Submission ID: [redacted]

The Environmental Statement and assessments need to be site and receptor specific in order to comply with Environmental Impact Assessment (EIA) Regulations. Generic comments attempting to justify omission of receptors is procedurally flawed.

GLINT AND GLARE

The applicant has used multiple graphs they have found from weatherspark.com within North Northamptonshire Local Highways Glint and Glare [REP4-026]. They state they show predicted cloud cover. However, the website states the methodology for the data is as follows: 'For each hour between 08:00 and 21:00 of each day in the analysis period (1980 to 2016), independent scores are computed for perceived temperature, cloud cover, and total precipitation. Those scores are combined into a single hourly composite score, which is then aggregated into days, averaged over all the years in the analysis period, and smoothed.' so the statement by the applicant that the graphs show predicted cloud cover is completely misleading and incorrect.

Please can the applicant reference the specific industry guidance and/ or best practice document where it shows they may omit receptors on upper floors of dwellings irrespective of a site's topology from assessments? Also, please can the applicant explain how the omission of upper floors of dwellings is compliant with EIA Regulations?

The applicant stated in their Responses to Deadline 3 Submissions [REP4-022] receptors for glint and glare assessments have been included for other, approved, DCO Solar applications. However, this is irrelevant as glint and glare assessments must be site specific. Glint and glare assessments should be based on a site's unique layout and topography. Excluding relevant receptors based on assessments for other schemes is methodologically flawed and results in a materially incomplete Environmental Statement.

In environmental decision making, an Environmental Statement is needed to identify, describe and assess the likely significant effects of a project. The decision maker can only lawfully weigh the benefits against the assessed harm. If the harm is not assessed, it is not part of the evidence so it cannot be weighed as part of the decision. The purpose of the legislation is to ensure environmental harm is not ignored or inadequately assessed.

NOISE AND VIBRATION

The applicant states in their Response to Deadline 3 Submissions [REP4-022] 'Results of the first and second floor levels have been considered'. However, 'second floor' is not mentioned once within Environmental Statement Chapter 14: Noise and Vibration [APP-051].

The 10dB reduction applied by the applicant to their results cannot be applied to the sound reduction across a partition of a second floor bedroom within the roof with a partially open window. The structure of rooms within the roof are fundamentally different from the conditions in Napier's research so that research cannot be applied to estimate sound across these partitions. Therefore, all of the predicted operational noise levels need at least 10dB adding back onto them to reflect realistic worst case scenarios. Second floor bedrooms are more exposed than first floor bedrooms so it is likely they will experience a greater noise level and their results will be higher than the applicants before they applied the 10dB reduction to them.

Due to the sloping topology it is very unlikely that the closest dwelling is the most exposed to harm so the results are understated as dwellings slightly further back are at higher level than the receptors the applicant has chosen. As previously stated, Property A may be closer than Property B but Property A may be shielded by terrain, vegetation or buildings and experience less of an impact. Site specific analysis is needed to determine if the closest property is the most exposed to harm or whether others in the vicinity may be more significantly affected due to topography, elevation or other environmental factors.

The applicant states in their Response to Deadline 3 Submissions [REP4-022] 'The model assumes windows will face the noise source, which provides a precautionary worst-case scenario irrespective of the actual orientation of windows or building layout'. This suggests that real world geometry is not represented within the model. The applicant states within Environmental Statement Chapter 14: Noise and Vibration [APP-051] 'Road traffic noise at existing and proposed receptors have been predicted using the CadnaA software, taking into account 1st order reflections from buildings and other large surfaces'. However, reflections and subsequent outputs of the model are not likely to be valid as they are not based on the real world geometry of the sites so the results are meaningless. This is further emphasised as the applicant states within Environmental Statement Chapter 14: Noise and Vibration [APP-051] 'The modelling software calculates noise levels based on the emission parameters and spatial settings that are entered.' However, the applicant has admitted they have not used real world spatial settings. As a result, the noise assessments do not reflect the real world impact the project will have and they are not reflective of a worst case scenario as other receptors are more exposed as mentioned above.

Furthermore, the applicant states in their Response to Deadline 3 Submissions [REP4-022] 'Responses to Written Representations at Deadline 1 [REP2-050] remain valid given the assessment results predict that noise levels from the Scheme are predicted to be no higher than the representative background noise levels at the closest sensitive receptors during the daytime and night-time periods with the appropriate mitigation measures incorporated. The results were informed by manufacturers data and therefore considered to be of low risk of understated noise levels.' but in their Responses to Written Representations at Deadline 1 [REP2-048] they state 'any intermittency associated with the proposed operations is unlikely to be readily distinctive against the residual environment' which is a subjective judgement and not a numerical assessment. The applicant's more recent submission implies that the conclusions are based on quantitative evidence obtained by an assessment. This inconsistency is misleading and raises concerns about the reliability and transparency of the applicant's noise assessment.

'You should recognise that there can be significant uncertainty associated with the manufacturers' data' is found on the following website: https://www.gov.uk/government/publications/noise-and-vibration-management-environmental-permits/noise-and-vibration-management-environmental-permits#step-3-source-assessment. The judgement to use manufacturers data as a substitute for an assessment is flawed and cannot be relied upon. As a result, penalties will need to be added onto predicted operational noise levels for the characteristics present.

In conclusion, most, if not all, predicted noise levels will be above 35dB which is significant. The impact on pets has been omitted and the applicant has failed to rectify this omission despite repeated statements highlighting their omission. Pets are more sensitive than humans to noise and the characteristics so disregarding them represents a significant methodological gap. This is particularly concerning given the clear welfare implications and the applicant's duty under the EIA Regulations to assess all relevant receptors.

FLOOD RISK

On page 177 of their Responses to Written Representations at Deadline 1 [REP2-048] the applicant states the following: 'The statement that the BESS lies within Flood Zones 2 and 3 is incorrect. The Environment Agency Flood Map for Planning is an indicative national screening tool and does not define site specific flood extents. For Green Hill, detailed hydraulic modelling has been completed for the Grendon Brook catchment, as set out in Flood Risk Assessment Annex J (Green Hill BESS) [REP1-057]. This modelling supersedes the national mapping and shows that the BESS compound is wholly within Flood Zone 1'.

The applicant states in their Response to Deadline 3 Submissions [REP4-022] 'Arthian undertook additional hydraulic assessment to provide a site specific understanding of flood behaviour at the BESS site' but the assessment is highly likely to be inaccurate of flood behaviour as the model for main river interactions is only 1D and contains data from 1980s-2000s. The results also contradict the Environment Agency's classification. Arthian attempted to justify the 1D model by classing the site as a low vulnerability NSIP which is completely incorrect. The applicant states there will be mitigations and they have not solely relied on historic mapping but accurate assessments need to be undertaken to ensure mitigations are at the very least sufficient. Placing a BESS within Flood Zones 2 and 3 without proper assessment suggests the applicant does not understand the seriousness of the risks involved.

Continuing on, there is still no mention of any measures or plan to deal with a flood causing a fire and hindering fire fighting efforts. A flood could result in previously identified measures and controls no longer being effective. For example, the applicant mentions pollution control measures (including automatically closing isolation valves in the event of a fire) within their Response to Deadline 3 Submissions [REP4-022] but what happens if a flood means the valves do not close? NFPA 855 (2026) requires Hazard Mitigation Analysis (HMA) to identify and mitigate all reasonably foreseeable external hazards for BESS installations. For example, a BESS located within a flood risk area should demonstrate that flooding cannot compromise electrical isolation, fire safety systems or emergency access. Without robust site specific flood modelling and mitigation the installation would not satisfy NFPA/855's minimum

MAJOR ACCIDENTS

Solely relying on remote operation is where issues mainly arise. The applicant states that the control room will not be operational 24/7 and does not implement anything else to fill this evidenced critical gap in safety and emergency planning.

In Arizona, USA, on 19 April 2019, four firefighters were seriously injured. It was reported by DNV GL [Ref 1] that at 17:07 one of the remote operators advised that a field service engineer was 'en route' to visually confirm a potential fire. At 17:40, the field service engineer called the emergency services and at 17:48 the emergency services arrived which is 41 minutes after the remote operator said they had sent someone to visually confirm a fire.

In Liverpool, UK, on 15 September 2020, it was reported by Merseyside Fire and Rescue Service [Ref 2] that at 00:38 smoke was seen on CCTV, at 00:39 there was an explosion and at 00:41 the remote operator wrongly cleared the fire system warning. At 00:49 calls were made to the fire service reporting the large explosion. However, it was not until 01:26 the remote operator first made contact with the fire service and advised that the site posed a substantial electrical hazard to emergency responders.

Both incidents show that remote only operation of a BESS site led to avoidable delays and resulted in the fire service arriving to a far more dangerous situation than would have occurred with timely intervention. Their lives and the lives of nearby residents were put at an entirely unacceptable level of risk due to the lack of supervision of the sites.

In January 2026, it was reported by CTIF, the International Association of Fire and Rescue Services, that New York City lawmakers are weighing a temporary six month moratorium on new battery energy storage systems (BESS) as fire safety concerns continue to rise across the state [Ref 3]. The applicant unacceptably wants to further add to the risk by situating a BESS within Flood Zones 2 and 3 without a proper assessment.

STANDARD OF PRACTICE

Solar Energy UK is an established trade association where members commit to adopting best practices in relation to the development of a solar farm. This includes ensuring all health and safety issues are addressed throughout the lifetime of the project. Green Hill Solar Farm Limited is not a member of Solar Energy UK and has therefore not opted into the industry's voluntary best practice framework including the '11 Commitments on Solar Farms' [Ref 4]. This raises questions about the extent to which the applicant is committed to following recognised sector standards. This is further reinforced as the applicant has repeatedly failed to rectify material omissions, presented misleading information to the public and the Examining Authority and has failed to demonstrate that they will ensure the health and safety of the public, animals and wildlife.

Overall, the applicant's repeated failure to address material issues raises serious concerns about their approach to risk, the adequacy of their assessment of harm and their understanding of the legislative and regulatory requirements that apply to this project.

REFERENCES

1. [redacted]

2. https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010106-003805-DL2 - Alan B Smith - Appendix 6 (1 of 2) - Merseyside Fire and Rescue Service (MFRS) Liverpool BESS Reports.pdf

3. [redacted]