



Fosse Green Energy

Preliminary Environmental Information Report

VOLUME

3

**Appendix 11-A: Noise and Vibration
Policy and Legislation**

October 2024



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1. Introduction

1.1 Purpose of this Appendix

- 1.1.1 This Preliminary Environmental Information Report (PEI Report) appendix identifies and describes the legislation, policy and supporting guidance considered relevant to the assessment of the likely significant effects of the Proposed Development 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 Proposed Development 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 PEI Report assessment and/or within the EIA which will be presented in the Environmental Statement. 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 Proposed Development, comprises:

2.2 Legislation

- 2.2.1 The legislation relevant to Noise and Vibration and pertinent to the Proposed Development 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 legislation regarding enabling works and construction site noise and vibration. If noise complaints are received, a Section 60 notice may be issued by the Local 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 EIA takes account of the following National Policy Statements (NPSs), which have effect in relation to the Proposed Development and provide a framework for decision making by the Secretary of State:
 - a. Overarching National Policy Statement for Energy (EN-1) (**Error! Reference source not found.**);
 - b. National Policy Statement for Renewable Energy Infrastructure (EN-3) (**Error! Reference source not found.**); and
 - c. National Policy Statement for Electricity Networks Infrastructure (EN-5) (**Error! Reference source not found.**).
- 2.3.2 The NPSs set out the Government's energy policy infrastructure for delivery of major energy infrastructure, along with the need for new infrastructure and guidance for determining applications for Development Consent Orders (DCOs). The NPSs provide specific guidance and criteria that applicants should cover when assessing the effects of their Proposed Development, and how the Secretary of State should consider these impacts and any mitigation measures applied.
- 2.3.3 The relevant NPS requirements, together with an indication of where in the PEI Report (or ES) the information provided to address these requirements, are (or will be) provided in **Table 1**.

Table 1: Relevant NPS requirements for the Noise and Vibration assessment

Relevant NPS 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 Chapter 11: Noise and Vibration, PEI Report Volume 2, Section 11.7. 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: • a description of the noise generating aspects of the development proposal leading to noise impacts, including the identification of any distinctive tonal, impulsive, low frequency or temporal characteristics of the noise • identification of noise sensitive receptors and noise sensitive areas that may be affected • the characteristics of the existing noise environment • a prediction of how the noise environment will change with the proposed development o in the shorter term, such as during the construction period o in the longer term, during the operating life of the infrastructure o at particular times of the day, evening and night (and weekends) as appropriate, and at different times of year • 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 well-being where appropriate, and noise-sensitive areas	A description of noise generating aspects of the project, Identification of noise sensitive receptors, a prediction of how the noise environment will change with the proposed development in the short and long-term during multiple periods of the day are highlighted in Chapter 11: Noise and Vibration, PEI Report Volume 2. The characteristics of the existing noise environment is highlighted in Chapter 11: Noise and Vibration, PEI Report Volume 2, Section 11.5.

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
	- if likely to cause disturbance, an assessment of the effect of underwater or subterranean noise - measures to be employed in mitigating the effects of noise using best available techniques to reduce noise impacts	An assessment of the effect of predicted changes to the noise environment at noise sensitive receptors are summarised in Chapter 11: Noise and Vibration, PEI Report Volume 2, Section 11.7. There are no elements of the Proposed Development that may cause underwater or subterranean noise. Measures to employ in mitigating noise are highlighted in Chapter 11: Noise and Vibration, PEI Report Volume 2, Section 11.6 and Section 11.8.
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 Chapter 11: Noise and Vibration, PEI Report Volume 2, Section 11.4)
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 is scoped out
Paragraph 5.12.9	Operational noise, with respect to human receptors, should be assessed using the principles of the relevant British Standards 259 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	The noise and vibration assessment methodology is presented in Chapter 11: Noise and Vibration, PEI Report

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
	guidance for specific features of those technologies. For the prediction, assessment and management of construction noise, reference should be made to any relevant British Standards260 and other guidance which also give examples of mitigation strategies	Volume 2, Section 11.4. Reference is made to NPS EN-3, which relates to renewables. The construction noise assessment methodology makes reference to guidance in BS 5228-1 and the operational assessment methodology makes reference to BS 4142.
Paragraph 5.12.12	Applicants should submit a detailed impact assessment and mitigation plan as part of any development plan, including the use of noise mitigation and noise abatement technologies during construction and operation	An assessment of noise and vibration effects is presented in Chapter 11: Noise and Vibration, PEI Report Volume 2, Section 11.7. Measures to employ in mitigating construction and operational noise are highlighted in Chapter 11: Noise and Vibration, PEI Report Volume 2, Section 11.6 and Section 11.8.
Paragraph 5.12.13	The Secretary of State should consider whether mitigation measures are needed both for operational 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 NPPF or any successor to it and planning practice guidance on noise.	Measures to employ in mitigating construction and operational noise are highlighted in Chapter 11: Noise and Vibration, PEI Report Volume 2, Section 11.6 and Section 11.8.
Paragraph 5.12.14	Mitigation measures may include one or more of the following: engineering: reducing the noise generated at source and/or containing the noise generated	Measures to employ in mitigating construction and operational noise

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
	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 buildings 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 sites insulation: mitigating the impact on areas likely to be affected by noise including through noise insulation when the impact is on a building.	are highlighted in Chapter 11: Noise and Vibration, PEI Report Volume 2, Section 11.6 and Section 11.8 . These measures consider how noise can be reduced through engineering and lay-out, which are relevant to a solar farm.
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)	Measures to employ in mitigating construction and operational noise are highlighted in Chapter 11: Noise and Vibration, PEI Report Volume 2, Section 11.6 and Section 11.8 .
Paragraph 5.12.16	A development must be undertaken in accordance with statutory requirements for noise. Due regard must be given to the relevant sections of the Noise Policy Statement for England (NPSE), the NPPF, and the government's associated planning guidance on noise.	Relevant sections of the NPSE and NPPF are duly considered and applied in assessment methodology set out in Chapter 11: Noise and Vibration, PEI Report Volume 2, Section 11.4 .
Paragraph 5.12.17	A development must be undertaken in accordance with statutory requirements for noise. Due regard must be given to the relevant sections of the Noise Policy Statement for England, the NPPF, and the government's associated planning guidance on noise.	Relevant sections of the NPSE and NPPF are duly considered and applied in assessment methodology set out in Chapter 11: Noise and Vibration, PEI Report Volume 2, Section 11.4 .

Relevant NPS paragraph reference	Requirement of the NPS	Location of information provided to address this
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 uses, and in the design of the project to mitigate impacts such as noise and effects on ecology and heritage	Measures to employ in mitigating construction and operational noise are highlighted in Chapter 11: Noise and Vibration, PEI Report Volume 2, Section 11.6 and Section 11.8.
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 operational phase of a project.	As the Proposed Development will generate limited amounts of operational traffic, an assessment of operational transport noise was scoped out.
NPS EN-5		
Paragraph 2.9.19	In brief, the Horlock Rules ¹ should: • keep the visual, noise and other environmental effects to a reasonably practicable minimum. state that applicants should:	Measures to employ in mitigating construction and operational noise are highlighted in Chapter 11: Noise and Vibration, PEI Report Volume 2, Section 11.6 and Section 11.8.

¹ The Horlock Rules – guidelines for the design and siting of substations – were established by National Grid in 2009 in pursuance of its duties under Schedule 9 of the Electricity Act 1989.

National Planning Policy Framework

- 2.3.4 The National Planning Policy Framework (NPPF) (2023) (Ref 6) sets out the Governments planning policies for England and how these are expected to be applied. Paragraph 5 outlines that while the Framework does not contain specific policies for Nationally Significant Infrastructure Projects (NSIPs), the NPPF is still relevant when considering the determination of DCOs. As a result, the EIA is taking the NPPF into account.
- 2.3.5 Section 15 of the National Planning Policy Framework (NPPF) (Ref 6) 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 National Planning Policy (NPPF) paragraphs, together with an indication of where in the PEI Report (or ES) the information is (or will be) 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 level of noise pollution at sensitive receptors are identified in PEI Report Volume 1, Chapter 11: Noise and Vibration .
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; 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.”	PEI Report Volume 1, Chapter 11: Noise and Vibration demonstrates that significant adverse impacts on health and quality of life are avoided (Section 11.9) and how adverse impacts on health and quality of life are mitigated and managed as far as reasonably practicable (Section 11.8).

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:
 - "Avoid significant adverse impacts on health and quality of life;
 - "Mitigate and minimise adverse impacts on health and quality of life; and
 - "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:
- 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;
 - Lowest Observable Adverse Effect Level (LOAEL) – the level above which adverse effects on health and quality of life can be detected; and
 - Significant Observed Adverse Effect Level (SOAEL) – the level above which significant adverse effects on health and quality of life occur.
- 2.3.11 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."
- 2.3.12 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.

2.4 Policy 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:

- “whether or not a significant adverse effect is occurring or likely
- “whether or not an adverse effect is occurring or likely to occur; and
- “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 PPG.

Table 3: Planning Practice Guidance noise exposure hierarchy

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 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	Observed Adverse Effect	Mitigate and reduce to a minimum

Perception	Examples of Outcomes	Increasing Effect Level	Action
	a small actual or perceived change in the quality of life.		
Significant Observed Adverse Effect Level			
Present and disruptive	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	Significant Observed Adverse Effect	Avoid
Present and very disruptive	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	Unacceptable Adverse Effect	Prevent

3. Local Policy and Guidance

- 3.1.1 The Proposed Development lies within the administrative area of Central Lincolnshire. Should any new planning policy or guidance be issued, this will be considered within the Environmental Statement (ES).
- 3.1.2 The following local policy (Table 4) is relevant to the assessment of the effects of the Proposed Development on Noise and Vibration.

Table 4: Relevant local policy and guidance

Relevant Document	Relevant policies
Central Lincolnshire Local Plan Adopted April 2023 (Ref 9)	Policy S14 (Renewable Energy) states that proposals for the development of the energy sector will be supported where noise impacts are acceptable on the amenity of sensitive neighbouring uses (including local residents). Policy S53 (Design and Amenity) states all new development should not result in adverse noise and vibration taking into account surrounding uses

4. References

- Ref 1 Control of Pollution Act (1974). Available at:
<https://www.legislation.gov.uk/ukpga/1974/40>
- Ref 2 The Environmental Protection Act 1990. Available at:
<https://www.legislation.gov.uk/ukpga/1990/43/contents>
- Ref 3 Department for Energy Security & Net Zero (2023). Overarching National Policy Statement for Energy (EN-1). Available at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1147380/NPS_EN-1.pdf
- Ref 4 Department for Energy Security & Net Zero (2023). National Policy Statement for Renewable Energy Infrastructure (EN-3). Available at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1147382/NPS_EN-3.pdf
- Ref 5 Department for Energy Security & Net Zero (2023). National Policy Statement for Electricity Networks Infrastructure (EN-5). Available at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1147384/NPS_EN-5.pdf
- Ref 6 Ministry of Housing, Communities and Local Government. National Planning Policy Framework (2021). Available at:
<https://www.gov.uk/government/publications/national-planning-policy-framework--2>
- Ref 7 Department for Environment, Food & Rural Affairs. Noise Policy Statement for England (2010). Available at:
<https://www.gov.uk/government/publications/noise-policy-statement-for-england>
- Ref 8 Ministry of Housing, Communities and Local Government. Planning Practice Guidance (2016). Available at:
<https://www.gov.uk/government/collections/planning-practice-guidance>
- Ref 9 Central Lincolnshire County Council (2023); Central Lincolnshire Local Plan Adopted 2023. Available at: <https://www.n-kesteven.gov.uk/sites/default/files/2023-04/Local%20Plan%20for%20adoption%20Approved%20by%20Committee.pdf>