TECHNICAL NOTE

Project:	Statera Pelham
Client:	Statera Energy Ltd
Date:	06/03/2023
Reference:	JAJ03542-TN-01-R0
Subject:	Planning Application UTT/22/2046/PINS – Development of a ground mounted solar farm with generation capacity of up to 49.99 MW, together with associated infrastructure and landscaping Response to EHO Comments

1 INTRODUCTION

1.1 RPS Acoustics Team (RPS) have been appointed by Statera Energy Ltd to respond to comments from Mr A. Luck, Senior Environmental Health Officer at Uttlesford District Council (UDC) dated 16th August 2022.

1.2 The comments relate to application UTT/22/2046/PINS – Development of a ground mounted solar farm with generation capacity of up to 49.99 MW, together with associated infrastructure and landscaping.

1.3 It is noted that the above application has been considered in conjunction with application UTT/22/1203/FUL – *Pelham Road Berden -Construction and operation of a Battery Energy Storage System and associated infrastructure* and Cross Boundary Application in conjunction with East Herts District Council (ref. 3/22/0806/FUL).

1.4 This technical note summarises a review of the above comments and provides the relevant responses / comments where appropriate

2 CRITERIA

2.1 The Uttlesford Noise Assessment Technical Guide[1] (NATG) states that:

"*The development should be designed so as to achieve a rating level of 5 dB (L_{Aeq}) below the typical background (L_{A90}) level at the nearest noise sensitive location*"

2.2 It does not state 6 dB below background sound level should be achieved, as mentioned in the comments; nor does it state that applies to the cumulative assessment of the existing Battery Energy Storage site and the currently proposed solar farm.

2.3 The NATG further states:

> "*Where this criterion cannot be, the various noise control measures considered as part of the assessment should be fully explained (i.e. relocation of noise sources, use of quieter equipment, enclosures, screening, and restriction of the hours of operation) and the achievable noise level should be identified. This information will allow us to make a judgement concerning the application and its likely impact on the surrounding area.*
>
> *In addition to the above, the maximum noise levels should also be adequately controlled. Where uses generate high noise levels of a short duration (e.g. loud bangs) on a regular basis, these should aim to be controlled so as not to exceed 55 dB (L_{Amax}) at the façade of the noise sensitive premises nearby in accordance with the recommendations of the World Health Organisation*.
>
> […]

[1] *Uttlesford District Council, Noise Assessment Technical Guidance, June 2017*

3 RPS RESPONSE TO UDC COMMENTS

3.1 The following table provides high-level responses to the queries and comments from UDC.

Table 3.1

RPS response to UDC comments

UDC Comments	RPS Response
"… NSR D a 1 dB increase was predicted during the early morning period, a 2 dB increase was predicted during night-time and no increase was predicted during daytime."	With reference to the RPS report[2] this is correct and is based on a noise impact assessment completed in 2017. A more recent noise impact assessment[3] has been carried out and is accompanying the application UTT/22/1203/FUL. Based on the rating levels provided in tables 9 and 10 of the report, the cumulative assessment for NSR D would then be as shown in Table 3.2 below. While the predicted rating level is not 5 dB below background during early morning and daytime, it is below background. The night-time level is predicted to be 1 dB above background which, in BS 4142:2014+A1:2019 terms, indicates a low impact depending on the context. Regarding the absolute levels, the rating levels for the cumulative scheme are between 3 and 12 dB below the residual sound levels. This indicates that the ambient sound levels are likely to mask the specific sound from the two developments.
"The predicted increase is within noise sensitive times and can also be considered to be contributing to a "creep" in overall background levels."	If the specific levels (with no penalties) are below the existing background levels, which is the case at all time periods, there is no "creep" in the background sound levels. The rating levels (specific levels plus penalties) are reflecting the perceived levels, not the objectively measured levels.

Table 3.2

Cumulative Noise Impact Assessment

NSR D	Background Sound Level, $L_{A90,T}$ [dB]	Residual Sound Level, $L_{Aeq,T}$ [dB]	Rating Sound Level, $L_{Ar,Tr}$ (incl. all penalties) [dB]	Rating Level – Background Sound Level [dB]
Early Morning (05:00-07:00)	36	40	33	- 3
Daytime (07:00-23:00)	37	46	34	- 3
Night-time (05:00-07:00)	34	36	33	+ 1

[2] *JAJ02800-REPT01-R0 dated 23/05/2022*

[3] *"Crabbs Green Battery Energy Storage – Noise Assessment for Planning, Acoustics Report A1690 R01B" dated 6th April 2022 by iOnAcoustics.*

3.2 In conclusion, the noise impact assessment of the proposed solar farm shows that the solar farm in isolation has no noise impact on the noise sensitive receptors. Whilst an increase of 1 dB during night-time is predicted for the cumulative assessment, this is unlikely to be perceived as an identifiable increase, when considering the absolute noise levels and the existing residual sound levels.

4 PROPOSED PLANNING CONDITIONS

4.1 Three planning conditions in relation to noise have been proposed by UDC. These are as follows:

- *Before the development hereby approved is brought into use, a manned measured noise survey must be carried out and a report of the findings shall be submitted to and approved in writing by the Local Planning Authority.*

- *The noise emitted by the combined operation of all plant hereby permitted (including power inverter units, battery storage units, transformer station & generators etc) shall have a rating level that does not increase the measured background noise level expressed as L_{A90} during the night-time period and the day-time period when all the plant is operating at the boundary of the nearest residential premises. Measurement parameters must include the L_{A90}, L_{Aeq}, L_{Amax} and 1:1 frequency analysis, and appropriate corrections shall apply in accordance with BS 4142:2014+A1:2019.*

- *Should the plant fail to comply with this condition at any time, it shall be switched off and not used again until it is able to comply. The use of the equipment must not re-commence until a fully detailed noise survey and report has been submitted to and approved in writing by the Local Planning Authority and approved mitigation measures such as acoustic screening or silencers have been implemented. The plant shall be serviced in accordance with the manufacturer's instructions and as necessary to ensure that the requirements of the condition are maintained at all times.*

4.2 Following review of these conditions RPS have the following comments:

- The first condition is unnecessary as there is no noise impact from the solar farm. This has been demonstrated through the BS 4142:2014+A1:2019 assessment of the proposed solar farm alone, which shows rating levels of at least 8 dB below background sound levels at all time periods.
- The second condition is not relevant as it seeks to include the existing battery storage facility, and as such relates to the cumulative noise levels. As demonstrated, the proposed solar farm in isolation does not contribute to any increases in the background sound levels during daytime or night-time.
- Therefore, as a result the third condition is unnecessary.