

21 January 2026

Attention: Knowsley Council

SLR Project No.: 402.V08525.00024

RE: Planning Application 25/00228/FUL Land North of Cut Lane, Kirkby

1.0 Background

SLR has received the following feedback¹ from the Environmental Health Officer (EHO) at Knowsley Council, the Local Planning Authority (LPA). The EHO's comments are highlighted in **italic bold**, with SLR's response below.

"The updated letter response details a change in position with the MVS units being shielded within the development by the BESS units, to help reduce the noise. The area is very quiet during the nighttime resulting in noise levels of 35/36dB, the equipment will still produce a level of +4dB above the background noise levels at Sandy Brow Cottages, and +2dB at two other properties.

The development could potentially run 24/7, with a potential for the system to develop tonal elements. The noise produced by the proposed system is above the background for several receptors and will increase the overall background level for the area and the sound will be audible at the closest receptors.

Environmental Health do not believe that the contextual arguments presented by SLR constitute valid grounds to dismiss the predicted outcome. Given the quiet rural context, night-time operation, and proximity of receptors, the risk of audibility, complaint, and potential statutory nuisance remains credible.

Given the development, as assessed, is likely to result in at least an adverse impact under BS 4142 and no further mitigation can be put in place if issues or complaints did arise and were justified, it may be that the site is not suitable for such a development, therefore we object to the application."

Previous responses to comments from the EHO (Letters dated September, October and November 2025) have sought to provide further mitigation and context for the operation of the Proposed Development, however notwithstanding those responses, the most recent noise assessment undertaken (Letter dated November 2025) concludes that **the Proposed Development will not result in an adverse impact under BS 4142** as explained in greater detail in Sections 2 and 3 of this response.

SLR's responses to the updated comments received from the EHO are detailed below under the following headings:

- Rejection of Context Argument.
- The Difference Between the Rating Level and the Background Sound.
- The Rating Level.
- Operational use and tonal elements.

¹ Date of feedback 7th January 2026.

2.0 Rejection of Context Argument

SLR is not relying on context to demonstrate low impact. This is set out clearly in Section 3 of this response.

The EHO suggests that there is a risk of audibility, and statutory nuisance is not in line with a BS4142 Assessment.

With regards to audibility, BS4142 does not require a Site to be inaudible to prevent an impact. Inaudibility is not a planning requirement.

With regards to statutory nuisance at Section 1.3 the BS4142 standard states *“The determination of noise amounting to a nuisance is beyond the scope of this British Standard.”*

When discussing context, SLR refer to internal ambient noise levels within the Noise Impact Assessment (SLR, March 2025) and it is demonstrated that the internal limit prescribed by the WHO would not be exceeded.

Of relevance to this contextual argument is an Appeal for a BESS Unit in Staffordshire (Appeal Ref: APP/B3438/W/24/3351328).

The application was originally refused by the LPA on several grounds including noise. The appeal decision took into account local context, local and national policy as well as national and international legislation and concluded that while there were aspects that were contrary to the development plan, in the planning balance, the appeal should be allowed.

With regards to meeting the internal ambient noise level of 30dBA at night the Inspector stated:

“The appellant’s Noise Assessments (NAs) identifies residential properties that are representative properties for noise monitoring (NSR points 1 – 411). The Council’s reason for refusal cites night-time noise (23:00 – 07:00hrs) having the potential for adverse effects, based upon the previous scheme and it maintains this objection for the revised scheme. It also expressed concerns over levels in the evening....BS8223 implies 30dB LAeq, 8 Hour provides an adequate sleeping environment and World Health Organisation (WHO) Guidelines state that if negative effects on sleep are to be avoided the equivalent sound pressure level shouldn’t exceed 30 dBA for continuous noise¹². Though the Council considers these are not relevant to a new noise source for existing residents, I consider they provide a useful guideline. That the noise levels would be 4 – 8 dB below this, indicates the perceived changes would be limited and unlikely to result in significant sleep disturbance”.

The Inspector is referring to the specific sound levels of the BESS internally. The corresponding level internally at Sandy Brow Cottages (front) with a partially open window would be equal to 22dBA (32dBA minus 10dBA). This level is well below the 30dBA quoted by the World Health Organisation.

This contextual argument is valid and should not be discounted. Indeed, the arguments to disregard context, are exactly those that require the consideration of context, i.e. the quiet rural context, and the night-time operation. With reference to this please refer to Section 11 of BS4142, second paragraph of item 1 as follows:

“Where background sound levels and rating levels are low, absolute levels might be as, or more, relevant than the margin by which the rating level exceeds the background. This is especially true at night”.

SLR maintain that in accordance with guidance (and precedent), no **adverse impacts are anticipated** at the Kirkby Site. A refusal on noise grounds is not defensible.



3.0 Difference Between the Rating Level and the Background Sound

SLR has previously provided responses regarding the rating levels (Report dated March 2025, Letter dated October 2025, and Letter dated November 2025). In the November 2025 Letter it was demonstrated that with the redesign of the Proposed Development, there was a reduction at the most effected receptor, Sandy Brow Cottages, which **resulted in a rating level of no more than 35dBA at the faced facing the Site, and level substantially lower to the rear**. The results of the BS4142 assessment as presented in the letter dated November 2025 are copied below.

Table A: BS4142 Results at Night - dBA

NSR	Period	Specific	Predicted Rating Level, $L_{Ar,Tr}$ (dB)	Representative $L_{A90,15min}$, dB	Difference
Coopers Moss Farm	Night	24	27	34	-7
Sandy Lane Farm Bungalow	Night	33	36	34	+2
Sandy Brow Cottages Front	Night	32	35	31	+4
Sandy Brow Cottages Rear	Night	21	24	31	-7
Sandy Brow Farm	Night	30	33	31	+2
Sandy Brow Farm Bungalow	Night	29	32	31	+1

The latest response from the EHO states that the impact is “...likely to result in at least an adverse impact under BS 4142....”. **This is incorrect.** BS4142 states the following:

“Typically, the greater this difference, the greater the magnitude of the impact.

- A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context.*
- A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context.*
- The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context”.*

The Proposed Development has levels of between **-7dBA and +4dBA** above the background sound level, these are shown in Table A. The levels are therefore outside of the parameters set by BS4142 of **+5 dB or +10 dB** which are quoted above, this, alongside the contextual argument previously submitted (as provided in detail in the planning Report dated March 2025 for reference), and outlined in Section 2 of this response, demonstrates that it **cannot be concluded that there would be an adverse noise impact as a result of the Proposed Development under BS4142.**



4.0 The Rating Level

In the updated comments, the EHO states: The area is very quiet during the nighttime resulting in noise levels of 35/36dB, the equipment will still produce a level of +4dB above the background noise levels at Sandy Brow Cottages, and +2dB at two other properties.

When reviewing the level difference between the rating level and the baseline background sound level SLR further points to the following Section of BS4142:

“1) The absolute level of sound. For a given difference between the rating level and the background sound level, the magnitude of the overall impact might be greater for an acoustic environment where the residual sound level is high than for an acoustic environment where the residual sound level is low.

Where background sound levels and rating levels are low, absolute levels might be as, or more, relevant than the margin by which the rating level exceeds the background. This is especially true at night.

Numerous studies by Moorhouse, Berry, Flindell, etc. for the Health Protection Agency and for Defra (referenced within the Further Reading Section of BS 4142) conclude that adverse impacts **at rating levels below 35dB are unlikely**. This is further supported by the recent Association of Noise Consultants Working Group report on BS4142 application.

The Noise Hierarchy Table as set out in the Planning Practice Guidance is reproduced below.

Table B: Noise Hierarchy Table

Response	Example of Outcomes	Increasing Effect Level	Action
NOEL – No observed effect level			
Not present	No effect	NOEL	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 or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life.	No Observed Adverse Effect	No specific measures required
LOAEL – Lowest Observed Adverse Effect Level			
Present and intrusive	Noise can be heard and causes small changes in behaviour and/or attitude, 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 sleep disturbance. Affects acoustic character of the area and creates a perceived change in quality of life.	Observed Adverse Effect	Mitigate and reduce to a minimum



Response	Example of Outcomes	Increasing Effect Level	Action
SOAEL – Significant Observed Adverse Effect Level			
Present and disruptive	The noise causes a material change in behaviour and/or attitude, 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 and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory	Unacceptable Adverse Effect	Prevent

At the LOAEL:

- 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.

There is no evidence in the literature to suggest that a rating level of 35 dBA or lower could result in any changes in behaviour such as those described in the Planning Practice Guidance as a LOAEL (see Table B).

There is no justification for imposing any noise requirement limiting the rating level below 35 dBA. This view is shared by the Working Group of the Association of Noise Consultants, that has produced guidance on the application of BS4142, which recommends that:

“The Working Group suggest that similar values would not be unreasonable in the context of BS 4142, but that the assessor should make a judgement and justify it where appropriate”.

The similar values they are referring to are a noise rating of 35dBA and a background sound level of 30 dBA, only 1dBA lower that used in the assessment for Sandy Brow Cottages.

With regards to a rating level limit of 35dBA at night, determined in accordance with the above, there are other planning applications that have been approved such as the East Anglia Three Offshore Windfarm (Development Consent Order 2017 No. 826), Bemersley Road/Ball Green BESS (Appeal ref: APP/B3438/W/24/3351328). The argument is also currently being used in the Development Consent Order for Beacon Fen Energy Park, an application currently under examination.



To conclude, with a rating level limit of 35dBA, SLR maintain that in accordance with guidance (and precedent), no **adverse impacts are anticipated** for the Proposed Development. A refusal on noise grounds is not defensible.

5.0 Operational Use and Tonal Elements

The updated EHO comments state the following:

The development could potentially run 24/7, with a potential for the system to develop tonal elements. The noise produced by the proposed system is above the background for several receptors and will increase the overall background level for the area and the sound will be audible at the closest receptors.

Queries regarding the accumulated sound power and running of the equipment simultaneously were raised by the EHO in August and SLR responded to these comments in their letter dated September 2025. The Noise Impact Assessments are generally prepared on a worst-case scenario basis, largely in part due to the rapidly evolving nature of the technology. Equipment is unlikely to be run simultaneously at maximum output. Operational use is expected to be intermittent over a 24-hour period.

Further information on the anticipated operational use of the BESS has been provided by the Applicant in a separate letter.

With regards to tonal noise, this was also addressed in the letter submitted to the EHO in September 2025, please see Section 6 of this response for further details which demonstrate that no tones were identified.

6.0 Closure

As referenced above, SLR and the Applicant have worked with the statutory consultees including the EHO to evolve the design of the Proposed Development and the changes to the design reflect the feedback received.

The rating levels are below those parameters considered to cause an 'adverse impact' by BS4142, the perceived change to overnight noise levels would be limited and unlikely to result in disturbance to local residents, and it is considered that the Proposed Development complies with BS4142, local and national planning policy, including the Noise Policy Statement and National Planning Policy Framework. The Proposed Development will also deliver wider public benefits and support the Local Authority in working towards mitigating climate change.

I trust this letter addresses the EHO's concerns but please do get in touch if further information is required. To discuss this response, and those submitted previously, SLR and the Applicant suggest a virtual meeting at your earliest convenience.

Regards,

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