

SUNNICA ENERGY FARM

EN010106

Volume 6

6.2 Appendix 11A Relevant legislation and policy for noise and vibration

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



Planning Act 2008

**The Infrastructure Planning
(Applications: Prescribed Forms and
Procedure) Regulations 2009**

Sunnica Energy Farm

Appendix 11A Relevant legislation and policy for 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 noise and vibration effects of the Scheme.
- 1.1.2 Legislation and policy are considered at national and local levels.
- 1.1.3 This ES appendix does not assess the Scheme against legislation and policy; instead the purpose of considering legislation and policy in the EIA is twofold:
- to identify legislation and policy that could influence the sensitivity of receptors (and therefore the significance of effects) and any requirements for mitigation; and
 - to identify legislation and policy that could influence the methodology of the EIA. For example, a policy may require the assessment of an impact or the use of a specific methodology.
- 1.1.4 The following sections identify and describe the legislation, policy and supporting guidance considered specifically relevant to the biodiversity assessment.

2 National Legislation, Policy and Guidance

2.1 Legislation

- 2.1.1 The main legislation relevant to the noise and vibration effects of the Scheme include the following:
- 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.
 - 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.

2.2 Policy

National Policy Statements

- 2.2.1 The Scheme's proposed energy generating technology is not currently specifically referenced by a National Policy Statement (NPS) however in lieu of a technology specific NPS, 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 (EN1) (Ref. 3), with particular reference to Section 5.11 and Paragraphs 5.11.4 to 5.11.7, in relation to the assessment of noise; and
 - b. National Policy Statement for Renewable Energy Infrastructure (EN-3) (Ref. 4), with particular reference to Paragraphs 2.4.2, in relation to the design of a project to mitigate noise impacts.
- 2.2.2 National Policy Statement for Electricity Networks Infrastructure EN-5 (Ref. 5) advises that generic noise effects are covered in Section 5.11 of EN-1 which are summarised in **Table 2-1**. EN-5 section 2.9 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 in **Chapter 11: Noise and Vibration** of this Environmental Statement [**EN010106/APP/6.1**].
- 2.2.3 The NPSs set out the Government's energy policy, the need for new infrastructure and guidance for determining an application for a DCO. The NPSs include specific criteria and issues which should be covered by applicants' assessments of the effects of their scheme, and how the decision maker should consider these impacts.
- 2.2.4 The relevant NPS requirements, together with an indication of where in **Chapter 11: Noise and Vibration** of this Environmental Statement [**EN010106/APP/6.1**] the information provided to address these requirements, are provided in **Table 2-1**.

Table 2-1 Relevant NPS requirements for the noise and vibration assessment

Relevant NPS paragraph reference	Requirement of the NPS	Where in the ES chapter is information provided to address this
NPS EN-1		
5.11.4	<p>Where noise impacts are likely to arise from a proposed development, the applicant should include the following in the noise assessment:</p> <ul style="list-style-type: none"> • a description of the noise generating aspects of the development proposal leading to noise impacts, including the identification of any distinctive tonal, impulsive or low frequency characteristics of the noise; • identification of noise sensitive premises 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; • in the shorter term such as during the construction period; • in the longer term during the operating life of the infrastructure; • at particular times of the day, evening and night as appropriate. • an assessment of the effect of predicted changes in the noise environment on any noise sensitive premises and noise sensitive areas; and • measures to be employed in mitigating noise. <p>The nature and extent of the noise assessment should be proportionate to the likely noise impact.</p>	<p>Sensitive receptors are described in Table 11-1.</p> <p>The existing noise environment has been established by baseline surveys, presented in section 11.6.</p> <p>Assessments of construction and operational noise are presented in section 11.8.</p> <p>Mitigation measures are described in sections 11.7 and 11.9.</p>
5.11.5	<p>The noise impact of ancillary activities associated with the development, such as increased road and rail traffic movements, or other forms of transportation, should also be considered.</p>	<p>The construction noise assessments presented in section 11.8 include the assessment of noise related to road traffic movements.</p>
5.11.6	<p>Operational 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</p>	<p>Noise from operational plant has been assessed following guidance from BS 4142:2014+A1:2019. See section 11.8.25 to 11.8.39.</p>

Relevant NPS paragraph reference	Requirement of the NPS	Where in the ES chapter is information provided to address this
	noise, reference should be made to any relevant British Standards and other guidance which also give examples of mitigation strategies.	
5.11.7	The applicant should consult Environment Agency (EA) and Natural England (NE), or the Countryside Council for Wales (CCW), as necessary and in particular with regard to assessment of noise on protected species or other wildlife. The results of any noise surveys and predictions may inform the ecological assessment. The seasonality of potentially affected species in nearby sites may also need to be taken into account.	In-combination effects on local ecological receptors due to the introduction of the proposed development are assessed in Chapter 8: Ecology and Nature Conservation of this Environmental Statement [EN010106/APP/6.1] .
5.11.8	The project should demonstrate good design through selection of the quietest cost-effective plant available; containment of noise within buildings wherever possible; optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission.	No specific noise mitigation measures have been included for operational plant, based on the output of the quantitative assessment. Outline mitigation measures are described in sections 11.7 and 11.9. The wider approach to management of operational noise in the design of the Scheme is set out in Appendix 16F: Framework Operation Environmental Management Plan (OEMP) of this Environmental Statement [EN0101066/APP/6.2] .
5.11.9	The IPC should not grant development consent unless it is satisfied that the proposals will meet the following aims: <ul style="list-style-type: none"> • avoid significant adverse impacts on health and quality of life from noise; • mitigate and minimise other adverse impacts on health and quality of life from noise; and • where possible, contribute to improvements to health and quality of life through the effective management and control of noise. 	With reference to the NPSE, the LOAEL and SOAEL thresholds have been defined alongside the assessment criteria for the magnitude of impacts of noise and vibration. As summarised in section 11.10 of the ES, noise effects during the construction/decommissioning and operational phases are predicted to be negligible to minor adverse and therefore not considered significant. No significant noise effects are identified, and noise and vibration levels from construction/decommissioning and operation phases are not predicted to exceed the SOAEL. As such significant adverse impacts are avoided to health and quality of life from noise.
5.11.10	When preparing the development consent order, the IPC should consider including measurable requirements or specifying the mitigation measures to be	

Relevant NPS paragraph reference	Requirement of the NPS	Where in the ES chapter is information provided to address this
	put in place to ensure that noise levels do not exceed any limits specified in the development consent.	
5.11.11	The IPC 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 IPC may wish to impose requirements. Any such requirements should take account of the guidance set out in Circular 11/95 (see Section 4.1) or any successor to it.	Section 11.8.25 to 11.8.39. shows that the modelled impacts associated with operational noise are not predicted to be significant.
5.11.12	Mitigation measures may include one or more of the following: <ul style="list-style-type: none"> • engineering: reduction of noise at point of generation and containment of noise generated; • lay-out: adequate distance between source and noise-sensitive receptors; incorporating good design to minimise noise transmission through screening by natural barriers, or other buildings; and • administrative: restricting activities allowed on the site; specifying acceptable noise limits; and taking into account seasonality of wildlife in nearby designated sites. 	No specific noise mitigation measures have been included for operational plant, based on the output of the quantitative assessment. Outline mitigation measures are described in sections 11.7 and 11.9. The wider approach to management of operational noise in the design of the Scheme is set out in Appendix 16F: Framework Operation Environmental Management Plan (OEMP) of this Environmental Statement [EN0101066/APP/6.2].
5.11.13	In certain situations, and only when all other forms of noise mitigation have been exhausted, it may be appropriate for the IPC to consider requiring noise mitigation through improved sound insulation to dwellings.	
NPS EN-3		
2.4.2	Proposals for renewable energy infrastructure should demonstrate good design in respect of landscape and visual amenity, and in the design of the project to mitigate impacts such as noise and effects on ecology.	Section 11.8.25 to 11.8.39. shows that the modelled impacts associated with operational noise are not predicted to be significant. No specific noise mitigation measures have been included for operational plant, based on the output of the quantitative assessment. Outline mitigation measures are described in sections 11.7 and 11.9. The wider approach to management of operational noise in the design of the Scheme is set out in Appendix 16F: Framework Operation Environmental Management Plan (OEMP) of this Environmental Statement [EN0101066/APP/6.2].

Draft National Policy Statements

- 2.2.5 The Government is currently reviewing and updating the Energy NPSs. It is doing this in order to reflect its policies and strategic approach for the energy system that is set out in the Energy White Paper (December 2020), and to ensure that the planning policy framework enables the delivery of the infrastructure required for the country's transition to net zero carbon emissions. As part of the Energy NPS review process, the Government published a suite of Draft Energy NPSs for consultation on 6 September 2021. These include the following Draft NPSs, which are expected to be important and relevant to the Secretary of State's decision, and have therefore been taken into account by the EIA:
- a. Draft Overarching National Policy Statement for Energy (EN-1) (Draft NPS EN-1),
 - b. Draft National Policy Statement for Renewable Energy (EN-3) (Draft NPS EN-3), and
 - c. Draft National Policy Statement for Electricity Networks Infrastructure (EN-5).
- 2.2.6 Where the relevant Draft NPS contain requirements that differ from the requirements of the NPSs, **Table 2-2** indicates where the information to address these requirements is provided within the ES Chapter.

Table 2-2 Relevant Draft NPS requirements for the noise and vibration assessment

Relevant NPS paragraph reference	Requirement of the NPS	Where in the ES chapter is information provided to address this
Draft NPS EN-1		
Paragraph 5.12.4	<p>Where noise impacts are likely to arise from the proposed development, the applicant should include the following in the noise assessment:</p> <ul style="list-style-type: none"> • 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 • in the shorter term, such as during the construction period or in the longer term, during the operating life of the infrastructure • 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 • 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 - applicants should consider using best available techniques to reduce noise impacts 	<p>Sensitive receptors are described in Table 11-1.</p> <p>The existing noise environment has been established by baseline surveys, presented in section 11.6.</p> <p>Assessments of construction and operational noise are presented in section 11.8.</p> <p>Mitigation measures are described in sections 11.7 and 11.9.</p> <p>Underwater or subterranean noise is not applicable to the Scheme.</p> <p>Further consideration of health effects is presented in Chapter 15: Human Health of this Environmental Statement [EN010106/APP/6.1], which concludes no significant adverse health impacts arising from the Scheme when considering the interaction of air quality, noise and neighbourhood amenity effects reported across the ES.</p>
Paragraph 5.12.8	<p>Some noise impacts will be controlled through environmental permits and parallel tracking is encouraged where noise impacts determined by an environmental permit interface with planning issues (i.e. physical design and location of development). The applicant should consult EA and/or the SNCB, as necessary, and in particular with regard to assessment of noise on protected species or other wildlife. The results of any noise surveys and predictions</p>	<p>In-combination effects on local ecological receptors due to the introduction of the proposed development are assessed in Chapter 8: Ecology and Nature Conservation of this Environmental Statement [EN010106/APP/6.1].</p>

Relevant NPS paragraph reference	Requirement of the NPS	Where in the ES chapter is information provided to address this
	may inform the ecological assessment. The seasonality of potentially affected species in nearby sites may also need to be taken into account.	

National Planning Policy Framework

- 2.2.7 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.
- 2.2.8 Paragraph 174 states that *“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.”*
- 2.2.9 Paragraph 185 states that *“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 impacts 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.”*

Noise Policy Statement for England

- 2.2.10 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.
- 2.2.11 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”*.
- 2.2.12 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.”*

2.2.13 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.

2.2.14 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.”

2.2.15 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.

2.3 Guidance

2.3.1 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)”

2.3.2 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.”*

2.3.3 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.

2.3.4 Further details on the hierarchy of noise effects are presented in **Table 2-3**, which has been reproduced from PPG.

Table 2-3 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.	No Observed Adverse Effect	No specific measures required
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 a small actual or perceived change in the quality of life.	Observed Adverse Effect	Mitigate and reduce to a minimum
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

Perception	Examples of Outcomes	Increasing Effect Level	Action
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 Legislation, Policy and Guidance

3.1 Policy

3.1.1 The following local policy is relevant to the assessment of the noise and vibration effects of the Scheme.

Relevant Document	Relevant policies
East Cambridgeshire District Council Local Plan Adopted April 2015. (Ref. 9)	Policy ENV9: Pollution <i>"All development proposals should minimise, and where possible, reduce all emissions and other forms of pollution, including light and noise pollution"</i>
Forest Heath and St Edmundsbury Local Plan: Joint Development Management Policies Document (last updated February 2015) (Ref. 10)	Policy DM2: Creating Places - Development Principles and Local Distinctiveness <i>"Proposals for all development (including changes of use, shopfronts, and the display of advertisements) should, as appropriate: h. not site sensitive development where its users would be significantly and adversely affected by noise, smell, vibration, or other forms of pollution from existing sources, unless adequate and appropriate mitigation can be implemented."</i> Policy DM14: Protecting and Enhancing Natural Resources, Minimising Pollution and Safeguarding from Hazards <i>"Proposals for all new developments should minimise all emissions and other forms of pollution (including light and noise pollution)"</i>

3.2 Guidance

3.2.1 The following guidance has been considered as part of the assessment:

- a. East Cambridgeshire District Council Supplementary Planning Document - Renewable Energy Development (Commercial Scale) Adopted October 2014 (Ref. 11) – Policy EN8: Pollution which states: *"All development proposals should minimise, and where possible, reduce all emissions and other forms of pollution, including light and noise pollution"*.

4 References

- Ref. 1 Her Majesty's Stationery Office (1974); Control of Pollution Act
- Ref. 2 Her Majesty's Stationery Office (1995); Environmental Protection Act
- Ref. 3 Department of Energy and Climate Change (2011) Overarching National Policy Statement for Energy (EN-1)
- Ref. 4 Department of Energy and Climate Change (2011) National Policy Statement for Renewable Energy Infrastructure (EN-3)
- Ref. 5 Department of Energy and Climate Change (2011) National Policy Statement for Electricity Networks Infrastructure (EN-5)
- Ref. 6 Ministry of Housing, Communities & Local Government (MHCLG) (2021) National Planning Policy Framework
- Ref. 7 Department for Environment Food and Rural Affairs (Defra) (2010); Noise Policy Statement for England
- Ref. 8 Ministry of Housing, Communities & Local Government (MHCLG) (2019) ; Planning Practice Guidance for Noise
- Ref. 9 East Cambridgeshire District Council (2015) Local Plan
- Ref. 10 Forest Heath and St Edmundsbury Councils (2015) Forest Heath and St Edmundsbury Local Plan: Joint Development Management Policies Document (February 2015)
- Ref. 11 East Cambridgeshire District Council (2014) Supplementary Planning Document Renewable Energy Development (Commercial Scale) October 2014