Submission ID: [redacted]

Please note that the uploaded document contains responses to the RIES and also to other relevant issues for this deadline. These have been brought together in a single document for convenience.

Stop Greenhill Solar Responses to Examiners Questions arising from the Report on the implications for European Sites (RIES).

Other matters relevant to Deadline 5:

- **REP4-040 Response from Historic England – comment.**
- **REP4-019 Applicant comments on responses to ExA Second Written Questions**
- **REP4-020 Applicant responses to Written Representations at Deadline 3.**
- **REP4-021 Applicant responses to Stop Greenhill Solar.**

These responses have not involved the use of AI.

Responses to Examiners Questions arising from the Report on the implications for European Sites

RQ5, 6, 17, 19: to SGHS or other organisations.

ExQ	Theme	Comments / Issue raised	Response
RQ5	**Wintering Bird survey**	With reference to your response in [REP1-218], please provide the document title and examination library reference where these limitations were identified.	This is found in the Environmental Statement Appendix 9.9 Wintering Bird Surveys, page 16, para 1.3.5. APP-092, as follows: 'During Winter 2023/2024 and Winter 2024/2025, contractors were observed conducting topographic surveys and/or archaeological trenching works in a subset of fields within the survey area during the bird surveys. Given time constraints across disciplines, it was not possible to schedule surveys to avoid conflict with topographic/ trenching survey works. The presence of personnel and machinery is likely to have reduced the level of recorded bird activity within the affected fields on those occasions. Given that such survey works were temporary, Green Hill Solar Farm – Environmental Statement Appendix 9.9 – Wintering Bird Surveys survey results from individual fields were only affected on a single survey visit, hence the impact of any reduction in recorded activity is not considered a major limitation in the context of the wider dataset. It is also comparable to disturbance levels during typical farming activities.' We do not agree with their conclusion that the impact is not a major limitation, as we do not agree that trenching is comparable to typical farming activities. See SGHS REP1-204 point 16 and image14.
RQ6	**Survey data**	Please confirm if you have further comments or concerns in relation	SGHS has no further comments to make about the survey data, leaving Natural England as the expert consultee to deal with this.

		to the applicants' survey data	
RQ17 (to NE)	**Waterborne pollution**	Do you have any comments on the applicant's proposed mitigation measures for control of waterborne pollution through the OBSSMP, para 1.1.13 [REP1 143] with regard to the waterborne pollution impact-pathway? Can NE confirm whether it is satisfied that there are no AEoI from this impact pathway on all qualifying features of UNVGP SPA and UNVRS?	SGHS would like to make some comments about a statement made by the Applicant in the OBSSMP, para 1.1.13, listing that one of the anticipated BESS failure safety provisions is: 'The location of the BESS has been chosen to minimise impacts on offsite receptors (albeit this is inherent in the DCO Application, more particularly Embedded Mitigation for the Scheme, as it has been factored into the design process to date)' We take absolute issue with this as it is patently not the case that the site of the BESS would **minimise** impacts on off-site receptors (particularly species within the UNVGP SPA and UNVRS); quite the reverse. It is in the one position that would **maximise** impacts of waterborne pollution, being immediately upstream. The Applicant's choice of siting has presumably been driven by it's proximity to Grendon Substation and the grid transmission network. We would also like to take this opportunity to point out that another very important source of potential contamination by a BESS fire/explosion seems to have been omitted for consideration on wildlife and nature. In the OBSSMP, para 2.4.2, Safety Objectives, the Applicant states that the Emergency Response Plan is: ' to ensure that fire, **smoke, and any release of toxic gases does not significantly impact site operatives, first responders, and the local community;** There is no mention of trying to reduce the harm of airborne pollution on the nearby wildlife. Later in 5.5.10, the Applicant states that 'the ERP could contain the following measures or protocols relating to air quality for sensitive receptors located downwind from a fire plume: Notification of potentially affected residents including advice on the health effects of smoke and ways to reduce

			exposure (e.g. close windows and stay indoors); Notification of potentially affected members of the public to move to a cleaner air location; Cancellation of outdoor events and potentially moving affected residents to a cleaner air location'. Therefore, the Applicant accepts that this would be necessary to safeguard human health, but does not consider wildlife, most notably the bird populations of the RAMSAR site and SPA, as sensitive receptors. It is self-evidently not possible to notify the wildlife to move to safer locations. The site of the Proposed Green Hill BESS is within 100 – 200m of the most southerly edge of the RAMSAR site, which extends in a northeast direction within the Nene Valley. The prevailing winds here are from the southwest, so the most likely direction of any plume from a battery fire is towards the northeast, directly over the adjacent UNVRS. A wind direction, speed and power analysis for this area can be found in the open access Global Wind Atlas produced by the Danish Technical University, which shows this clearly. The Applicant has submitted Plume Analysis Modelling APP-167 which discuss the potential effects of toxic fumes on human health, which include most notably hydrogen fluoride, but also carbon monoxide, formaldehyde, hydrogen chloride, hydrogen cyanide, ammonia ,nitrogen dioxide and particulates. It is also self-evident that these will be toxic to other animal life, not just humans. In January 2025, a runaway fire and explosion happened at the Vistra BESS facility (300MW) at Moss Landing in California. It was noted that debris and ash rained down for miles around with illness experienced by humans, pets and livestock. Although air quality was deemed back to within federal safety standards within 2 days, the smoke plume released not only hazardous gases such as hydrogen fluoride but also soot and charred fragments of burned batteries. The levels of heavy metals from the battery cathodes (nickel, manganese and cobalt) were found to have sharply increased on the

			surface of the nearby wetlands, peaking at 2 weeks, but then remaining for months within the ecosystems, and bioaccumulating up through the food chains. Thus, we would contend that the proposed siting of Green Hill BESS, immediately adjacent, upstream and upwind from the UNVGP SPA and RAMSAR site, would threaten the site's entire integrity of as a result of the potential for short-term and long-term toxicity.
RQ19	**SPA and RAMSAR**	Please comment on further measures identified by the applicant in the OBSSMP (REP-1-143) in relation to your concerns on the SPA and RAMSAR site.	We remain concerned about the serious risks posed to the RAMSAR site and SPA from the proposed siting of Green Hill BESS, despite the Revised OBSSMP (REP1-143). It is noted that the plan in the event of a fire within the BESS will most likely be defensive, which is to use water for boundary cooling of adjacent BESS compounds, but let the fire burn itself out. If the fire is allowed to burn out, this will produce toxic gases and particulate matter over many hours or even days, producing the airborne pollution discussed in the answer to RQ17 above. If the plan is more active fire-fighting, then the plan to store 2 hours' worth of water in tanks on-site will presumably be insufficient when many hours have been shown to be necessary in previous incidents. Also, the capacity of the surface water drainage system to store the runoff will then be insufficient. So, in this scenario, the much more significantly contaminated water from direct contact with burning batteries and other components is more likely to breach the storage and cause major contamination of the surrounding environment, close to the RAMSAR site and River Nene. In the Applicant's response to Relevant Representations, REP1-161, section EA-008, p.154, the Applicant states: 'one option is for the compound subbase to act as the attenuation medium, comprising permeable gravel underlain by an impermeable liner. This ensures that firewater is held within

			the subbase and fully contained by the liner.' However, in the OBSSMP REP1-143, paragraph 5.5.5. concerning the BESS drainage system, the wording is different: 'a lined, permeable gravel subbase beneath proposed hardstanding', without mentioning an impermeable layer. It should also be noted that this is in an area of Flood risk 3, where there have been repeated flooding events in the last 18 months – so how can any firewater runoff be safely contained in a subbase in land prone to surface flooding? As a general comment, the document's wording states the overriding necessary principles (that are easily cut and pasted) but fails to detail any specifics relevant to the very particular characteristics of the siting of Green Hill BESS.

REP4-040 Response from Historic England

ExQ	Theme	Comments / Issue raised	Response
	Acceptability of mitigation planting on historic assets	We refer to Historic England response to the Examiners	We would like to comment that Historic England appear to suggest that in some instances there would not be an unacceptable level of harm to certain of the assets referred to. We assume that this assessment is based on assumptions regarding screen planting and would request that the examiners review SGHS earlier report.

REP4-019 Applicant comments on responses to ExA Second Written Questions

ExQ	Theme	Comments / Issue raised	Response
Q2.13.3	**Mitigation planting (NNC-005)**	Visual Effects	SGHS wish to acknowledge and emphasise the applicant's response which states that *"there would be an immediate change to the character of the Sotes themselves and their immediate surroundings as they change from an area of arable farmland to solar infrastructure"* We contend that the arguments then advanced by the applicant, to the effect that the dispersed nature of the sites, the "reversible" nature of the scheme, the existing vegetation, and the mitigation effects would in no way bring about acceptable resolutions to the changed landscape character. Much of the mitigation planting involves hedgerows which, we argue elsewhere, would not reach the proposed height (4.5 metres) and would obscure existing viewpoints and be out of character with all other hedgerows which are maintained by cutting back to around 2 metres or less each year.
Q2.13.4	**Cumulative Impacts** **(NNC-006)**	Visual Effects and cumulative impacts	SGHS wish to comment that the basic design of the scheme, with site selection being driven by inappropriate criteria rather than a preferential search for brownfield or non-BMV land – has resulted in cumulative impacts that would not otherwise have required any consideration. Applicant responses to this issue are not satisfactory. We refer to the response cited above regarding mitigation planting and its impact on the character of the landscape. We also wish to express our support for the comments and observations put forward by CPRE in GH8.1.28 (Rep 4-020) where the applicant is identified as seeking support for treating the project either as a single

			entity or as multiple individual sites according to the case they wish to present.

REP4-020 Applicant responses to Written Representations at Deadline 3.

ExQ	Theme	Comments / Issue raised	Response
CPRE-036	**Air Quality**	BESS: Toxic Fumes	SGHS notes that the applicant states that they have "thoroughly addressed all requisite BESS failure safety issues" in OBSSMP (Rep1-143) and APP-167. SGHS does not accept that safety has been thoroughly addressed and proposes to submit further evidence relating to safety factors prior to Deadline 5.
CPRE-044	**Continuing Agricultural Use**	The utilisation of fields with solar panels for sheep grazing.	SGHS notes the continued absence of agreement about the use of formerly arable land for sheep grazing. SGHS is grateful for the examples of sheep grazing at solar sites which the Applicant's farming consultant has provided. Could the Applicant please confirm whether these sites are still being grazed on an ongoing basis? Also, could the Applicant please provide the areas (in hectares) of these sites, and the schemes' generating capacity (in megawatts (MW)).

REP4-021 Applicant responses to Stop Greenhill Solar.

SGHS would like to point out that a significant number of the issues listed in REP4-021 comprise applicant rebuttal of points put forward by SGHS. Where a simple rebuttal has been recorded by the applicant we see no need to repeat or "re-rebutt". The following are therefore issues where SGHS consider that responses to date are not adequate or where there are further issues of significance to raise. SGHS will make further substantive submissions on a range of other relevant areas for consideration during the examination process.

ExQ	Theme	Comments / Issue raised	Response
SGHS-001; **SGHS-002;** **SGHS-003;** **SGHS-004;** **SGHS-005;** **SGHS-020;**	**Site Selection**	The appropriateness of the site selection methodology and associated elements.	SGHS notes the applicant's response and reiterates that the selection of sites has not been conducted on an appropriate basis in line with the government policy, as referred to in previous documentation and submissions. The consequence of the inappropriate selection of sites and the late addition of two sites (Site G and Site A2) has resulted in a distended scattering of sites which has failed to identify and include non-BMV land which could have been utilised. This has dramatically increased the cable route requirements, has exacerbated the need to block public footpaths and led to increased requirements for hedging and tree planting which would obscure existing viewpoints. The Farming Report (APP-571), which references BMV land, is quoted by the applicant and is significant: *"It was not considered proportionate to consider in detail every piece of unconstrained Grade 3 agricultural within the 20km search area identified through the site selection process due to the amount of land involved and the vast quantity of BMV land within the 20km search radius".* The statement indicates that the search was not

			done transparently or thoroughly but merely based on the least possible effort which arose from the responses of willing landowners. The site selection search should, at the very least, be undertaken again to include non-BMV land for which compulsory acquisition options could be used. Further, the applicant states (in response to SGHS-006) that the search criteria for 500MW capacity involved *"a total size of approximately 1,000 hectares (excluding cable route")*. SGHS notes that site selection has resulted in an area that significantly exceeds this figure and so requires increased cable routing.
SGHS-011	**Landscape and visual impact**	Methodological concerns	In SGHS's landscape expert's opinion, the Applicant's responses do not satisfactorily address matters raised in the *Landscape and Related Matters Statement* [REP1-195] and associated documents, and in subsequent comments / responses. The fact that there is agreement between the Applicant's and Councils' landscape experts about the LVIA method and approach does not alter the landscape expert's position on those matters. Also, the Councils are still expressing concerns about certain aspects of the LVIA (for example cumulative effects; mitigation effects; visual effects; and not factoring in local landscape designations and omitting important local character variations, which affect judgements about levels of effects). Indeed, regardless of the reasons why, the Councils appear to **agree** with SGHS's expert that levels of adverse landscape and visual effects have been underestimated. Should the Examining Inspectors consider it necessary, the Landscape Institute could be asked to clarify technical points of disagreement relating

			to LVIA / GLVIA3: they cannot comment on project-specific matters, but the inquiry can be 'anonymised'. However, it is important to note that in terms of predicted levels of effects, SGHS's expert **agrees** with many of the LVIA's findings, as summarised below. The Applicant's responses confirm that the proposed development would result in significant adverse effects on character and views. However, the expert's opinion remains that the level, extent, and duration of the adverse effects have been underestimated. As explained in representations, comments and responses, for reasons which are not clear, the LVIA did not assess effects on the character of the sites themselves, only their 'fabric'. However, evidently the **direct** effects on landscape character within the Scheme boundary could not be mitigated, and would be **significant adverse** from start to finish SGHS's expert **agrees** that **indirect** effects on character beyond the Scheme boundary would be significant adverse from Year 1 – Year 15, but also that levels would be higher than stated. The expert does **not agree** that after Year 15, levels would fall below the significance threshold, partly because the LVIA does not factor in a) non-visual effects on character, and b) the adverse effects arising from the proposed screen planting that would result in loss of characteristic openness. SGHS's expert does **not agree** that by Year 15, there would be a significant beneficial effect on the sites' landscape 'fabric'. The LVIA erroneously assumes that proposed landscape / visual mitigation measures can be

			double counted as landscape / visual enhancements. At best, the effect would be Neutral, at worst significant adverse, the latter due to a) the planting being uncharacteristic (tall hedges), and b) the loss of characteristic openness. SGHS's expert **agrees** that visual effects would remain significant adverse for the duration of the operation, and that in some cases, mitigation is not possible. However, in many cases, levels would be higher than assumed because the LVIA does not factor in a) the high levels of adverse effects resulting from the total loss of a good view; b) the proposed screening measures being uncharacteristic; and c) it being highly unlikely that existing (and proposed) vegetation would continue to screen views for the duration of the operation.
SGHS-012 - 018; 074,075; **083-085** **092, 093**			We refer to the response above in respect of SGHS-011.
SGHS-007	**Ecology and Biodiversity**		Please see separate submission included above.

SGHS-021	**Human Health**	Health, access to open spaces and mental health.	SGHS notes that the applicant refers back REP2-048 which, in turn, refers back to REP1-161. SGHS wish to point out that this does not amount to an adequate response on what are very important issues to local residents. SGHS has already raised the inadequacy of Greenhill documentation on health and mental health issues. Greenhill have stated, in response, that permissive paths, for example have been identified following consultation with local public health departments. However, Greenhill have actually stated that although they "reached out" to local public health departments they received no response. This has been confirmed by SGHS using a Freedom of Information request to North Northants public health department. Whilst SGHS respects the fact that efforts to consult were made, the relevant issue is that **no consultations** actually took place. Unless the applicant is able to provide details on any such consultations the examiners are requested to set aside the unqualified estimates provided within the documentation. The impact of lost access to the countryside is highly significant and will be adverse over time. Government health bodies prescribe – for example through the social prescribing schemes – access to countryside for those with health and mental health issues. Such access is either limited to walking through restricted areas of solar panels or, for periods of time, denied altogether where no such permissive paths are provided (acknowledged with respect to TP182 in REP2-050).
SGHS-026; SGHS 027;	**Transport and Access**	Traffic estimates, access to compounds and minor roads.	SGHS reiterates that existing and future traffic estimates have not been put together in sufficient detail or with the local knowledge that residents have been able to supply.

SGHS-028; **SGHS-029;** **SGHA-030;**			Delivery materials to key compounds and the use of local minor roads are likely to cause significant difficulties for all road users. It can alos be predicted that the passage of HGV's along some of the local roads will cause deterioration to the verges and then to road surfaces.