

## **BLACKHILLOCK**349 MW BESS

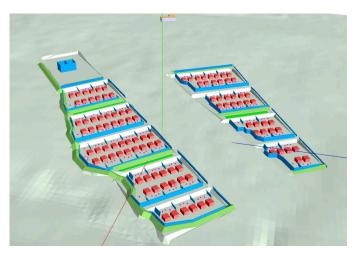
## **Noise Report Summary**

Pace Consult Limited, an independent noise consultancy, was commissioned by Blackhillock Flexpower Limited to undertake a noise survey and impact assessment for the proposed BESS. The development has been assessed against requirements and guidance from Moray Council's Environmental Health Department and the Scottish Government's Planning Advice Note 1/2011, using the methodology of BS 4142.

Pace Consult undertook a baseline noise survey in April 2023 to measure typical noise levels at and around the site. The noise levels were affected by traffic on the A96, activity at Blackhillock Quarry, and underlying noise from Blackhillock Substation. Measurements were taken at the five locations marked ST1-5 in the figure to the right. From this data and the requirements and advice noted above, noise limits at the four closest sensitive receptors of 47 dB (day) and 36 dB (night) were established.



Blackhillock Flexpower has worked closely with Pace Consult to design a layout optimised to meet these requirements, making use of acoustic attenuation on the equipment, acoustic barriers and baffles around the site, and ensuring equipment is oriented and set out on terraces in the most effective way to minimise noise emission.



Pace Consult modelled the proposed layout in industry-standard acoustic modelling software (SoundPlan) and confirmed that it meets the more onerous night-time criterion at all four of the noise-sensitive receptors. This quantitatively assessed against the Scottish Government's Planning Advice Note, leading to a result of at worst a magnitude of impact, 'slight/moderate' level of significance to the receptor. These assessments can be seen below.



Table 1, Quantitative assessment (BS4142)

Receptor ID	Calculated Specific Level dBA @1m from facade	BS 4142 Character Correction	Calculated Rating Level	Noise Rating Limit (+5 dB above L <sub>A90</sub> )	Difference between calculated rating level and required rating level
1 Gibston Farm (Land Owner)	36	0 (see below)	36	. 36	0
2 Rosehall Cottage	36	0 (see below)	36		0
3 Tarnash Farm	33	0 (see below)	33		-3
4 Denhead	35	0 (see below)	35		-1

Table 2, Qualitative assessment (TAN)

Receptor ID	Magnitude of Impact	Perception	Level of Significance Relative to Sensitivity of Receptor	
1 Gibston Farm (Land Owner)	Minor	Noticeable (Mildly intrusive)	Slight/Moderate	
2 Rosehall Cottage	Minor	Noticeable (Mildly intrusive)	Slight/Moderate	
3 Tarnash Farm	Negligible	Just Noticeable (Non-intrusive)	Slight	
4 Denhead	Minor	Noticeable (Mildly intrusive)	Slight/Moderate	