

9 October 2025

Attention: Knowsley Council

SLR Project No.: 402.v08525.00024

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

Background

SLR has received the following feedback from the Local Authority(LA). The LA's comments are highighted in *italic bold*, with SLR's response below.

"The report details the BESS units are operating at 80% fan speed in the day, and 50% fan speed in the night, classing it as the worst-case scenario. The predicted noise levels at some receptors exceed the 5dB threshold during the middle of the night, the report states that they do not anticipate any adverse impact to the residents.

Environmental Health disagree with this statement as exceeding the 5dB threshold, can indicate a potential adverse effect, which residents may be able to hear and could be disturbed by it, potentially leading to complaints and the noise being considered a nuisance".

As recognised by the Officer at night the rating level is predicted to be 6dB(A) above the background sound level at Sandy Brow Cottages, and Red Cut Lane.

With reference to BS4142, BS4142 states:

"A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context".

With reference to context, it is demonstrated in the Report that at night, the total sound level (Site noise, plus existing sound) would not exceed a level whereby residents would struggle to sleep, i.e. a level of 30dBA inside (with a partially open window) is met. Therefore, disturbance from the Site at night is unlikely, especially as Site noise would typically be continuous when "on" with no tones, impulses, or other noticeable characteristics expected.

Of note is that in the examples provided in BS4142, where a possible impact is identified at night, reference is made to the BS8233 internal limits, and there is a discussion in an example provided that refers to the residual sound masking the Site sound.

At the relevant baseline monitoring location (Location 2) the residual ambient sound level at night ranged between 29BA and 46dBA. This can be compared to a Site noise level of 34dBA. At those times of the night when residents are most likely to be more sensitive to noise (i.e. between 23:00 and 01:00 when they are more likely to be awake) the log average baseline ambient sound level during the survey was 38.1dBA. With the addition of the Site noise, this would increase to 39.4dBA. An increase in the ambient sound level of 1.3dBA would not typically be noticeable.

On balance, with context considered, SLR continue to defend the case that the noise impact of the Site would be "not adverse".

"Given these concerns are there any additional mitigation measures, other than the 3.5m fence, that could be implemented to reduce the noise impacts further?"

Over several months many layout iterations were tested to minimise the noise impact of the Site with plant repositioned into the most acoustically shielded positions. Furthermore, recognising the sensitivity of the Site, EDF Pivot are seeking to invest in noise efficient plant as highlighted in the previous response and copied below.

“The Table below details the sound power level of the Sungrow Power Titan 2 mitigated and unmitigated BESS Units at a temperature of 30 degrees. There is a clear reduction when the noise attenuation kit is integrated into the equipment”.

Model	50% Fan Speed dBA	80% Fan Speed dBA
<i>Unmitigated</i>	91	98
<i>Mitigated</i>	78	79

The quietest plant that the equipment provider can supply is proposed.

To minimise noise the layout further includes an all-encompassing barrier, the height of which is crucially higher than the proposed plant. Whilst a higher fence was tested, the acoustic benefit was minimal and did not outweigh other considerations such as visual impact. On balance the best available techniques to mitigate sound have been incorporated into the site design.

Nevertheless, to prevent an adverse noise impact further, the applicant is agreeable to accepting a noise condition that would limit the rating level from the Site to no more than 5dBA above the baseline background sound level.

“The noise assessment was completed in 2022, has the area remained largely unchanged since that time?”

The survey was completed in September 2022.

With reference to the above proposed noise condition, if permitted it is suggested that the noise condition includes for an updated baseline noise survey at the free-field façade (3m from) at the following receptors:

- Sandy Brow Cottages
- Red Cut Lane

Closure

I trust this letter addresses the Council's concerns but please do get in touch if further information is required.

Regards,

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