



The Planning Inspectorate
Yr Arolygiaeth Gynllunio

The Planning Act 2008

CLEVE HILL SOLAR PARK

Examining Authority's Report
of Findings and Conclusions

and

Recommendation to the Secretary of State for
Business, Energy and Industrial Strategy

Examining Authority

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Conclusions on Water Environment

- 8.6.55. Taking all relevant documents and policies into account, we conclude that, subject to the implementation in full of the relevant measures identified in the construction, operational and decommissioning management plans, as summarised in the Mitigation Route Map [REP7-025]:
- the Proposed Development is compliant with the WFD;
 - the Proposed Development is policy compliant in relation to flood risk;
 - the management of coastal change and associated risks have been adequately addressed; and
 - the construction, operational and decommissioning impacts and risks to the water environment have been addressed and the overall effect of the Proposed Development on water quality is likely to be slightly positive: we consider this to be a neutral factor in our subsequent planning balance.

8.7. SAFETY AND SECURITY

Policy Considerations

National Policy Statements (NPSs)

- 8.7.1. The NPSs are silent on battery energy storage systems.

The Development Plan

- 8.7.2. No relevant development plan policies have been drawn to our attention.

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

- 8.7.3. The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended) under Regulation 5, part 4 states that:

The significant effects to be identified, described and assessed include, where relevant, the expected significant effects arising from the vulnerability of the proposed development to major accidents or disasters that are relevant to that development’.

The Applicant’s Case

- 8.7.4. The principal Application document of relevance was:
- [APP-047]: Environmental Statement – Miscellaneous Issues Chapter.
- 8.7.5. Documents subsequently submitted into the Examination by the Applicant relating to battery energy storage included:
- [AS-009]: the Applicant’s responses to Relevant Representations (RRs);
 - [REP3-021]: written representation on Electrical Safety Regulations and Standards;

- [REP4-051]: written representation - Air Quality Assessment - Battery Fire;
 - [REP4-028]: the Applicant's responses to ExQ2 - Appendix 8 - Kent Fire and Rescue Service Meeting Notes - 20 August 2019;
 - [REP4-032]: the Applicant's responses to ExQ2 - Appendix 12 – Allianz Risk Consulting - Tech Talk Volume 26: Battery Energy Storage Systems (BESS) Using Li-ion Batteries;
 - [REP5-011]: the Applicant's written summaries of oral submissions ISH6 – Environmental Matters; and
 - [REP6-021]: Outline Battery Safety Management Plan.
- 8.7.6. Chapter 17 of the ES [APP-047] recorded that the Proposed Development was not considered likely to cause a significant accident or disaster risk during either the construction or operational phases. However, it acknowledged that:
- 'there is a potential fire risk associated with certain types of batteries such as lithium-ion, although the facility includes cooling systems which are designed to regulate temperatures to within safe conditions to minimise the risk of fire'.*
- 8.7.7. The ES [APP-047] stated:
- 'fire detection and suppression features could be installed to detect (e.g. multispectrum infrared flame detectors) and suppress fire (e.g. water base suppression systems) to minimise the effect of any fire. The Development design will include adequate separation between battery banks to ensure that an isolated fire would not become widespread and lead to a major incident'.*
- 8.7.8. In terms of the security of the Proposed Development Site, the ES [APP-047] confirmed that it would be protected by a perimeter fence, closed circuit television, selective use of lighting with sensors and restriction of access to authorised personnel.
- 8.7.9. The Applicant [AS-009] responded to the RRs by reference to Chapter 17 of the ES [APP-047] and as follows:
- the site operator would ensure that emergency procedures are implemented in consultation with the relevant authorities;
 - emergency access arrangements through the protective bund surrounding the battery energy storage system compound would be arranged by the site operator; and
 - any waste classified as hazardous waste generated on-site would be controlled by The Hazardous Waste (England and Wales) Regulations 2005.
- 8.7.10. The Applicant's response [REP3-021] to representations at OFH2 about the alleged risks of battery energy storage systems set out relevant legislation, regulations and standards applicable to such projects.
- 8.7.11. Further, in light of discussions at ISH2 on the dDCO on how safety measures might be secured, the Applicant's subsequent outline Battery Safety Management Plan [REP6-021] confirmed:

'..... that safety risks related to the Battery Energy Storage System ('BESS') are understood, accounted for and mitigated as far as practicable, in agreement with relevant consultees, and in supplement to the Outline Design Principles document to form the basis for the decision of the relevant local planning authority ('LPA') to discharge Requirement 3' [of the dDCO].

- 8.7.12. The outline Battery Safety Management Plan had been reviewed by the HSE, with comments received incorporated in the document. A review by Kent Fire and Rescue Service¹⁶, following initial discussion [REP4-028] had also been undertaken which stated:

'Whilst we are not a statutory consultee in relation to this project we will continue to work and engage as this project develops to ensure that Cleve Hill Solar Park Ltd comply with the statutory responsibilities that we enforce.

All risk reduction strategies start with prevention and it is the 'responsible person' for the premises that has responsibility for this as stated in the Regulatory Reform (Fire Safety) Order 2005. We would also expect that our Central Consultation Team (CCT) will become more involved as the appropriate planning applications are submitted and that any applications would conform to any legislation that relates to this type of development and the design of the BESS will reflect prevailing legislative requirements and UK industry recommendations.

Kent Fire and Rescue Service (KFRS) recognises the use of batteries (including lithium-ion) as Energy Storage Systems is a new and emerging practice in the global renewable energy sector. As with all new and emerging practices within UK industry the KFRS would like to work with the developers to better understand any risks that may be posed and develop strategies and procedures to mitigate these risks.

The responses to the ARC [Allianz Risk Consulting] recommendations set out in the OSMP [outline Safety Management Plan] details the information that we would expect to be provided during the planning application phase, we would then be working with our CCT and Water Services colleagues during the consultation phase to make sure that the Cleve Hill Solar Park conforms to the appropriate legislation and recommendations.'

- 8.7.13. The Applicant's Air Quality Impact Assessment [REP4-051] responded to representations made by an IP, Dr Erasin, at OFH2, and his more detailed assessment report that had been published in the Faversham News ([REP4-051], Appendix B). The Applicant found the following limitations in Dr Erasin's assessment:

- control measures to eliminate or restrict a fire and its consequences were not accounted for;
- the exposure limit used was 1,333 times lower than the limit recommended in Public Health England guidance;

¹⁶ Kent Fire and Rescue Service has responsibility for responding in the locality of the Proposed Development Site

- the estimated total emission was three times more than the realistic worst-case scenario (assuming the fire suppression system failed, and a fire was allowed to propagate); and
 - Dr Erasin’s modelled release of hydrogen fluoride was 75 times his estimated maximum with no explanation of the inconsistency.
- 8.7.14. The Applicant [REP4-051] concluded that Dr Erasin’s modelling had led to a substantial over-estimation of potential impacts, in the event of the unlikely scenario of a failure of the fire detection and suppression system, and a lack of emergency response within an hour.
- 8.7.15. By contrast, the Applicant’s modelling [REP4-051], based on data provided by Leclanché¹⁷, had shown that the worst-case concentrations of hydrogen fluoride at the nearest residential properties (some 200m due south of the battery energy storage system compound) would be approximately 5% of the relevant Acute Exposure Guideline Level.
- 8.7.16. This guideline is the level above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic non-sensory effects. However, such effects were not disabling and were transient and reversible upon cessation of exposure.

Planning Issues

Relevant Representations

- 8.7.17. The RRs included a range of comments on safety concerns associated with energy storage, including: dangers to local residents arising from the potential for major incidents; risk of fire; and potentially hazardous waste arising from the disposal of end of life batteries.
- 8.7.18. By way of example, Faversham Town Council [RR-274] expressed concern about battery storage as an emerging technology and the lack of clarity in the Application.
- 8.7.19. The Faversham Society [RR-486] recorded strong objections:
- the safety of batteries has not been adequately addressed;
 - such a large installation has no track record in the UK;
 - lithium-ion batteries can catch fire and explode;
 - it is not clear who would be responsible for assessing the safety of the installation; and
 - uncertainty about access arrangements for emergency vehicles and the replacement of the batteries as the shortest-life components.
- 8.7.20. GREAT [RR-770] also drew attention to battery explosion, fire risk and potential terrorism activity.

¹⁷ Consulted by the Applicant as ‘a world leading provider and manufacturer of high-quality energy solutions, principally based on lithium-ion cell technologies.’

Local Impact Reports

- 8.7.21. The Local Impact Reports were silent on potential safety implications.

Other representations to the Examination

- 8.7.22. At OFH2, we heard further representations on behalf of The Faversham Society, who subsequently requested an ISH on batteries and related technology. Supplementary points raised, as augmented by the additional submission for Deadline 3 [REP3-071], included:
- the lack of any National Policy Statements or guidance on energy storage;
 - The HSE had established a battery safety and energy storage test facility and a shared research programme – no results had been published;
 - Allianz Risk Consulting guidance indicated 'BESS using lithium-ion batteries are susceptible to thermal runaway and have been involved in several serious fires in the last few years.'
 - significant and expensive battery fires had occurred in Hawaii, Arizona, Wisconsin and Belgium (where fire detection and suppression equipment had failed to contain the fire) and the causes remained unknown;
 - there were currently no formal guidelines for the protection of battery energy storage systems and knowledge gaps on fire behaviour; fire test data for large format batteries; limited incident data; no data on methods of thermal runaway protection; spacing of units and access for emergency services; and no guidance on post fire response and recovery procedure; and
 - the Allianz document set out advice in relation to early consultation with the fire service; and guidance on: construction; location; materials; equipment; design; ventilation; temperature control; gas and smoke detection; fire protection and water supply; and maintenance - but neither the Application nor the dDCO contained any reference to these safety issues.
- 8.7.23. We also heard from Dr Erasin at OFH2, who provided a summary of his submissions by Deadline 3 [REP3-059]. His principal points were:
- technical studies showed that, in the event of fire, lithium-ion batteries release high concentrations of toxic and harmful hydrogen fluoride gas;
 - in the absence of any information in the Application, it had been necessary for him to extrapolate emissions, derive a domestic exposure limit for hydrogen fluoride based on work exposure limits, and adopt a generic wind dispersion model;
 - the expected hydrogen fluoride concentrations would exceed the derived domestic exposure limits by a factor of 2,444 (at a distance of 4.5km); a factor of 1,333 (at a distance of 7.8km); and a factor of 55 (at a distance of 10km);
 - there would be a foreseeable and significant human health risk endangering the population at Seasalter, Graveney, Faversham and Whitstable; and

- a safety zone of at least 15km from any population should be adopted.
- 8.7.24. Dr Erasin [REP3-059] also pointed to an environmental risk from copper leachates from the batteries in the event of a catastrophic flood.
- 8.7.25. CPRE Kent [REP3-060] echoed the need for an ISH and concerns about the limited science and experience of battery energy storage systems and the risk of serious incidents occurring.
- 8.7.26. At OFH3, Dr Erasin [REP5-034] spoke about the likely costs of decommissioning the Proposed Development and estimated that the disposal cost for the batteries would be around £40m. He also repeated his earlier concerns about hydrogen fluoride emissions in the event of a fire and maintained his recommendation of a 15km exclusion zone from any population. He was also concerned that the Applicant might wish to use vanadium redox flow batteries, which he considered to be an unacceptable risk in view of their constituent components.
- 8.7.27. Following ISH6, GREAT made further representations [REP7-098] expressing concern about the Applicant's failure to ensure early engagement with Kent Fire and Rescue Service which had precluded its registration as an IP and subsequent contribution to the Examination.
- 8.7.28. From documents obtained by GREAT [REP7-098] through a Freedom of Information Request, we were told that some correspondence between the Applicant and Kent Fire and Rescue Service, and also with the HSE, had not been made available to the Examination.
- 8.7.29. Moreover, Kent Fire and Rescue Service had told Graveney and Goodnestone Parish Council ([REP7-098], Appendix D) that in the event of a fire a decision might be taken to allow a controlled burn strategy. GREAT's concern was that Kent Fire and Rescue Service had not been provided with sufficient information.
- 8.7.30. Further, GREAT [REP7-098] highlighted that the battery energy storage system would be some seven times larger than the current largest battery installation in a remote part of Australia, there is a greater risk of battery energy storage fires in coastal and mountain areas, waste batteries have been known to cause serious fires, and fires have occurred across the range of battery usage.
- 8.7.31. Faversham Town Council's Deadline 7 representation [REP7-073] expressed apprehension about the size of the battery energy storage system, fire risk and toxic gases, and insisted that independent expert advice be sought.
- 8.7.32. The Faversham Society also made further representations at Deadline 7 [REP7-090]. In addition to those issues raised above, it sought a Security Considerations Assessment if the Application for development consent were to be granted and considered that a final decision on whether the Proposed Development should proceed should not be taken until explicit information had been provided.

8.7.33. We exercised our discretion to accept a further submission from The Faversham Society [AS-061] shortly before the close of the Examination. This introduced the publication by the Arizona Regulator of the Commissioner's determination of the 2012 Flagstaff, Arizona battery energy storage system fire, and a more recent fire and explosion in Surprise, Arizona. The Faversham Society drew out a number of points from the Commissioner's conclusions:

- the manner in which fire can spread from one container to another contradicts the Applicant's assertion that multiple containers are no more of a fire hazard than a single container;
- a serious risk of large-scale explosion was identified as lithium-ion batteries were extremely volatile if they come into contact with water - in view of the scale of the Proposed Development, a fire would result in very severe and potentially catastrophic consequences;
- the Commissioner recommended that any large-scale battery energy storage system should be built in isolation as an explosion could potentially flatten buildings at some distance;
- the Commissioner's findings reinforced the concerns expressed by the local community during the Examination of the Proposed Development, and those of Dr Erasin, in relation to chemistries that included compounds which released hydrogen fluoride in the event of fire or explosion; and
- the Commissioner set down stringent requirements for the protection of fire-fighters, none of which had been acknowledged by the Applicant or by Kent Fire and Rescue Service.

8.7.34. The Faversham Society [AS-061] concluded:

'Given the absence of National Planning Statements on BESS, it is important that the Examination is guided by authoritative sources with experience of BESS projects. We would urge that the attached ACC Determination is the most thorough and up-to-date such source currently available.

This Determination by the Arizona State Commission clearly reinforces the view of the Faversham Society and others, expressed in evidence to the Examination, that the risks associated with Lithium-ion batteries are unacceptable at any scale and especially when close to habitation. It is clear that a proposal for a Battery Energy Storage System close to Faversham, which will be over five times the size of the current largest in the world, poses unparalleled risks and must be regarded as recklessly dangerous and totally unacceptable.'

8.7.35. In response, the Applicant [REP17-007] suggested that The Faversham Society's Additional Submission [AS-061] misrepresented the position in that The Faversham Society had relied on a single document from an ongoing investigation that had received further documents from a variety of parties including Tesla. Tesla's statement pointed out:

'Also, the NFPA 855 Energy Storage Standard, which is a new NFPA standard for the installation of energy storage systems, is in its final stages of development and is expected to be approved by the end of

2019. NFPA 855 is designed to mitigate hazards based upon various battery technologies and it imposes a high bar for safety based on historical precedent and documented technology safety claims.

To avoid future events like those that occurred the Commissioner should ensure that all new energy storage systems meet the requirements of the new NFPA 855 standard and the 2021 IFC code. These new codes and standards stipulate the use of ventilated detection, suppression, and other safety features which would have prevented [the Arizona] storage systems from being deployed as designed’.

- 8.7.36. The Applicant [REP17-007] confirmed that the NFPA 855 standard was included in the outline Battery Safety Management Plan [REP6-021]. This would provide a robust and deliverable mechanism for ensuring that the safety of the facility was designed into the proposals from the outset in consultation with the HSE and Kent Fire and Rescue Service and secured in Requirements 3 and 20 of the dDCO. It should also be noted that, in the latest Arizona fire, the battery modules themselves had not exploded.
- 8.7.37. The Applicant [REP17-007] affirmed that its air quality assessment was reliable. It also confirmed that suppression measures would be tailored to the specific selected technology and to the requirements of Kent Fire and Rescue Service.
- 8.7.38. Overall, the Applicant [REP17-007] disagreed that the material supplied by The Faversham Society [AS-061] was the most thorough and up-to-date source currently available. Further, it urged that it was of little relevance to the Proposed Development and greater weight should be given to the expertise and experience of Leclanché in battery energy storage systems. Moreover, the outline Battery Safety Management Plan [REP4-045] indicated that more detailed UK guidance was emerging and it was expected that the regulatory requirements would be more developed by the detailed design stage and the submissions of details to discharge Requirement 3 of the dDCO.
- 8.7.39. Finally, the response of the US Energy Storage Association to the Arizona Commissioner [REP17-007] summarised the wider context of the information submitted by The Faversham Society:

‘According to Wood Mackenzie Power and Renewables, at the end of 2018, 1 gigawatt of battery-based energy storage projects were operational in the United States across more than 20 states. Nearly 95% of these systems use lithium-ion battery technology Grid battery energy storage systems are professionally designed and installed and are built to stringent safety standards with state-of-the art monitoring systems’.

ExA Response

Battery energy storage system safety

- 8.7.40. In light of the representations made, we decided to include the topic of battery safety in ISH6 on Environmental Matters [EV-023] and [REP5-011]. We heard from IPs, including those who had raised concerns

previously, the Applicant, and also from Leclanché. The Applicant explained that Leclanché's representatives appeared by invitation of the Applicant in an independent capacity, insofar as the company was not commercially or contractually linked to the Proposed Development, to answer questions concerning energy storage. Whilst we recognise Leclanché's field of expertise and the open manner in which our questions were answered, we do not regard their presence to be truly independent insofar as the company is a provider of energy storage systems.

- 8.7.41. It was clear to us that, from the starting point of the Applicant's limited information about battery energy storage [APP-047], the Examination process had already elicited a substantial amount of additional information. However, there was nothing to suggest that this had satisfied the legitimate concerns expressed by IPs.
- 8.7.42. We heard [REP5-011] that Leclanché had experience of installing battery energy storage systems in Central Europe and North America but not on a comparable scale to the Proposed Development. However, Leclanché stated, in general terms and without specific reference to the Proposed Development, that installations take the form of containerised modules with the same safety practices and mechanisms applied irrespective of scale. We were also assured that the safety distances between containers was calculated at design stage so as to prevent propagation in the event of a fire breaking out.
- 8.7.43. Leclanché informed us that it was aware of the reported fires affecting battery energy storage systems and also the content and recommendations of the Allianz report [REP4-032]. We were also advised that all of the fires had occurred in the construction phase of the battery energy storage system. As a consequence, lessons had been learned, designs had been improved, and it was anticipated that most governments would adopt the latest International Standards and those prescribed by Underwriters Laboratories.
- 8.7.44. In view of the apparent heightened risk of fire during the construction phase, we asked for clarification about how the fire prevention and protection measures would be incorporated and commissioned. We are reassured [REP5-011] that each unit would have a pre-installed system and it would be fully operational before the energisation of the batteries. Moreover, each module would be equipped with shock sensors, so that any damage during transit could be identified, and each battery would be tested for voltage and insulation integrity.
- 8.7.45. We also explored the ongoing protection of the battery energy storage facility and were advised [REP5-011] that the containers would have an enhanced external coating to reflect the site's coastal location. In addition, regular inspection would be undertaken to ensure that the units, and the equipment therein, remained safe over the operational life of the Proposed Development. Inspections could also be undertaken at the discretion of the Fire and Rescue Service and the HSE.

- 8.7.46. In response to our question about how possible battery leakage might be detected, we were told [REP5-011] that the energy management system would be able to sense leaks and instigate an automatic shutdown before consequential damage. We are content that any leakage occurring before detection would be small in scale, and confined within the affected container, and it would not pollute the outside ground.
- 8.7.47. The outline Battery Fire Safety Management Plan [REP4-045] sets out the minimum information to be included at detailed design stage and, in turn, in the application to discharge Requirement 3 of the Recommended DCO. It provides for the following:
- a statement of compliance with applicable legislation;
 - a detailed design drawing to show separation between modules and safe access for fire appliances;
 - a statement of design responses to fire risk explaining how the risk of fire spreading has been addressed in the design of the installation;
 - battery specification to include chemistry, size and format;
 - fire detection and suppression systems specifications;
 - standard operating procedures and guidelines providing for maintenance during operation and the replacement of battery modules;
 - installation and operation protocols to manage a fire during construction or during operation or decommissioning; and
 - any other information required by Kent Fire and Rescue Service.
- 8.7.48. In turn, Requirement 3 of the Recommended DCO requires the approval of a Battery Safety Management Plan (BSMP) which must, amongst other things, *'prescribe measures to facilitate safety during the construction, operation and decommissioning of Work No.2(a) including the transportation of new, used and replacement battery cells both to and from the authorised development'* and *'the relevant planning authority must consult with the Health and Safety Executive and Kent Fire and Rescue Service before determining an application for the approval of the BSMP'*.
- 8.7.49. Whilst some of the generic measures outlined during the examination of this issue are not expressly provided for in the above, we are satisfied that the outline Battery Fire Safety Management Plan, in expressing the minimum information required, does not preclude more detail being sought by the local planning authority or by Kent Fire and Rescue Service, should it be found to be necessary, when an application is submitted in accordance with Requirement 3 of the Recommended DCO.
- 8.7.50. In terms of the concerns about air quality and the risk of gaseous escape in the event of fire, we recognise that Dr Erasin [REP3-059] and [REP5-034] was at a comparative disadvantage in that his calculations are substantially based on extrapolation. As a consequence, we find material shortcomings in his assessment. Although we gave Dr Erasin the opportunity to respond to the Applicant's critique [REP4-051] of his methodology and conclusions, no further representations were made.

- 8.7.51. We believe that the Applicant's assessment [REP4-051] has the advantage of primary data, the use of industry standard software to model dispersion, and comparison with relevant thresholds. We are also satisfied that the Applicant's modelling is highly conservative, and it provides clear demonstration that there would be no material threat to health at the nearest residential properties, or in the wider locality, in the event of an outbreak of fire.
- 8.7.52. We have had careful regard to GREAT's Deadline 7 representations [REP7-098]. We are satisfied that engagement with Kent and Fire Rescue Service, albeit delayed, has provided vital understanding which the Applicant has used to inform the outline Battery Safety Management Plan.
- 8.7.53. Although Kent Fire and Rescue Service was too late to register as an IP, in the absence of a RR, it was advised [OD-004] that we had discretionary powers to allow a non-IP to submit a WR and also attend Hearings and speak. We are satisfied that Kent Fire and Rescue Service was not precluded from direct participation in the Examination.
- 8.7.54. Similarly, while we note the claim [REP7-098] that the Applicant has not provided us with all of the correspondence in its dealings with the HSE and Kent Fire and Rescue Service, we believe that we have a sufficient understanding of their individual positions at the close of the Examination.
- 8.7.55. In relation to GREAT's [REP7-098] concern about any fire being allowed to burn itself out, reference to the source letter from Kent Fire and Rescue Service ([REP7-098], Appendix D) confirms:
- 'In broad terms and prior to a decision relating to any on-site fire suppression systems, KFRS would extinguish a fire on the site by applying large volumes of water. Alternatively, if no life risk were present, then a controlled burn strategy may be considered and employed in order to try to minimise the possible environmental pollution that may be caused with fire water run-off.'*
- 8.7.56. Further, irrespective of GREAT's [REP7-098] concern about the inadequacy of information available to Kent Fire and Rescue Service, the same letter states:
- '..... KFRS has procedures in place for a response to incidents involving batteries whilst these procedures cover incidents involving any type of electrical storage battery they need to be considered alongside site specific risk information as such and in line with other industrial sites in Kent and Medway, KFRS would work with the site operators to ensure site specific information is available if an emergency occurs rest assured that our firecrews would deal with any such incident with the same level of skill and dedication that they bring to any incident regardless of size, risk or complexity.'*
- 8.7.57. Overall, if development consent is granted, further details of the proposed installation would need to be submitted to Swale Borough

Council and relevant consultees. We are thus satisfied that this process would secure all of the necessary information required by Kent Fire and Rescue Service, including access arrangements for fire appliances and access to water supplies, to ensure an appropriate response in the event of an incident occurring. Moreover, there is nothing to suggest that the service would be ill-equipped to deal with any incident as alleged by Faversham Town Council [REP7-073].

- 8.7.58. We understand the Applicant's [REP5-011] desire for flexibility in its eventual choice of battery storage energy system, particularly as battery energy technology is the subject of ongoing development and improvement. Whilst noting Dr Erasin's [REP5-034] concern about vanadium redox flow systems, we consider that it would be inappropriate for the Recommended DCO to restrict the eventual choice of technology.
- 8.7.59. In this regard, all of the processes, regulations and safety legislation, referred to above will have equal applicability irrespective of the composition of the battery storage energy system, and the onus would be on the Applicant to satisfy the appropriate authorities in seeking to discharge Requirement 3 in the Recommended DCO. In this regard both Kent Fire and Rescue Service and the Health and Safety Executive are named as parties which the local planning authority must consult before determining an application for the approval of the Battery Storage Management Plan.

Security

- 8.7.60. We have considered local concerns about the proposed security arrangements for the site which The Faversham Society [REP7-090] describe as derisory in relation to the risk of terrorism. The Applicant has confirmed [REP17-007] that it would not be in its interest for the site to be at risk of a terrorism or other security event that threatens its operation. We are satisfied that the measures proposed in the ES ([APP-047] Chapter 17, section 17.3.6) would act as a reasonable deterrent and it would be a matter for the Applicant or site operator to keep their effectiveness under review.
- 8.7.61. While we acknowledge that the fear of criminal activity is capable of being a material consideration, no party has provided tangible evidence to show that additional measures, over and above those proposed, are necessary.
- 8.7.62. On the matter of insurance, the Applicant informed ISH6 [REP5-011] that it was in negotiations with insurers, the level of public liability was to be determined, and construction would not commence without having insurance in place. We regard these to be commercial considerations and not material to the determination of the Application.

Finally, we note the guidance in NPS EN-1 on security considerations. This sets out the role of DECC (now BEIS) and the pre-application notification procedure for energy NSIPs which enables any national security implications to be identified and addressed. There is nothing

before us to indicate that the Proposed Development is considered to be potentially 'critical' infrastructure raising national security concerns.

Conclusions on safety and security

- 8.7.63. In essence, the sustained and robust representations concerning the safety of the battery energy storage system flow primarily from the scale of the Proposed Development, the uncertainties of an emerging technology, incidents leading to major fires, and the proximity of the local population. We well understand these concerns.
- 8.7.64. However, there is raft of legislation and guidance in place and regulatory bodies have a role to play in the design, regulation, approval and ongoing supervision of the battery energy storage system. The Battery Safety Management Plan secured by Requirement 3 of the Recommended DCO would be a component contributor.
- 8.7.65. Overall, we are confident that risk will be managed and mitigated through the safeguards and checks during final design, installation and thereafter in operation. It would be open to any of those approving bodies to seek independent expert advice at that stage, should they consider it necessary.
- 8.7.66. In terms of site security, whilst the measures proposed might be viewed as minimal, we have not been provided with any evidence to lead us to conclude that more stringent security measures are necessary and in any event site security is primarily a matter for the Applicant and operator to determine in consultation with other relevant agencies.
- 8.7.67. Having thoroughly examined public concerns about the safety and security of the battery energy storage system, we are satisfied that, by the close of the Examination, the Applicant has provided a sound and enforceable basis of managing and mitigating safety risk and there is no compelling evidence to the contrary.
- 8.7.68. Overall, we are content that the information and analysis provided to us satisfies the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 in respect of major accidents and disasters.
- 8.7.69. We find nothing of weight to carry into the overall planning balance.

8.8. EXA'S RESPONSE AND CONCLUSIONS ON OTHER IMPORTANT AND RELEVANT CONSIDERATIONS

- 8.8.1. Taking all other relevant submissions, documents and policies drawn to our attention into account, we are satisfied that no other matters have arisen which affect the identification in the preceding chapters and sections of this report of the planning matters that require to be balanced by the SoS or taken into account in the DCO decision.

9. FINDINGS AND CONCLUSIONS IN RELATION TO HABITATS REGULATIONS ASSESSMENT

9.1. INTRODUCTION

- 9.1.1. This chapter sets out our analysis, findings and conclusions in relation to the Habitats Regulations Assessment (HRA). This will assist the Secretary of State for Business, Energy and Industrial Strategy (the SoS) to perform the duties of a competent authority under the Habitats Regulations¹⁸.
- 9.1.2. Regulation 63 of the Habitats Regulations states that if a proposal is likely to have a significant effect on a European site¹⁹ (either alone or in combination with other plans or projects), then the competent authority must undertake an appropriate assessment of the implications for that site in view of its conservation objectives.
- 9.1.3. Consent for the Proposed Development may only be granted if, having assessed the effects of the Proposed Development on European sites, the competent authority's appropriate assessment concludes that the integrity of European sites would not be adversely affected, subject to Regulation 64, a consideration of overriding public interest.
- 9.1.4. Throughout the Examination process, we were mindful of the need to ensure that the SoS has the information that may reasonably be required to carry out the necessary duties as competent authority. We sought evidence from the Applicant and the relevant Interested Parties (IPs), including Natural England as the statutory nature conservation body, through our Written Questions (ExQ1) [PD-004], Further Written Questions (ExQ2) [PD-008], a Rule 17 request for further information [PD-009] and at Issue Specific Hearings (ISH) [EV-011 and EV-023].
- 9.1.5. We produced a Report on the Implications for European Sites (RIES) during the Examination, with support from the Planning Inspectorate's Environmental Services Team [PD-010]. The purpose of the RIES was to compile, document and signpost information provided in the DCO application and submitted by the Applicant and IPs during the Examination (up to and including Deadline 6). The RIES was issued to ensure that we had correctly understood HRA-related, factual information

¹⁸ The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations).

¹⁹ The term European sites in this context includes Sites of Community Importance (SCIs), Special Areas of Conservation (SACs) and candidate SACs (cSACs), Special Protection Areas (SPAs), possible SACs (pSACs), potential SPAs (pSPAs), Ramsar sites, proposed Ramsar sites, and any sites identified as compensatory measures for adverse effects on any of the above.