

# **Green Hill Solar Farm**

## **EN010170**

# **Applicant Comments on Responses to Report on the Implications for European Sites (RIES)**

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## Issue Sheet

Report Prepared for: Green Hill Solar Farm

Examination Deadline 6

The Applicant Comments on Responses to Report on the Implications for European Sites (RIES)

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# 1 Introduction

## 1.1 Purpose of the Document

1.1.1 This document has been prepared by the Applicant to respond to comments made at Deadline 5 to the (ExA) Report on the Implications for European Sites (RIES), issued 28 January 2026 **[PD-014]**, in relation to Green Hill Solar Farm.



## 2 Applicant Comments on Responses to Questions in the ExA’s Report on the Implications for European Sites (REIS)

### 2.1 North Northamptonshire Council [\[REP5-111\]](#)

Reference	Theme	Issue	Comment/Issue Raised	Applicant’s Response
NNC-001	Ecology and Biodiversity	Survey Data	<p><i>In Response to RQ6: To SGHS, NE and NNC: Please confirm if you have further comments or concerns in relation to the applicant’s survey data</i></p> <p>In response to the answer regarding FLL and survey effort, we consider that the surveys undertaken use an appropriate methodology and at a level of detail that is sufficient to identify FLL that might be impacted by the proposals. This position is taken notwithstanding that some parcels of land have not been surveyed to the same extent or with the same timings as other land due to the late inclusion of these areas within the order limits, as the applicant has adopted a precautionary approach in the assessment of potential FLL in these areas.</p>	The Applicant acknowledges and welcomes this response.
NNC-002	Ecology and Biodiversity	Mitigation for FLL	<p><i>In Response to RQ10: To WNC and NNC: Please comment on the timing of the availability of the proposed mitigation for FLL, set out in the applicant’s updated OLEMP [REP3-062]</i></p> <p>We consider it important that the proposed mitigation land is available and managed as mitigation land prior to the commencement of construction. The suitability of the land for use is not exclusively determined by availability as a physical space, but requires that suitable food sources have had the opportunity to colonise and</p>	The principle of the mitigation of losses of Functionally Linked Land (FLL) is to secure no net loss in the extent (area) of FLL, for the lifetime of the Scheme. As detailed in the <b>Habitats Regulations Assessment (HRA) (Revision B) [REP5-079]</b> , the Scheme secures a surplus of land to the quantum of FLL (and precautionary FLL) which will be lost. Some FLL fields are simply retained, whilst alternative fields are secured to offset losses of other FLL fields.



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			<p>develop sufficiently to act as a resource for wintering birds. The land required as mitigation is to compensate for the loss of land used as a winter feeding site. If the applicant maintains that the land set aside for mitigation already functions as a site that can provide for winter foraging, this should not be considered as mitigation, as no new land is provided to offset the loss. If the applicant is claiming that converting the land for mitigation post commencement is the intention, they should evidence the concept that the mitigation land will be able to offer an additional resource at a level sufficient to offset the loss of land without any time-lag.</p>	<p>Unlike a Biodiversity Net Gain Assessment, there is no defined metric to assign values to particular habitat types, and therefore the mitigation strategy principally seeks to secure at least no net loss in FLL <i>extent</i>. However, the strategy also proposes the fields to be managed as particular habitat types, adjudged to be appropriate based on ecological expertise. This entails the conversion of the majority of the mitigation fields from their current arable management to conservation grassland.</p> <p>The fact that the mitigation fields already provide suitable winter foraging habitat is not of consequence, as the mitigation strategy is not seeking to deliver no net loss in the total area of all potentially suitable foraging habitat, but just no net loss in the extent of defined FLL.</p> <p>As detailed in <b>Method Statement 13</b> of the <b>Outline Ecological Protection and Mitigation Strategy (OEPMS) (Revision D) [EX6/GH7.5_D]</b>, the FLL mitigation fields will be managed and maintained as suitable for golden plover and lapwing until habitat conversion works (such as grassland seeding) can take place, which may be after construction commences. The fields will be converted to their proposed habitat types for the operational lifetime of the Scheme within 12 months of construction commencement. Given that the fields will be maintained as suitable in the interim period, there will be no net loss in the</p>



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				extent of FLL at any point. This is considered to address NNC's concerns.
NNC-003	Ecology and Biodiversity	Mitigation for SPA and Ramsar	<p><i>In Response to RQ19: To NNC and SGHS: Please comment on the further measures identified by the applicant in the OBSSMP [REP1-143] in relation to your concerns on the SPA and Ramsar site.</i></p> <p>As already stated, NNC Ecology is not able to comment on the technical solutions to the issue of fire control, and the containment of contaminants arising. We remain concerned to understand what the potential impacts of such an event are, notwithstanding the efforts that are being made to reduce the risk. Unless it is absolutely guaranteed that no contamination is possible, or reasonably so, this is an ongoing concern.</p>	<p>The Applicant acknowledges this response. As detailed in the <b>HRA (Revision B) [REP5-079]</b>, mitigation measures are considered to reduce the potential for impacts on the SPA to negligible levels, such that no adverse effects on integrity are likely from this pathway.</p> <p>Natural England are in full agreement with matters relating to the assessment of ecological impacts and mitigation measures, as per the <b>Natural England Statement of Common Ground (Revision B) [REP5-106]; ECO-12 and ECO-13.</b></p> <p>The Environment Agency are in agreement with the matters relating to the embedded measures to prevent contamination of surface water features, particularly from the BESS as per the <b>Environment Agency Statement of Common Ground (Revision C) [EX6/GH8.3.5_C]</b> items HYD-02 and HYD-09.</p>



## 2.2 Grendon Parish Council [\[REP5-115\]](#)

Reference	Theme	Issue	Comment/Issue Raised	Applicant's Response
GPC-001	Ecology and Biodiversity	Objection to Green Hill Solar Farm	<p>We (Grendon Parish Council) objects to the proposed Green Hill Solar Farm due to its very close proximity (approximately 0.01 km / 10 metres) to the Upper Nene Valley Gravel Pits Special Protection Area (SPA) and the Upper Nene Valley Ramsar site. These sites are internationally protected wetlands of the highest ecological importance. We are concerned that the proposed Solar Farm, BESS and associated infrastructure development is located too close to these sites and would inevitably place them at risk.</p> <p>The Examining Authority's Report on the Implications for European Sites (RIES) identifies a number of negative impacts which it concludes cannot be ruled out at this stage. Several of these remain unresolved and, our view, give rise to serious concern.</p>	<p>The <b>HRA (Revision B) [REP5-079]</b> assesses the potential for impacts on the Upper Nene Valley Gravel Pits Special Protection Area (SPA) and the Upper Nene Valley Ramsar site via all potential pathways. Mitigation measures are then proposed to mitigate possible adverse impacts. In response to the RIES <b>[PD-014]</b>, the HRA has been updated to screen in disturbance to species outside the SPA, and includes appropriate mitigation measures. The conclusion of the HRA is that no adverse effects on integrity are likely via any pathway, in isolation or in combination with other projects.</p> <p>Natural England are in full agreement with matters relating to the assessment of ecological impacts and mitigation measures, as per the <b>Natural England Statement of Common Ground (Revision B) [REP5-106]</b>.</p>
GPC-002	Ecology and Biodiversity	Location immediately next to protected wetlands	<p>The proposed solar farm and associated infrastructure are located directly adjacent to the SPA and Ramsar site. At a distance of around 10 metres, the Council considers that there is no meaningful separation between the development and the protected wetlands. Any changes to drainage, land management, or activity levels therefore have the potential to affect the integrity of these sites.</p>	<p>Potential changes to surface water runoff, drainage pathways and hydrological inputs to adjacent receptors are assessed in <b>ES Chapter 10: Hydrology, Flood Risk and Drainage [EX6/GH6.2.10_C]</b>, with supporting detail provided in <b>ES Appendix 10.1 to 10.11: Flood Risk Assessment and Drainage Strategy [REP5-021, REP5-023, REP5-025, APP-100 to APP-102, REP5-027, APP-104 to APP-106, REP5-029, REP5-031]</b>.</p>



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				<p>The assessment considers both increases and reductions in runoff volumes, as well as potential changes in flow direction or connectivity. Solar PV panels are mounted above ground and drain to the existing soil profile. They do not form connected impermeable surfaces or discharge to a sealed drainage network. The drainage strategy maintains greenfield runoff behaviour and existing overland flow pathways so that there is no material change in the rate, volume or direction of surface water leaving the Order Limits.</p> <p>Where associated infrastructure introduces impermeable area, this is treated as discrete catchment and subject to quantitative drainage design to control runoff and maintain baseline discharge characteristics. For the BESS, runoff is managed within a sealed and isolatable drainage system designed to contain runoff and firewater, preventing discharge to the surrounding environment. This approach is consistent with the Environment Agency's requirement for containment of potentially contaminated runoff. Construction-phase risks, including soil compaction and temporary disturbance, are controlled through the <b>Outline Construction Environmental Management Plan (OCEMP) [EX6/GH7.1_C]</b>, secured by the <b>Draft Development Consent Order (DCO) [EX6/GH3.1_E]</b>, ensuring that infiltration capacity and runoff pathways are protected.</p>



Reference	Theme	Issue	Comment/Issue Raised	Applicant's Response
				<p>On that basis, the hydrology and drainage assessment does not identify a mechanism by which the Scheme would result in a material increase or reduction in hydrological inputs to adjacent wetlands or otherwise give rise to adverse effects through changes in surface water drainage or flood risk. The BESS and substation drainage proposals provide sealed and isolatable containment of runoff and firewater, preventing uncontrolled discharge and limiting any pathway to the adjacent SPA and Ramsar site.</p> <p>The Applicant can confirm that subject to the implementation of the measures set out in the <b>ES Appendix 10.11: Flood Risk Assessment and Drainage Strategy Annex J – Green Hill BESS (Revision B) [REP5-031]</b> and the <b>OBSSMP [REP5-075]</b>, the Environment Agency are in full agreement with all relevant matters within the <b>Environment Agency Statement of Common Ground (Revision C) [EX6/GH8.3.5_C]</b>.</p>
GPC-003	Ecology and Biodiversity	Likely significant effects identified	<p>The RIES confirms that probable significant effects have been identified in relation to a number of areas, including:</p> <ul style="list-style-type: none"> <li>• disturbance to qualifying bird species during construction and operation;</li> <li>• habitat fragmentation and loss of functionally linked land;</li> <li>• airborne and waterborne pollution; • surface water runoff; and</li> </ul>	<p>Please refer to the Applicant's response to GPC-001. No adverse effects on integrity are identified after the application of mitigation measures.</p> <p>The Applicant can confirm that Natural England are in full agreement with all matters within the <b>Natural England Statement of Common Ground (Revision B) [REP5-106]</b>.</p>



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			<ul style="list-style-type: none"> <li>the spread of invasive non-native species.</li> </ul> <p>These effects apply to both the SPA and the Ramsar site and, in several cases, are still subject to disagreement between the applicant, Natural England and other interested parties.</p>	
GPC-004	Flood Risk	Flood risk and waterborne pollution	<p>The Council is particularly concerned about the risk of polluted surface water entering the wetland system. The site lies within a floodplain, and there are ongoing concerns about whether proposed drainage and pollution control measures would operate effectively during flood events. The presence of the Battery Energy Storage Systems (BESS) increases this concern, particularly in the event of a fire where contaminated firewater could reach watercourses connected to the wetlands.</p>	<p>Flood risk within the Order Limits is assessed in <b>ES Chapter 10: Hydrology, Flood Risk and Drainage [EX6/GH6.2.10_C]</b>, with supporting detail in <b>ES Appendix 10.1 to 10.11: Flood Risk Assessment and Drainage Strategy [REP5-021, REP5-023, REP5-025, APP-100 to APP-102, REP5-027, APP-104 to APP-106, REP5-029, REP5-031]</b>. While the Environment Agency Flood Map for Planning identifies parts of the wider land parcel within Flood Zones 2 and 3, site-specific modelling and assessment demonstrate that the BESS platform area lies outside the modelled 1% annual probability event including climate change. The BESS is therefore not expected to be impacted by fluvial flooding during the design event.</p> <p>Surface water drainage associated with the BESS is designed as a sealed and isolatable system. Operational runoff and any potential spillages are contained within controlled drainage infrastructure. In the event of a fire, isolation mechanisms at outfalls enable containment of firewater within the drainage system, preventing uncontrolled discharge to adjacent land or watercourses. The drainage and containment systems are designed to operate independently</p>



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				<p>of fluvial flood conditions and are not reliant on gravity discharge during flood events. Storage capacity and isolation controls enable containment of runoff and firewater within the site during the design flood event, preventing uncontrolled release even where downstream water levels are elevated. These principles are set out in <b>ES Chapter 10: Hydrology, Flood Risk and Drainage [EX6/GH6.2.10_C]</b> and the <b>Outline Battery Storage Safety Management Plan (OBSSMP) [REP5-075]</b>.</p> <p>Construction-phase pollution prevention measures are secured through the <b>OCEMP [EX6/GH7.1_C]</b>, which is secured by the <b>Draft DCO [EX6/GH3.1_E]</b>. Detailed drainage design for the BESS and substations will be subject to approval under the Draft DCO.</p> <p>On that basis, the hydrology and drainage assessment does not identify a credible pathway by which polluted surface water, including potential firewater from the BESS, would enter connected wetlands as a result of the Scheme.</p>
GPC-005	Ecology and Biodiversity	Floodplain location increases vulnerability	Both the wetlands and the proposed development sit within the same floodplain system. Our local experience shows that flooding is not uncommon in this area. These flood conditions increase the risk that control measures do not work or are overtopped, allowing sediment or pollutants to be carried towards the SPA and Ramsar site.	Flood risk within the Order Limits, including fluvial flood extents associated with adjacent watercourses, is assessed in <b>ES Chapter 10: Hydrology, Flood Risk and Drainage [EX6/GH6.2.10_C]</b> , with supporting detail in <b>ES Appendix 10.1 to 10.11: Flood Risk Assessment and Drainage Strategy [REP5-021, REP5-023, REP5-025, APP-100 to APP-102, REP5-027, APP-104 to APP-106, REP5-</b>



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				<p><b>029, REP5-031].</b> While certain fields intersect mapped Flood Zones 2 and 3, the assessment demonstrates that more vulnerable infrastructure, including substations and BESS, is located outside the modelled 1% annual probability event including climate change. Solar panel areas located within mapped flood extents comprise minor, resilient infrastructure and do not materially displace flood storage or alter established flow routes.</p> <p>The potential for sediment mobilisation and pollutant transport during flood conditions has been assessed. Construction-phase risks are controlled through measures set out in the <b>OCEMP [EX6/GH7.1_C]</b>, secured by the <b>Draft DCO [EX6.GH3.1_E]</b>, including controls on soil handling, trafficking, temporary drainage and pollution prevention. These measures are designed to manage runoff during periods of heavy rainfall and to prevent uncontrolled discharge of sediment-laden water.</p> <p>Operational drainage associated with impermeable infrastructure is designed with containment and exceedance management so that runoff is controlled and does not rely on uncontrolled discharge during flood conditions. The assessment does not identify a credible pathway by which fluvial flooding would cause drainage or pollution control measures to fail in a manner that would result in adverse hydrological effects on adjacent designated wetlands.</p>



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				On that basis, the hydrology and drainage assessment concludes that the Scheme would not increase flood risk elsewhere or give rise to adverse effects through flood-related mobilisation of sediment or pollutants.
GPC-006	Ecology and Biodiversity	Impacts on birds and supporting land	The RIES raises concerns about the adequacy of bird surveys, the identification of land used by qualifying species outside the SPA, and the timing of proposed mitigation. In particular, it remains unclear whether a suitable replacement habitat would be available before any loss or disturbance occurs. The Council considers this uncertainty unacceptable given the sensitivity of the sites involved.	<p>Bird surveys have been completed over two years, as agreed with Natural England, across the majority of Green Hill Sites. Where survey shortfalls exist, these are clearly stated in the <b>ES Chapter 9: Ecology and Biodiversity (Revision B) [EX6/GH6.2.9_B]</b>, <b>ES Appendix 9.9 Wintering Bird Surveys [APP-092]</b>, and the <b>HRA [REP5-079]</b>. Precautionary mitigation measures are set out to account for these shortfalls. The level of survey effort completed, the methodology for the identification of Functionally Linked Land (FLL), and the mitigation strategy for losses of FLL, has been agreed with Natural England; please refer to <b>Natural England Statement of Common Ground (Revision B) [REP5-106]</b>.</p> <p>Detail on the timings of delivery of mitigation habitat is clarified in <b>Method Statement 13</b> of the <b>OEPMS (Revision D) [EX6/GH7.5_D]</b>.</p>
GPC-007	Ecology and Biodiversity	Cumulative effects	The Council notes that the Green Hill Solar Farm does not exist in isolation. The RIES confirms that effects must be considered in combination with other plans and projects. However, concerns remain that cumulative impacts, particularly in relation to disturbance,	The assessment in <b>ES Chapter 10: Hydrology, Flood Risk and Drainage [EX6/GH6.2.10_C]</b> demonstrates that the Scheme will not increase runoff rates or volumes leaving the Order Limits and will not increase fluvial flood risk elsewhere. Greenfield runoff behaviour is maintained and established drainage pathways are not altered.



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			hydrology and pollution, have not been fully resolved.	<p>As such, the Scheme does not introduce an additional hydrological loading to receiving watercourses.</p> <p>The cumulative and in-combination assessment reported in <b>ES Chapter 24: In-Combination and Cumulative Effects [APP-062]</b> considers other committed developments within the relevant catchments. Given that the Scheme does not increase off-site runoff or flood risk, it does not contribute to a cumulative increase in downstream flood risk or hydrological effects.</p> <p>Construction-phase runoff and pollution risks are controlled through the <b>OCEMP [EX6/GH7.1_C]</b>, secured by the <b>Draft DCO [EX6/GH3.1_E]</b>, ensuring that there is no uncontrolled discharge that could combine with other developments.</p> <p>On that basis, the hydrology and drainage assessment concludes that the Scheme does not give rise to cumulative effects in respect of flood risk or waterborne pollution.</p> <p>The <b>HRA (Revision B) [REP5-079]</b> considers all potential impact pathways from the Scheme, both in isolation and in combination with other projects. The conclusion of the HRA is no adverse effects on integrity via any pathway, either from the Scheme in isolation, or in combination with other projects.</p>



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GPC-008	Ecology and Biodiversity	Conclusion	<p>Given the extremely close proximity of the proposed development to internationally protected wetlands, the Council considers that the Green Hill Solar Farm carries an inherently high risk of harm. The Examining Authority's report identifies a number of impacts which cannot yet be ruled out, and important matters remain unresolved.</p> <p>In these circumstances, and applying the precautionary approach required under the Habitats Regulations, Grendon Parish Council considers that adverse effects on the integrity of the Upper Nene Valley Gravel Pits SPA and Ramsar site cannot be excluded. The Council therefore objects to the proposal and considers that consent should not be granted - unless and until these issues are satisfactorily resolved.</p>	<p>The Applicant acknowledges this comment and refers to the responses given to the other matters raised by Grendon Parish Council above. .</p>



### 2.3 Stop Green Hill Solar [\[REP5-121\]](#)

Reference	Theme	Issue	Comment/Issue Raised	Applicant's Response
SGHS-001	Ecology and Biodiversity	Wintering Bird survey	<p><i>In Response to RQ5: With reference to your response in [REP1-218], please provide the document title and examination library reference where these limitations were identified.</i></p> <p>This is found in the Environmental Statement Appendix 9.9 Wintering Bird Surveys, page 16, para 1.3.5. APP-092, as follows:</p> <p>'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.'</p> <p>We do not agree with their conclusion that the impact is not a major limitation, as we do not</p>	<p>The Limitations section (Section 1.3) in <b>ES Appendix 9.9 Wintering Bird Surveys [APP-092]</b> is intended to transparently identify any factors which served to limit the gathering of the survey data. The potential for each limitation to materially affect the results and conclusions of the assessment is then discussed. As per paragraph 1.3.5, the presence of temporary trenching works, affecting individual fields during a single survey visit, is not considered a major limitation to the extensive dataset gathered by the Applicant over multiple survey visits (6 diurnal visits for Green Hill A and A.2; 12 diurnal and 6 nocturnal visits for Green Hill B-E; 10 diurnal and 6 nocturnal visits for Green Hill F; 6 diurnal and 3 nocturnal survey visits for Green Hill G).</p>



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			agree that trenching is comparable to typical farming activities. See SGHS REP1-204 point 16 and image14.	
SGHS-002	Ecology and Biodiversity	Survey data	<i>In Response to RQ6: To SGHS, NE and NNC: Please confirm if you have further comments or concerns in relation to the applicant's survey data</i>  SGHS has no further comments to make about the survey data, leaving Natural England as the expert consultee to deal with this.	The Applicant acknowledges this response, and directs SGHS to the <b>Natural England Statement of Common Ground (Revision B) [REP5-106]</b> , which confirms that the survey data gathered are acceptable.
SGHS-003	Ecology and Biodiversity	Waterborne pollution	<i>In Response to RQ17 (to NE): 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 AEol from this impact pathway on all qualifying features of UNVGP SPA and UNVRS?</i>  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)'	The assessment of potential effects on water quality, including pathways associated with surface water runoff and drainage, is set out in <b>ES Chapter 10: Hydrology, Flood Risk and Drainage [EX6/GH6.2.10_C]</b> , with supporting detail in the Flood Risk Assessment and Drainage Strategy suite, including <b>ES Appendix 10.11: Flood Risk Assessment and Drainage Strategy – Green Hill BESS [REP5-031]</b> .  The control of contamination pathways associated with the BESS does not rely on siting alone. The BESS drainage is designed as a sealed and isolatable system serving the battery storage infrastructure. In the event of an incident, drainage can be isolated from the wider environment, and retained water can be managed appropriately before any discharge. These principles are set out in <b>ES Chapter 10 [EX6/GH6.2.10_C]</b> and the <b>OBSSMP [REP5-075]</b> .  The assessment concludes that, with the embedded mitigation and secured management



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			<p>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.</p> <p>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;</p>	<p>measures in place, there is no credible pathway for contaminated runoff from the BESS to enter adjacent watercourses. Detailed drainage design and construction-phase pollution prevention controls are secured through the <b>Draft DCO [EX6/GH3.1_E]</b>, including implementation of the <b>OCEMP [EX6/GH7.1_C]</b>.</p> <p>The Applicant's <b>OBSSMP [REP5-075]</b> is a document drafted to ensure all onsite and offsite significant life and safety risks (human health) are fully addressed and mitigated.</p> <p>The BESS site poses no more significant risk to surrounding wildlife, than any fire scenario that might be expected in a rural environment. The buffer zones to the RAMSAR site ensure that any toxic gas emission would be significantly below 1PPM.</p> <p>The Applicant has already fully addressed the Moss Landing fire during the ISH 2 submissions and Post hearing note <b>8.1.24 Written Summary of the Oral Submissions at the Open Floor Hearing 2 and the Applicant's Responses [REP3-129]</b>:</p> <p>Professor Dobson's reference to the Moss Landing fire is not relevant to the Scheme because BESS fires involving air cooled, pouch cell systems battery systems skew BESS global failure data. Air cooled, NMC chemistry pouch cell systems will not be considered for the Scheme for safety reasons, batteries that may be selected do not contain</p>



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			<p>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.</p> <p>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.</p> <p>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.</p>	<p>nickel, manganese, or cobalt separator materials. These NMC battery systems were involved in 31 from 91 BESS failure events listed in the EPRI database. In 31 BESS failures recorded in South Korea between 2017-21 these systems were integrated in 18 (58%) BESS failures but only accounted for 30% of total BESS systems installed. Confirmed global BESS failures listed on the EPRI database (outside of South Korea) integrating these battery systems are 12 significant failure incidents at facilities in Drogenbos (Belgium), McMicken (AZ, USA), Carnegie Road Liverpool, 3 failures at Moss Landing (CA, USA), and 2 failures at Valley Center (CA, USA).</p> <p>Section 2.5 of the <b>OBSSMP [REP5-075]</b> lists the guidance documents and testing and safety standards considered by the Applicant have been used to inform the design of the scheme, which are BESS safety specific and include global or relevant UK guidance or standards.</p> <p>The Moss Landing fire involved approximately 100,000 battery racks located in an old power station building with no separation between battery racks and many battery racks were double stacked on top of one another within the building. Unlike the Moss Landing power station structure BESS enclosures are constructed from non-combustible materials and typically contain 5-10 battery racks within each BESS enclosure. To replicate the size and intensity of the Moss Landing event would require the simultaneous thermal runaway fire in</p>



Reference	Theme	Issue	Comment/Issue Raised	Applicant's Response
			<p>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's 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.</p> <p>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.</p>	<p>10,000-20,000 individual BESS enclosures which bears no relevance to the Green Hill scheme.</p> <p>The siting of Green Hill BESS poses no significant short-term or long-term off-site toxicity risks to any sensitive receptor, including UNVGP SPA and RAMSAR sites.</p>
SGHS-004	Ecology and Biodiversity	SPA and RAMSAR	<p><i>In Response to RQ19: To NNC and SGHS: Please comment on the further measures identified by the applicant in the OBSSMP [REP1-143] in relation to your concerns on the SPA and Ramsar site</i></p> <p>We remain concerned about the serious risks posed to the RAMSAR site and SPA from the</p>	<p>Flood risk to the BESS platform area is assessed in <b>ES Chapter 10: Hydrology, Flood Risk and Drainage [EX6/GH6.2.10_C]</b>, with supporting detail provided in the Flood Risk Assessment and Drainage Strategy suite, including <b>Annex J: Green Hill BESS [REP5-031]</b>. While the wider land parcel intersects Environment Agency Flood Zones 2 and 3, site-specific assessment demonstrates that the BESS platform lies outside</p>



Reference	Theme	Issue	Comment/Issue Raised	Applicant's Response
			<p>proposed siting of Green Hill BESS, despite the Revised OBSSMP (REP1-143).</p> <p>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.</p> <p>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</p>	<p>the modelled 1% annual probability event including climate change. The BESS is therefore not expected to be subject to fluvial inundation during the design event.</p> <p>The drainage strategy for the BESS does not rely on uncontrolled infiltration. The design principle, as assessed in <b>Annex J [REP5-031]</b>, is that runoff from the battery storage area will be managed within a sealed and isolatable drainage system serving the BESS infrastructure. In the event of an incident, drainage can be isolated from the wider environment. Retained water would be sampled and tested prior to any discharge. Where discharge is not appropriate, retained water would be removed off site by a licensed contractor in consultation with the relevant regulators. These principles are also set out in the <b>OBSSMP [REP5-075]</b>. The relevant drainage wording was updated at Deadline 5 to reflect wording agreed with the Environment Agency <b>[REP5-104]</b>.</p> <p>The assessment does not assume that firewater would discharge uncontrolled to adjacent land or watercourses. Containment capacity and isolation controls form part of the embedded mitigation assessed within <b>ES Chapter 10 [EX6/GH6.2.10_C]</b>. Detailed drainage design will be subject to approval under the <b>Draft DCO [EX6/GH3.1_E]</b>, ensuring that the final design accords with the assessed containment principles and the wording agreed with the Environment Agency at Deadline 5 <b>[REP5-104]</b>.</p>



Reference	Theme	Issue	Comment/Issue Raised	Applicant's Response
			<p>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?</p> <p>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.</p>	<p>The Applicant has already fully addressed all relevant firefighting requirements during ISH 2 submissions and in the Post hearing note <b>8.1.24 Written Summary of the Oral Submissions at the Open Floor Hearing 2 and the Applicant's Responses [REP3-129]</b> namely:</p> <p>The <b>OBSSMP [REP5-075]</b> stipulates that the Applicant at detailed design will only select a BESS system that as mandated under NFPA 855 (2026 Revision) must have undertaken Large Scale Fire Testing (LSFT) as part of UL 9540A tests and / or 3rd party full scale destruction testing. This testing involves burning the full BESS system to validate safe equipment spacing and performance test active and passive mitigation systems integrated into the BESS design. The objective of the test is to evaluate the thermal exposure impacts from a developed BESS enclosure, to determine propagation risk to adjacent BESS or equipment. Testing also defines the length of burn, duration of Peak Heat Release Rate, maximum burn temperatures, etc. The detailed design phase of the Scheme will consider the lifecycle of the battery system from installation (during the construction phase of the Scheme) to decommissioning.</p> <p>At the detailed design stage, the selected BESS will have undertaken Large Scale Fire Testing (LSFT) to fully inform inputs for risk assessment tools which will be utilised together with detailed consequence modelling to provide a</p>



Reference	Theme	Issue	Comment/Issue Raised	Applicant's Response
				<p>comprehensive site operations and emergency response safety audit. LSFT of the selected BESS design is conducted to establish minimum equipment spacing distances (no fire propagation to adjacent BESS or infrastructure) and site specific consequence modelling will provide a clear, evidence-based case for the final BESS area installation plans at the detailed design phase and will be agreed with NFRS.</p> <p>The Applicant will also commission site specific heat flux and flame tilt consequence modelling to account for site topography and wind conditions to establish final equipment spacing distances for the Scheme. The Applicant confirms that in line with NFCC and NFPA 855 guidance that in all BESS failure scenarios NFRS are only expected to take a defensive firefighting strategy i.e. observation and only applying boundary cooling if necessary. The BESS area water supply system for NFRS allows for ease of access in all weather conditions and ensures that firefighters do not have to operate within a smoke plume.</p> <p>Section 5.3.2 of the <b>OBSSMP [REP5-075]</b> stipulates the Applicant will supply 4 hours water supply @ 1900 LPM which is more than double the NFCC (2026) guidance requirement of 2 hours at 1500 LPM.</p> <p>The <b>OBSSMP [REP5-075]</b> also confirms that: The firefighting water requirement will be fully assessed at the detailed design stage based upon based upon analysis of Large Scale Fire Testing</p>



Reference	Theme	Issue	Comment/Issue Raised	Applicant's Response
				(LSFT) of the BESS design plus any additional fire and explosion test data provided by an independent Fire Protection Engineer, water storage volumes will be fully agreed with NFRS.



## 2.4 Natural England [\[REP5-129\]](#)

Reference	Theme	Issue	Comment/Issue Raised	Applicant's Response
NE-001	Ecology and Biodiversity	Survey Data	<i>In Response to RQ6:</i> No further comments or concerns in relation to the applicant's survey data.	The Applicant notes this comment.
NE-002	Ecology and Biodiversity	Management and Monitoring measures	<i>In Response to RQ7:</i> NE are satisfied that the applicant's approach, as set out in its updated OLEMP and associated plans covers our previous concerns. NE are satisfied that these measures are sufficient to reach a conclusion of no AEoI on qualifying features of the UNVGP SPA and UNVRS.	The Applicant notes this comment.
NE-003	Ecology and Biodiversity	FLL mitigation	<i>In Response to RQ9:</i> Natural England suggest that as much of the mitigation land be available prior to the loss of FLL as possible. However, as the fields that are FLL are currently arable, and will become grassland, the proposal for the timing's is fine. While the grassland will be superior for the birds, the arable land will still suffice. We consider the applicant's assertion that sufficient existing land is available during any time lag. NE would suggest adding manure to the arable fields if possible, as this will help the birds in the meantime.	The Applicant notes this comment, however the addition of fertiliser to these fields will increase nutrient levels within the soil, and may make it more difficult to create a species rich grassland when these fields are seeded, as high nutrient levels will result in the dominance of vigorous grasses and fast-growing forbs/injurious weeds, which would likely outcompete the desired wildflower and fine-grass species in the seed mix. As this would ultimately make it more difficult to achieve the long-term biodiversity aims associated with these fields, the Applicant would suggest that the addition of manure should not be undertaken during the time lag.
NE-004	Ecology and Biodiversity	Method Statement 10	<i>In Response to RQ14:</i>	The Applicant notes this comment.



Reference	Theme	Issue	Comment/Issue Raised	Applicant's Response
			NE understand that these areas of land may have birds on. The mitigation and avoidance measures in place are sufficient and have been agreed.	
NE-005	Ecology and Biodiversity	Noise and disturbance to FLL	<i>In Response to RQ16:</i> NE are satisfied with the updated mitigation measures in place in relation to disturbance and are satisfied that with these in place, there would be no AEol.	The Applicant notes this comment.
NE-006	Ecology and Biodiversity	Waterborne pollution	<i>In Response to RQ17:</i> NE have no comments to make on the proposed mitigation measures for control of waterborne pollution.	The Applicant notes this comment.