Management Plan

Relevant Paragraph Reference	Requirement of the NPS	Location of Information Provided to Address This
	<ul style="list-style-type: none">b. lay-out: where possible, optimising the distance between the source and noise-sensitive receptors and/or incorporating good design to minimise noise transmission through the use of screening by natural or purpose-built barriers, or other buildingsc. administrative: using planning conditions/obligations to restrict activities allowed on the site at certain times and/or specifying permissible noise limits/noise levels, differentiating as appropriate between different times of day, such as evenings and late at night, and taking into account seasonality of wildlife in nearby designated sitesd. insulation: mitigating the impact on areas likely to be affected by noise including through noise insulation when the impact is on a building.	<p>[EN010152/APP/7.7] are covered in Section 11.7 of ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1].</p>
Paragraph 5.12.15	The project should demonstrate good design through selection of the quietest or most acceptable cost-effective plant available; containment of noise within buildings wherever possible, taking into account any other adverse impacts that such containment might cause (e.g. on landscape and visual impacts; optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission).	Embedded mitigation measures such as optimising the layout of Field Stations (in terms of noise) and inclusion of control measures during the construction phase in the Framework Construction Environmental Management Plan [EN010152/APP/7.7] are covered in Section 11.7 of ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1] .

Relevant Paragraph Reference	Requirement of the NPS	Location of Information Provided to Address This
Paragraph 5.12.17	The Secretary of State should not grant development consent unless they are satisfied that the proposals will meet the following aims, through the effective management and control of noise: a. avoid significant adverse impacts on health and quality of life from noise; b. mitigate and minimise other adverse impacts on health and quality of life from noise; and c. where possible, contribute to improvements to health and quality of life through the effective management and control of noise.	ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1] demonstrates that significant adverse impacts on health and quality of life are avoided (Section 11.8) and how adverse impacts on health and quality of life are mitigated and managed as far as reasonably practicable (Section 11.7).
Paragraph 5.12.18	When preparing the Development Consent Order, the Secretary of State should consider including measurable requirements or specifying the mitigation measures to be put in place to ensure that noise levels do not exceed any limits specified in the development consent. These requirements or mitigation measures may apply to the construction, operation and maintenance, and decommissioning of the energy infrastructure development.	Embedded mitigation measures such as optimising the layout of Field Stations (in terms of noise) and inclusion of control measures during the construction phase in the Framework Construction Environmental Management Plan [EN010152/APP/7.7] are covered in Section 11.7 of ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1] .
NPS EN-3		
Paragraph 2.5.2	Proposals for renewable energy infrastructure should demonstrate good design, particularly in respect of landscape and visual amenity, opportunities for co-existence/co-location with other marine and terrestrial uses, and in the design of the	Good design has been demonstrated through the separation distance between sensitive receptors and noise generating plant as covered in Section 11.9 of ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1] .

Relevant Paragraph Reference	Requirement of the NPS	Location of Information Provided to Address This
	project to mitigate impacts such as noise and effects on ecology and heritage.	
Paragraph 2.10.162	The Secretary of State is unlikely to give any more than limited weight to traffic and transport noise and vibration impacts from the operation and maintenance phase of a project.	As the Scheme will generate limited amounts of operation and maintenance traffic and an assessment of operation and maintenance transport noise has been scoped out. This is confirmed in Paragraph 3.6.2 of ES Volume III Appendix 1-2: EIA Scoping Opinion [EN010152/APP/6.3] .

National Planning Policy Framework

- 2.3.5 While the policy direction in the NPS contains the key policy directions for NSIPs, the NPPF (December 2023) (Ref. 6) provides further policy context for projects. In respect of noise and vibration. Section 15 of the NPPF explains the national planning policy with regard to conserving and enhancing the natural environment and how local planning authorities should determine planning applications with regard to noise and vibration.
- 2.3.6 The relevant NPPF paragraphs, together with an indication of where in the ES the information is provided to address these requirements, are provided in Table 2.

Table 2: Relevant NPPF Requirements for the Noise and Vibration Assessment

Relevant NPPF Paragraph Reference	Requirement of the NPPF	Location of Information Provided to Address This
Paragraph 180	Planning policies and decisions should contribute to and enhance the natural and local environment by: [...] e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; [...]	No unacceptable levels of noise pollution at sensitive receptors are identified in ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1] .
Paragraph 191	Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should: a) mitigate and reduce to a minimum potential adverse impact resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life;	ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1] demonstrates that significant adverse impacts on health and quality of life are avoided (Section 11.8) and how adverse impacts on health and quality of life are mitigated and managed as far as reasonably practicable (Section 11.7).

b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; [...]

Noise Policy Statement for England

- 2.3.7 The Noise Policy Statement for England (NPSE) (Ref. 7) seeks to clarify the underlying principles and aims in existing policy documents, legislation, and guidance that relate to noise. The statement applies to all forms of noise, including environmental noise, neighbour noise and neighbourhood noise.
- 2.3.8 The NPSE 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 Government policy on sustainable development"*.
- 2.3.9 This long-term vision is supported by three aims:
"Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:
- a. *avoid significant adverse impacts on health and quality of life;*
 - b. *mitigate and minimise adverse impacts on health and quality of life; and*
 - c. *where possible, contribute to the improvements of health and quality of life."*
- 2.3.10 The 'Explanatory Note' within the NPSE provides further guidance on defining 'significant adverse effects' and 'adverse effects' using the concepts:
- a. No Observed Effect Level (NOEL) – the level below which no effect can be detected. Below this level no detectable effect on health and quality of life due to noise can be established;
 - b. Lowest Observable Adverse Effect Level (LOAEL) – the level above which adverse effects on health and quality of life can be detected; and
 - c. Significant Observed Adverse Effect Level (SOAEL) – the level above which significant adverse effects on health and quality of life occur.
- 2.3.11 The above three concepts have been applied in the analysis undertaken in **ES Volume I Chapter 11: Noise and Vibration [EN010152/APP/6.1]**.
- 2.3.12 With reference to the SOAEL, the NPSE states: *"It is recognised that it is not possible to have a single objective noise-based measure that defines SOAEL that is applicable to all sources of noise in all situations. Consequently, the SOAEL is likely to be different for different noise sources, for different receptors and at different times. It is acknowledged that further research is required to increase our understanding of what may constitute a significant adverse impact on health and quality of life from noise. However, not having specific SOAEL values in the NPSE provides the necessary policy flexibility until further evidence and suitable guidance is available."*
- 2.3.13 For situations where noise levels are between the LOAEL and SOAEL, all reasonable steps should be taken to mitigate and minimise the effects. However, this does not mean that such adverse effects cannot occur as mentioned in the NPSE (Ref. 7) which states:
- a. *"It requires that all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development ... This does not mean that such adverse effects cannot occur"*.

2.4 Guidance

- 2.4.1 The Planning Practice Guidance concerned with noise (PPG) (Ref. 8) advises that *“Noise needs to be considered when development may create additional noise, or would be sensitive to the prevailing acoustic environment (including any anticipated changes to that environment from activities that are permitted but not yet commenced).”*
- 2.4.2 It also provides guidelines that are designed to assist with the implementation of the NPPF. The PPG states that local planning authorities should take account of the acoustic environment and in doing so consider:
- a. *“Whether or not a significant adverse effect is occurring or likely to occur;*
 - b. *Whether or not an adverse effect is occurring or likely to occur; and*
 - c. *Whether or not a good standard of amenity can be achieved.”*
- 2.4.3 Factors to be considered in determining whether noise is a concern are identified including the absolute noise level of the source, the existing ambient noise climate, time of day, frequency of occurrence, duration, character of the noise, and cumulative effects.
- 2.4.4 Further details on the hierarchy of noise effects are presented in Table 3, which has been reproduced from the PPG (Ref. 8).

Table 3: Planning Practice Guidance Noise Exposure Hierarchy (Ref. 8)

Perception	Examples of Outcomes	Increasing Effect Level	Action
Not present	No effect	No Observed Effect	No specific measures required
No Observed Adverse Effect Level			
Present and not intrusive	Noise can be heard, but does not cause any change in behaviour, attitude or other physiological response. Can slightly affect the acoustic character of the area but not such that there is a change in the quality of life.	Observed Adverse Effect	Mitigate and reduce to a minimum
Lowest Observed Adverse Effect Level			
Present and intrusive	Noise can be heard and causes small changes in behaviour, attitude or other physiological response, e.g. turning up volume of television; speaking more loudly; where there is no	Observed Adverse Effect	Mitigate and reduce to a minimum

Perception	Examples of Outcomes	Increasing Effect Level	Action
	<p>alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a small actual or perceived change in the quality of life.</p>		
Significant Observed Adverse Effect Level			
Present and disruptive	<p>The noise causes a material change in behaviour, attitude or other physiological response, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.</p>	Significant Observed Adverse Effect	Avoid
Present and very disruptive	<p>Extensive and regular changes in behaviour, attitude or other physiological response and/or an inability to mitigate effect of noise leading to psychological stress, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory.</p>	Unacceptable Adverse Effect	Prevent

3. Local Policy and Guidance

3.1.1 The Scheme lies within the administrative area of the City of Doncaster Council.

3.1.2 Policy 54: Pollution of Doncaster Local Plan 2015-2035 (Ref. 9) states that:

“Development proposals that are likely to cause pollution, or be exposed to pollution, will only be permitted where it can be demonstrated that pollution can be avoided, or where mitigation measures (such as those incorporated into the design and layout of development) will minimise significantly harmful impacts to acceptable levels that protect health, environmental quality and amenity. When determining planning applications, the agent of change principle will be applied, and particular consideration will be given to:

[...]

B) the presence of noise generating uses close to the site, and the potential noise likely to be generated by the proposed development. A Noise Assessment will be required to enable clear decision-making on any relevant planning application. Proposals will need to have regard to the standards identified in Appendix 11 to establish if the proposal is acceptable in noise impact terms”.

4. References

- Ref. 1 Control of Pollution Act (1974). Available at:
<https://www.legislation.gov.uk/ukpga/1974/40>. [Accessed 19 August 2024].
- Ref. 2 The Environmental Protection Act 1990. Available at:
<https://www.legislation.gov.uk/ukpga/1990/43/contents>. [Accessed 19 August 2024].
- Ref. 3 Department for Energy Security and Net Zero (DESNZ) (2024). Overarching National Policy Statement for Energy (EN-1) (November 2023). Available at:
<https://assets.publishing.service.gov.uk/media/65bbfbd709fe1000f637052/overarching-nps-for-energy-en1.pdf> [Accessed 19 August 2024].
- Ref. 4 DESNZ (2024). National Policy Statement for Renewable Energy Infrastructure (EN-3) (November 2023). Available at: [National Policy Statement for Renewable Energy Infrastructure \(EN-3\) \(publishing.service.gov.uk\)](https://assets.publishing.service.gov.uk/media/65bbfbd709fe1000f637052/national-policy-statement-for-renewable-energy-infrastructure-en-3.pdf). [Accessed 19 August 2024].
- Ref. 5 DESNZ (2024). National Policy Statement for Electricity Networks Infrastructure (EN-5) (November 2023). Available at: [National Policy Statement for Electricity Networks Infrastructure \(EN-5\) \(publishing.service.gov.uk\)](https://assets.publishing.service.gov.uk/media/65bbfbd709fe1000f637052/national-policy-statement-for-electricity-networks-infrastructure-en-5.pdf). [Accessed 19 August 2024].
- Ref. 6 Ministry of Housing, Communities and Local Government (2023). National Planning Policy Framework (December 2023). Available at:
<https://www.gov.uk/government/publications/national-planning-policy-framework--2>. [Accessed 19 August 2024].
- Ref. 7 Department for Environment, Food and Rural Affairs. Noise Policy Statement for England (2010). Available at:
<https://www.gov.uk/government/publications/noise-policy-statement-for-england>. [Accessed 19 August 2024].
- Ref. 8 Ministry of Housing, Communities and Local Government. Planning Practice Guidance: Noise (2014, updated July 2019). Available at:
<https://www.gov.uk/guidance/noise--2>[Accessed 19 August 2024].
- Ref. 9 City of Doncaster Council (2021) Doncaster Local Plan 2015 – 2035. Available at: <https://www.doncaster.gov.uk/services/planning/local-plan>. [Accessed 19 August 2024].



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