

Tillbridge Solar

PEI Report Volume II Appendix 13-1: Noise and Vibration Legislation and Policy
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tillbridgesolar.com

@: info@tillbridgesolar.com T: 0800 046 9643

Prepared for:

Tillbridge Solar Ltd

Prepared by:

AECOM Limited

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1. Introduction

- 1.1.1 This PEI Report 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 in the EIA is twofold:
- To identify legislation and policy that could influence the determination of important ecological features (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 and signposting where this dealt with in the PEI Report. 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 noise and vibration (the assessment) as presented in **PEI Report Volume I Chapter 13: Noise and Vibration**.

2. Legislation

Control of Pollution Act 1974

- 1.1.5 The Control of Pollution Act 1974 (CoPA) (Ref 13-1) 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 imposing requirements as to the way in which the works are to be carried out.
- 1.1.6 Section 61 of the CoPA provides a means to apply for prior consent to carry out noise generating activities during construction and allows the Local Authority to attach conditions to the consent.

Environmental Protection Act 1990

- 1.1.7 The Environmental Protection Act 1990 (EPA) (Ref 13-2) prescribes a statutory nuisance as noise (and vibration) emitted from premises (including land) that is prejudicial to health or a nuisance.
- 1.1.8 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.

- 1.1.9 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 failure to comply with a noise abatement notice.

3. National Planning Policy

- 1.1.10 The Scheme must have regard to the relevant policies of the National Planning Policy Framework (NPPF) (Ref 13-3) and relevant National Policy Statements (NPS). Key aspects of the NPPF and relevant NPSs, which have been considered during the development of this chapter, are outlined below.
- 1.1.11 NPS EN-1 (Ref 13-4), with particular reference to Section 5.11 and Paragraphs 5.11.4 to 5.11.7, states the following in relation to the assessment of noise:

Paragraph 5.11.4 “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 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. The nature and extent of the noise assessment should be proportionate to the likely noise impact.”

Paragraph 5.11.5 “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.”

Paragraph 5.11.6 “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 noise, reference should be made to any relevant British Standards and other guidance which also give examples of mitigation strategies.”

Paragraph 5.11.7 “The applicant should consult 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.”

1.1.12 To aid the Planning Inspectorate (formerly referred to as the Infrastructure Planning Commission (IPC) in the NPS) in decision making, paragraph 5.11.9 of NPS EN-1 sets out the three aims relating to noise emissions from new developments:

- *“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”.*

1.1.13 NPS EN-3 (Ref 13-5), with particular reference to Paragraphs 2.4.2, states the following in relation to the design of a project to mitigate noise impacts:

Paragraph 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.”

1.1.14 Draft versions of NPS EN-1 (Ref 13-6) and EN-3 (Ref 13-7) were published for consultation by the Department for Energy Security and Net Zero in 2023. With relation to noise, the draft EN-1 repeats the three aims for decision makers from the 2011 NPS EN-1. Key additional points that expand on requirements in NPS EN-1 and are relevant to the Scheme are referenced from paragraph 5.12.4 and require:

- *“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”*
- *“measures to be employed in mitigating the effects of noise - applicants should consider using best available techniques to reduce noise impacts”*

1.1.15 Additionally, the draft NPS EN-1 allows for some flexibility in design, stating that:

“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)”.

1.1.16 The draft EN-3 includes the consideration of transport noise and vibration associated with solar photovoltaic generation schemes. While no specific guidance is provided in the draft EN-1 of EN-3 for assessment of these noise impacts, these issues have been addressed in the noise and vibration chapter.

1.1.17 NPPF, with particular reference to Paragraph 174 and 185, states the following relevant to noise:

Paragraph 174: *“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.”*

Paragraph 185: *“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

- 1.1.18 The Noise Policy Statement for England (NPSE) (Ref 13-8) 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.
- 1.1.19 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”.
- 1.1.20 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.”*
- 1.1.21 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, there is no detectable effect on health and quality of life due to noise;
 - 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.
- 1.1.22 With reference to the SOAEL, the NPSE states:

“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.”

- 1.1.23 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.
- 1.1.24 Some effects might not be significant in EIA noise terms, but may be in health/policy terms if they are at or above SOAEL (i.e. where there may be “*significant adverse effects on health and quality of life*”). Where exceedances of LOAEL have been identified (i.e. where “adverse effects on health and quality of life” can be detected), mitigation measures are proposed to reduce noise as far as reasonably practicable.
- 1.1.25 Further consideration of health effects and the interaction of noise with other effects (e.g. land quality, transport, and landscape and visual amenity) is presented in **PEI Report Volume I Chapter 11: Human Health**, and **Chapter 17: Cumulative Effects**.

4. Planning Practice Guidance - Noise

- 1.1.26 The Planning Practice Guidance concerned with noise (PPGN) (Ref 13-9) 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)”*.
- 1.1.27 It also provides guidelines that are designed to assist with the implementation of the NPPF.
- 1.1.28 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 to occur;*
 - *whether or not an adverse effect is occurring or likely to occur; and*
 - *whether or not a good standard of amenity can be achieved.”*
- 1.1.29 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.
- 1.1.30 Further details on the hierarchy of noise effects are presented in Table 1, which has been reproduced from PPGN.

Table 1: 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
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

5. Local Planning Policy

- 1.1.31 The Central Lincolnshire Local Plan (April 2023) (Ref 13-10) Policy S14 states *“Proposals for renewable energy schemes, including ancillary development, will be supported where the direct, indirect, individual and cumulative impacts on the following considerations are, or will be made, acceptable. To determine whether it is acceptable, the following tests will have to be met:*
- 1.1.32 *iii. The impacts are acceptable on the amenity of sensitive neighbouring uses (including local residents) by virtue of matters such as noise, dust, odour, shadow flicker, air quality and traffic”;*
- 1.1.33 Policy S14 also states that *“Proposals for solar thermal or photovoltaics panels and associated infrastructure to be installed on existing property will be under a presumption in favour of permission unless there is clear and demonstrable significant harm arising.*
- 1.1.34 *Proposals for ground based photovoltaics and associated infrastructure, including commercial large scale proposals, will be under a presumption in favour unless:*
- *there is clear and demonstrable significant harm arising”;*
- 1.1.35 Policy S53 further states that *“All development... must achieve high quality sustainable design that contributes positively to local character, landscape and townscape, and supports diversity, equality and access for all”.*
- 1.1.36 Bassetlaw District Council Core Strategy and Development Management Policies DPD, adopted 22 December 2011 (Ref 13-11), includes Policy DM10: Renewable and Low Carbon Energy, which states: *“Proposals for renewable and low carbon energy infrastructure will also need to demonstrate that they: [...] will not result in unacceptable impacts in terms of visual appearance; noise; shadowflicker; watercourse engineering and hydrological impacts; pollution; or traffic generation”.*
- 1.1.37 The Bassetlaw Local Plan 2020-2037 (August 2021) includes Policy 48, which states that: *“1. Proposals for development should be designed and constructed to avoid and minimise impacts on the amenity of existing and future users, individually and cumulatively, within the development and close to it. As such, proposals will be expected to:*
- a) not have a significant adverse effect on the living conditions of existing and new residents and future occupiers of the proposed development through loss of privacy, excessive overshadowing or overbearing impact; and*
 - b) not generate a level of activity, noise, light, air quality, odour, vibration or other pollution which cannot be mitigated to an appropriate standard.”*

6. References

- Ref 13-1 Her Majesty's Stationery Office (1974); Control of Pollution Act.
- Ref 13-2 Her Majesty's Stationery Office (1995); Environmental Protection Act.
- Ref 13-3 Ministry of Housing, Communities & Local Government (2021) National Planning Policy Framework.
- Ref 13-4 Department of Energy and Climate Change. (2011) Overarching National Policy Statement for Energy (EN-1).
- Ref 13-5 Department of Energy and Climate Change (2011) National Policy Statement for Renewable Energy Infrastructure (EN-3).
- Ref 13-6 Department for Energy Security and Net Zero (2023) Draft overarching National Policy Statement for energy (EN-1).
- Ref 13-7 Department for Energy Security and Net Zero (2023) Draft National Policy Statement for renewable energy infrastructure (EN-3).
- Ref 13-8 Department for Environment Food and Rural Affairs (2010); Noise Policy Statement for England.
- Ref 13-9 Ministry of Housing, Communities & Local Government (2019); Planning Practice Guidance - Noise.
- Ref 13-10 Central Lincolnshire (2023). Central Lincolnshire Local Plan (2023) . Available at: <https://www.n-kesteven.gov.uk/sites/default/files/2023-04/Local%20Plan%20for%20adoption%20Approved%20by%20Committee.pdf>
- Ref 13-11 Bassetlaw District Council Core Strategy and Development Management Policies DPD, adopted 22 December 2011.

