



EAST PARK ENERGY

East Park Energy

EN010141

Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 4 (ISH4) and Action Points

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1.0 INTRODUCTION

1.1 Introduction

- 1.1.1 This note summarises the submissions made by BSSL Cambsbed 1 Limited (the “Applicant”) for the East Park Energy project (the “Scheme”) at Issue Specific Hearing 4 (ISH4) on 9th June 2026.
- 1.1.2 This document does not purport to summarise the oral submissions of parties other than the Applicant; summaries of submissions made by other parties are only included where necessary in order to give context to the Applicants’ submissions.
- 1.1.3 The Applicant has supplemented the written summary below with additional information where relevant to the action points raised in ISH4.

1.2 Issue Specific Hearing 4

ISH4 took place on the afternoon of 9th June 2026 and followed the **Agenda for Issue Specific Hearing 4 [EV7-001]** which was published by the ExA in advance of the hearing:

Agenda for Issue Specific Hearing 4	
1	Welcome, introductions, arrangements for the hearing
2	Purpose of the issue specific hearing
3a	The need for Battery Energy Storage System (BESS) and the applicant’s approach – The applicant will be asked to explain the need for BESS as part of the proposed development and its proposed design approach including distribution across the proposed site.
3b	Pollution Control and Waste – The applicant will be asked to outline its approach to pollution control and waste management.
3c	BESS Safety – The ExA will ask the applicant on its approach to addressing perceived safety concerns and mitigation proposed including proposed water supply. The ExA will also invite feedback from Cambridgeshire Fire and

Agenda for Issue Specific Hearing 4	
	Rescue Service on its current position in regard to BESS, water supply and emergency access to the site.
3d	Archaeological Impacts of BESS – The applicant will be asked to outline its approach, particularly in regard to soil stripping and foundations.
3e	Any other matters
4	Next Steps
5	Closing

- 1.2.1 The Applicant did not provide any material comments on Agenda Items 1, 2, 4, or 5 of the Agenda for ISH4.

1.3 Note about National Policy Statements

- 1.3.1 Section 1.6 of the 2026 National Policy Statement (NPS) EN-1 confirms that for schemes accepted for examination before the final publication of the approved 2025 amendments, the 2024 suite of NPSs should have effect. East Park Energy was accepted for examination in October 2025 prior to the final publication of the 2025 amendments. The 2024 NPSs therefore have effect for decision making.
- 1.3.2 All references to the NPSs in this document are to the 2024 NPSs unless stated otherwise.
- 1.3.3 The Applicant has prepared a separate **Note on updated National Policy Statements EN-1, EN-3 and EN-5 [PDA-018]**.

1.4 Submission by Mr Woodward [AS-027]

- 1.4.1 The ExA requested in Issue Specific Hearing 3 (ISH3) that the Applicant provide a written response to the Mr Woodward's additional submission **[AS-027]**. The Applicant notes that the submission **[AS-027]** included comments

for both ISH3, and ISH4. The Applicant has responded to the ISH4 comments at Appendix B of this document, with the response on ISH3 matters contained within the **Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 3 and Action Points [EN010141/DR/8.41]**.

2.0 THE APPLICANTS' SUMMARY OF ORAL SUBMISSIONS MADE AT ISH4

2.1 Agenda Item 3a – The need for Battery Energy Storage System (BESS) and the applicant's approach

2.1.1 The Applicant's response set out:

- why a Battery Energy Storage System (BESS) is needed in the context of the East Park Scheme; and
- the design approach to the BESS development, starting with the rationale for its positioning within the Site and thereafter the rationale for the adoption of a centralised BESS system.

Why is a BESS needed in context of East Park Scheme?

2.1.2 **ES Vol 1 Chapter 2 [REP3-023]** provides a description of the Scheme and confirms that it will allow the generation and export of 400MW of electricity from the solar generating station, with the BESS designed to be capable of both exporting and importing up to 100MW.

2.1.3 The primary function of the BESS in the context of the Scheme is for the storage of electricity generated by the solar PV modules at times of low demand on the electricity network, releasing the stored electricity at times of peak demand. In doing so, they will increase the overall efficiency and flexibility of the Scheme, ensuring there will be less wasted energy and that the energy is more dispatchable than solar generation without BESS.

2.1.4 These functional / efficiency benefits are explicitly supported within National Policy Statement (NPS) EN-1 which confirms at paragraph 3.3.26 that 'storage is needed to reduce the costs of the electricity system and increase reliability by storing surplus electricity in times of low demand to provide electricity when demand is higher'. At Paragraph 3.3.27 it also confirms that 'Storage can provide various services, locally and at the national level. These

include maximising the usable output from intermittent low carbon generation (e.g. solar and wind), reducing the total amount of generation capacity needed on the system’.

- 2.1.5 The Applicant is satisfied that the BESS is a viable part of the Scheme as a temporary storage device for its solar generation, with stored solar electricity capable of being exported through the Applicant’s solar generation connection offer. The Applicant intends to build out the BESS within the defined and assessed maximum parameters set out in Work No.2 of the **draft DCO [REP3-009]**.
- 2.1.6 It is important to note that the principal function of the BESS in as part of the Scheme is wholly unaffected by the recent grid connections reforms implemented by the National Energy System Operator (NESO).
- 2.1.7 NESO’s grid connections reform has restructured Great Britain’s electricity connection queue, moving away from a largely “first come, first served” approach towards a more selective process that prioritises projects which are ready to progress and aligned with strategic system needs. Under the reform process, developments are assessed through the Gate 1 and Gate 2 framework.
- Gate 1 applies to projects that do not yet meet the full Gate 2 criteria; these projects may retain a route to progress but do not receive a confirmed connection date, connection point or queue position.
 - Gate 2 developments are those that can demonstrate sufficient readiness and benefit from a confirmed connection date and queue position.
- 2.1.8 The BESS proposed in connection with the Scheme has been afforded Gate 1 status by NESO. As such, it is not currently assigned a confirmed connection date but may progress through future windows where readiness is demonstrated. However, the Gate 1 position only relates to the BESS’ ability to import electricity from the grid for wider grid-balancing services. It doesn’t affect whether the BESS can be charged from the Scheme’s solar

generation and then used to export stored solar electricity under the Scheme's solar generation connection offer.

- 2.1.9 In short, the absence of a Gate 2 import offer does not affect the primary function of the BESS, supporting more efficient flexible energy generation, or make its inclusion in the Scheme unviable or redundant in any way. It merely affects the timing and extent of the BESS's ability to provide grid import and balancing services at some point in the future.

What was the rationale for its location within the Site?

- 2.1.10 The location of the BESS within the Site has been a key feature of the wider design approach adopted by the Applicant and it was a key component of their early site feasibility / optioneering. One of the key environmental factors associated with the operation of a BESS is noise generation and this, along with the ability to provide a suitable access including emergency access, were key locational factors during the design development process.
- 2.1.11 The early feasibility work established that it would not be possible to locate the BESS within either Site A or Site B given the proximity to residential properties and a consequential inability for the Applicant to adequately mitigate noise impacts. The locations where this could be avoided were not readily accessible. Consequently, the preferred location for the BESS was initially established in Site C to the west of Moor Road and to the south of the River Kym on the basis it provided the necessary separation from residential properties and allowed suitable vehicular and emergency access. At the time it was also understood to be an area with limited environmental constraint.
- 2.1.12 Following the initial feasibility exercise, it was subsequently established through the geophysical surveys that the planned location for the BESS in Site C was on the site of the former Roman Town, which has subsequently been designated a Scheduled Monument.
- 2.1.13 Given the high potential for significant adverse effects on the Scheduled Monument and the lack of suitable locations within Sites A and B, the

Applicant considered the suitability of land within Site D. Locations within the south and east of site D were discounted due to the proximity of residential properties and the potential for noise and locations within the west were discounted based on a lack of adequate access / accessibility. It was ultimately determined by the Applicant that the northern part of site D would provide the best alternative as it is:

- remote from residential properties (the nearest is circa 478m from the BESS boundary);
- it is where the main site access is to be installed, providing better access, including emergency access than Site C;
- it is next to the main sub-station and cable corridor; and
- it would result in comparatively less environmental effects than the location in site C.

2.1.14 The option of including the BESS within either site C or D formed part of the Applicant's statutory consultation exercise and the environmental benefits and disbenefits of each option were set out within the Preliminary Environmental Information Report (PEIR).

2.1.15 The consultation process concluded that the majority of the public, the host local planning authorities and other statutory consultees, including Historic England, preferred Site D, which is why it was selected and taken forward in the Applicant's submission.

Why is single / centralised facility proposed over a distributed network?

2.1.16 The Applicant's approach to the concentration of the BESS is summarised within Section 4 (paragraphs 4.3.29 – 4.3.32) of the **Design Approach Document (DAD) [APP-034]**. It confirms that the decision making was led by the desire to have an AC-Coupled BESS over a DC-Coupled BESS. An AC-coupled BESS provides greater flexibility in terms of its ability to charge from the solar arrays (and from the grid). Under this arrangement it is technically preferable to have the BESS units in a single, centralised, location.

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- 2.1.17 The main rationale for the selection of a centralised AC-coupled system was not just led by technology type, the DAD also confirms that it was “*to reduce the need for large items of equipment to be distributed across the Site, instead focusing the BESS in one location which can have specific control measures put in place to manage the facility in case of an incident (such as a fire)*”.
- 2.1.18 The Applicant appreciates that this is a brief summary of the design philosophy and does not fully set out the other construction, operational, and design considerations regarding the use of a centralised BESS. In response the Applicant prepared a detailed clarification on the design rationale behind the centralised approach and that is set out in their written response to the ExA’s first written questions **[REP3-072]**.
- 2.1.19 The key factors for the use of a centralised BESS facility were dictated by a combination of practical, technical, safety and environmental factors:
- Technology choice - AC coupled over DC coupled.
 - Less impactful access from the public highway for construction, operation and emergency response – only a single retained access and emergency access point needs to be provided, rather than multiple points across the site.
 - More sustainable construction using less materials, less equipment / infrastructure, less / clearer cabling and less land – all significant factors in a predominantly rural location. A dispersed layout multiplies the need for much of the associated plant / equipment, a centralised solution is more sustainable, requiring far less materials and equipment to achieve the same purpose.
 - It requires less complex construction with reduced construction phase disruption and reduced commissioning requirements.
 - It requires the installation of less and much clearer cable routing, with fewer interfaces resulting in a reduced length of 400 kV grid connection between the East Park substation and the Eaton Socon substation.

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- A single dedicated BESS compound is easier for emergency services to find, access, isolate, and understand. As part of the **outline Battery Safety Management Plan [APP-162]** (oBSMP), it has been necessary to consider fire response, chemical release, smoke plume impacts, contaminated run-off, provision of appropriate access/egress routes, secondary access routes, and out-of-hours response. The development of an appropriate management plan becomes more complex and difficult to manage / maintain when batteries are situated in multiple locations within the Scheme. A central compound allows clear emergency plans / drawings, signage, access roads, isolation procedures, drainage containment, and fire-water strategy.
 - It also enhanced the ability to provide a better design solution for site security (single fence line and CCTV system to monitor a single location).
 - The ability to more effectively mitigate amenity and environmental effects (particularly noise, soils, drainage and highways).
 - Less intrusive replacement of BESS containers and other equipment during the operational phase.
 - Less impactful decommissioning at the end of the Scheme.

Question from the ExA as to whether there is any update between the Environment Agency and the Applicant in relation to matters raised in the Statement of Common Ground relating to BESS design, foundation depth and fire safety [REP1-061]

- 2.1.20 The Applicant confirmed that they are of the understanding that these matters have been resolved with the EA, and will provide an update at the next deadline by way of Statement of Common Ground.

Question from the ExA whether the any update between Huntingdonshire District Council and the Applicant in relation to the

matters raised in the Statement of Common Ground [REP2-037] regarding the operational replacement phase and the use of the BESS for grid balancing and an assessed counterfactual scenario.

2.1.21 The Applicant confirmed that this is still to be agreed.

Question from the ExA whether the Applicant has explored options to make the BESS look more agrarian to reduce visual impacts

2.1.22 The Applicant confirmed that the BESS are within a specifically designed unit with control measures and safety measures in place. While the BESS can be painted, they cannot be placed in alternative containers or covered from a battery safety perspective.

Comments from Mr Les Rant regarding the reasoning behind the choice of a centralised BESS system in Site D

2.1.23 The Applicant explained that the rationale behind the choice of site was explained in the earlier presentation and was mainly due to access, lack of environmental receptors and a lack of environmental impact in Site D.

Comments raised by Mr Nicholas Bolton regarding BESS designs being finalised after approval of the DCO

2.1.24 The Applicant confirmed that BESS design typically changes every 12 to 18 months and the Applicant cannot commit to a design which may be obsolete at detailed design, which is often in 2 to 5 years' time. All fire emission, pollution and explosion risks are covered in the oBSMP which is secured through requirement 10 of the **draft DCO [REP3-009]** and the final BSMP must be in substantial accordance with this.

Comments raised by Ms Amanda Patel regarding the Gate 1 status of the BESS and impacts of this

- 2.1.25 The Applicant confirmed that primary function of the BESS is to support the solar generation of the Scheme as set out in NPS EN-1 and its successor. The role of BESS in a solar scheme and the benefits that it can bring is clearly supported and set out in national policy. The fact that a Gate 2 import offer was not received does not mean that this won't be forthcoming in the future given that the BESS will be AC-coupled and available for use to the grid.
- 2.1.26 Further information is provided in the Applicant's response to Hearing Action Point (HAP) 1 below.

HAP No.	Action Point	Applicant's Response
1	Applicant to set out information on the Gate 1 status of the BESS.	The Applicant confirms that it has received a Gate 2 offer for the 400 MW solar generation export connection, and a Gate 1 offer for the 100 MW BESS import connection. The Gate 1 offer in relation to the BESS relates to its separate ability to import electricity from the grid for wider grid-balancing services. It does not determine whether the BESS can be consented, constructed, charged from the Scheme's solar generation, or used to export stored solar electricity under the Scheme's solar generation connection offer. ES Vol 1 Chapter 2 [APP-038] is clear that the Scheme allows the generation and export of 400 MW of electricity from the solar generating station, with the BESS designed to be capable of exporting and importing up to 100 MW. The primary function of the BESS is as an integral element of the Scheme, storing electricity generated by the solar PV modules at times of low demand and releasing that electricity at times of peak demand. Its additional role in importing excess electricity from the grid and providing grid-balancing services is supplementary to that core co-located storage function. Accordingly, the absence of a Gate 2 import offer for the BESS at this point in time does not make the BESS or solar development undeliverable. At most, it relates to the timing and extent of the BESS's

HAP No.	Action Point	Applicant's Response
		ability to provide grid import and balancing services. The BESS remains viable as temporary storage for the Scheme's solar generation, with stored solar electricity capable of being exported through the Gate 2 solar generation connection offer. The Applicant's statement of need for the Scheme (including the BESS) in Section 2 of the Planning Statement [APP-031] is not dependent on the BESS having an 'import' connection. The statement of need makes it clear that the BESS would be of benefit by capturing solar energy when it is abundant and dispatching it during peak demand or lower renewable periods, thereby improving system resilience and energy security. The public benefits identified at Section 5 of the Planning Statement [APP-031] are not dependent on the BESS providing grid balancing services through an import connection, and therefore not affected by the BESS receiving a 'Gate 1' offer. The planning balance set out by the Applicant in Section 8 of the Planning Statement [APP-031] is also not dependent on the BESS providing grid balancing services through an import connection. NPS EN-1 and EN-3 are supportive of solar that is co-located with other functions including BESS, recognising that storage is needed to reduce the costs of the electricity system and increase reliability by storing surplus electricity in times of low demand to provide electricity when demand is higher. The Applicant remains hopeful that the BESS component will be able to provide additional grid balancing services through an import connection in the future, but reiterates that the viability or consentability of the Scheme is not dependent on this.

Comments raised by Mr Les Rant and Mr Nicholas Bolton disputing the statement that the Scheme could provide energy for 108,000 homes

2.1.27 The Applicant confirmed that the figures presented in the application documents are for energy generation for the whole scheme and are based on typical usage for a household.

2.1.28 The Applicant agreed to consider the point raised and provide a response after the hearing.

2.1.29 Further information is provided in the Applicant's response to Hearing Action Point (HAP) 2 below.

HAP No.	Action Point	Applicant's Response
2	Applicant to provide written response regarding the capacity of the development to power homes.	The Applicant's calculations on the capacity of the Scheme to power homes is set out between paragraphs 2.6.6 and 2.6.10 of the Planning Statement [APP-031]. Further explanation is also provided in response to Q1.7.2 in the Applicant Response to Examining Authority's First Written Questions [REP3-072]. The Applicant's calculations are based on on-site solar generation only. BESS operations are not included for in the estimates of electricity generation to be supplied to the national grid. This is because the operation of the BESS is not something that the Applicant could accurately quantify or define in any meaningful way at this stage.

Comments from Mr Simon Beverly regarding location of the BESS, delivery and status of the BESS as associated infrastructure

2.1.30 The Applicant confirmed that the BESS is there to support the solar generating station as ancillary infrastructure, assisting with the delivery of the critical national priority infrastructure as set out in NPS EN-3. The BESS acts as flexible supporting infrastructure for delivery of the solar generation, capturing any excess energy and allowing it to be distributed to the grid more efficiently. The Gate 2 offer only relates to the import of electricity from the grid. The primary function of the BESS and the support in NPS EN-1 is for flexibility and grid balancing. Additionally, the location of the BESS within the Scheme is considered to be appropriate.

2.1.31 Further information is provided in the Applicant's response to Hearing Action Point (HAP) 1 above.

2.2 Agenda Item 3b – Pollution Control and Waste

- 2.2.1 The Applicant explained that they would outline the Applicant's approach to pollution control and waste management for the BESS during 'normal BESS operations' (i.e. operation of the BESS outside of any failure / emergency event such as a fire).

Pollution control

- 2.2.2 The main potential for 'pollution' that can arise during the normal operation of the BESS is noise which, without appropriate mitigation, has the potential arise from the operation of fans, transformers, cooling units, and other auxiliary equipment.
- 2.2.3 The potential effects of noise from both the BESS and the wider Scheme are comprehensively assessed in **Chapter 10 of the ES [APP-046]**. The assessment involved a comparison of the measured baseline noise levels at sensitive receptors against the predicted noise level, including the operation of the BESS and wider solar farm development, allowing for any associated mitigation measures. The difference in noise levels was then assessed against prescribed standards / limits in both the daytime and night-time periods.
- 2.2.4 The ES Chapter concludes that, through the adoption of a series of mitigation measures and specifically:
- The siting of noisier elements of the BESS as far as practicable from sensitive receptors,
 - The enclosure of battery storage units and inverters,
 - Designing and selecting plant / machinery so that no tonal character is perceptible at noise sensitive receptors,
 - Adopting operational mitigation measures, secured through the **outline Operational Environmental Management Plan [REP3-052]** including regular inspection of equipment for disrepair and timely remedial action

2.2.5 Individually or in combination with the solar infrastructure, the BESS would not give rise to any significant noise or vibration effects. As such, the Applicant is satisfied that they have made all necessary provisions to control pollution during the normal operation of the BESS facility.

2.2.6 Turning specifically to the matter of pollution control, there are a number of measures embedded in the siting, design and selection of the BESS equipment that specifically seek to control pollution in a failure event. They are set out in the **outline Battery Safety Management Plan [APP-162]** (oBSMP) and relate to:

- measures that are to be implemented to reduce the risk of fire and explosion
- measures to prevent the spread of fire,
- the impact of emissions in the event of fire and
- the capture and control of polluted fire water in such an event.

Waste Management

2.2.7 The Applicant has set out their approach to the management of waste arising from the Scheme in their **outline Waste Management Plan [REP3-062]** (oWMP). The oWMP sets out the Applicant's measures for the management of waste arising at each stage of development and for each scheme element, including the BESS.

2.2.8 The overarching aim of the oWMP is to ensure the Scheme complies with the well-established system of waste management legislation and policy which is in place to govern the management of waste in England. The relevant waste legislation is set out within the **Other Consents and Licences Statement [REP3-021]**.

2.2.9 The main requirements / commitments that are of relevance to the BESS are:

- Ensuring compliance with the waste hierarchy of prevention, re-use, recycling, treatment and disposal

- Segregate waste streams on site and storing them securely
- Ensuring only licensed waste management contractors are used to collect the waste
- Classify all waste, including hazardous waste, before removal.
- Keep waste hazardous waste consignment documentation, transfer notes, consignment notes and recycling / disposal records as appropriate
- Ensuring that appropriate duty-of-care and compliance with hazardous-waste requirements where hazardous parts are present within waste electrical items
- Ensure that any spent or defective batteries are sent for recycling / recovery. The Waste Batteries and Accumulators Regulations 2009 prevent them from being either incinerated / landfilled

2.2.10 Taking the above into account, any waste arising during the construction, operation and decommissioning of the BESS would be managed in accordance with the waste hierarchy and applicable duty-of-care requirements. Waste would be segregated, securely stored, classified, and removed only by authorised waste carriers to appropriately permitted facilities.

2.2.11 During the operational phase any faulty or replacement battery modules, cells and other electrical equipment would either be managed through a supplier take-back scheme or via approved recycling routes. The supplier take back scheme ensures that upon the sale of equipment solar and battery storage manufacturers take back battery units when they are damaged or reach the end of their operational life for specialist recycling and recovery. Where take back schemes are not available (for example where a supplier no longer operates) the Scheme operator would arrange for the battery containers and batteries to be sent for recycling to a suitably licenced facility.

2.2.12 There are an increasing number of facilities promoting the recycling of industrial grade lithium-ion batteries in the UK and it is expected that this will continue to grow to cater for the increasing requirements of the automotive

and industrial (including BESS) battery sectors. This includes major UK waste management firms like Veolia UK, who operates a specialist battery recycling and recovery facility in Minworth, West Midlands.

2.2.13 The Applicant has provided more details on the operational stage replacement of equipment in the technical note on the replacement of equipment submitted at Deadline 3 **[REP3-075]**.

2.2.14 Within the oWMP, it is estimated that around 90% of the battery storage units and associated transformer units can be recycled, with only 10% going to either landfill or energy recovery. It is important to note that in setting these assumptions reference is being made to the 'whole' BESS container unit, rather than just the battery components themselves. For a typical containerised grid-scale BESS, the main recyclable mass is not just the battery cells, there is also:

- BESS Container / enclosure / support structure
- Racks and mechanical supports
- Power conversion system
- Thermal management
- Fire and safety systems
- Control / communication devices

2.2.15 Whilst a number of these scheme elements (such as the metal container itself) are relatively straightforward to recycle, others are more difficult, including certain plastics, separators, foams. Thus, whilst the BESS is expected to be substantially recyclable / recoverable in accordance with the Waste Hierarchy, not everything is, and it is therefore reasonable to assume that around 90% of the containerised BESS equipment (by mass) is technically recyclable or recoverable and that the remainder will need to be the subject of some other form of recovery or disposal.

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- 2.2.16 The provisions for the decommissioning phase would be similar to those outlined above, albeit in accordance with the prevailing waste legislation and guidance at that time in accordance with the oWMP and oDEMP [REP3-054].

Approach to Waste Management in a Failure Event

- 2.2.17 In the unlikely event of a BESS failure and resultant fire, the broad legislative requirements would continue to be followed leading to the following approach:
- 2.2.18 Firefighting water collected after a failure event would be tested first before being pumped into a sealed tanker and then treated by a suitably licensed specialist waste contractor
- 2.2.19 All waste streams would be confirmed as safe (not hot, connected to electrical supply etc) and then identified and segregated into individual waste streams for re-use, recycling, treatment and disposal as necessary
- 2.2.20 The batteries would be quarantined and made safe by a specialist waste contractor before being removed by a specialist contractor. Storage on site and removal would be in appropriate containers.
- 2.2.21 In summary: the approach in such an event would be quarantine first, classify carefully, contain debris, use specialist packaging and transport, send only to authorised facilities, and keep a complete audit trail.

Question from the ExA asking whether the Environment Agency had raised any concerns around the reporting of firewater issues, noting that these were raised in Bedford Borough Council's Local Impact Report

- 2.2.22 The Applicant confirmed that they were not aware of any such concerns being raised by the Environment Agency.
-

Request from host authorities for further details relating to the attenuation lagoon

2.2.23 Please see the Applicant's response to Hearing Action Point (HAP) 3 below.

HAP No.	Action Point	Applicant's Response
3	Applicant to provide further details / schematic for attenuation lagoon.	An outline design for the detention basin / lagoon is provided in Figure 3 of the outline Surface Water Management Plan (oSWMP) [REP3-064] along with supporting calculations. The oSWMP [REP3-064] has demonstrated that in the event of a BESS fire and complete emptying of the fire water tanks within the compound, there is sufficient capacity within the lagoon to also provide storage for the 1 in 2yr + climate change return period storm (rainfall) event. This is considered to be a very conservative provision, since the probability of coincidence of a BESS fire with a storm equal to or greater than the 1 in 2yr event, is negligible. The detailed design of the detention basin / lagoon must be provided for approval by the relevant local planning authority in consultation with the lead local flood authority and Environment Agency, as secured by Requirements 3 and 14 of the draft DCO [REP3-009].

Questions from Mr Les Rant regarding standard operating procedures for waste management and whether there are any suitable waste contractors (noting issues at the Tilbury BESS in procuring a contractor)

2.2.24 The Applicant confirmed that the measures, in case an event were to occur, will be set out in the Waste Management Plan. There are a number of waste management contractors dealing with all waste types and it would be for the operator to identify/ have a contract with that contractor to deal with the event.

2.2.25 In respect of the time taken for the East Tilbury BESS operators to procure a contractor, the Applicant confirmed that East Tilbury was at the

commissioning stage at the time of the incident and that any operational or logistical arrangements for that Scheme are speculation. It is not considered that the situation referred to at East Tilbury is relevant to this Scheme.

Question from the ExA as to whether there are specialist contractors that dealt with BESS waste

- 2.2.26 The Applicant confirmed that there are a number of waste managers who deal with all waste.
- 2.2.27 The Applicant confirmed that it will provide a response identifying the contractors capable of managing BESS waste.
- 2.2.28 Further information is provided in the Applicant's response to Hearing Action Point (HAP) 5 below.

HAP No.	Action Point	Applicant's Response
5	Applicant to provide information on waste management companies capable of dealing with BESS waste.	There is an established and developing specialist market for the management, recycling and recovery of lithium-ion battery waste, including batteries of the type used in BESS. The Applicant notes the following example waste management companies are currently able to deal with lithium-ion battery waste: • Recyclus Group; • Suez Recycling; and • Veolia. The development of industrial-scale lithium-ion battery recycling is a fast developing market, responding to demand as demand increases from implementation of BESS facilities across the national grid, and increased adoption of electric vehicles. Waste BESS batteries would be managed in accordance with the waste hierarchy, the Waste Batteries and Accumulators Regulations 2009, the Environmental Permitting Regulations and the duty of care regime, as set out in the outline Waste Management Plan [REP3-062].

HAP No.	Action Point	Applicant's Response
		The Waste Batteries and Accumulators Regulations 2009 establish the UK framework for the separate collection, treatment and recycling of waste batteries, covering portable, industrial and automotive batteries and applying extended producer responsibility principles so that producers fund and organise compliant end-of-life routes. The Regulations require relevant producers to register, keep records, report battery tonnages and chemistry types, and provide or fund take-back/recycling arrangements; distributors of portable batteries have take-back duties; and waste industrial and automotive batteries must not be landfilled or incinerated, except for residues after treatment and recycling. Treatment and export for recycling must be carried out through approved battery treatment operators or approved battery exporters, with minimum treatment standards and recycling efficiencies applying. Where take back schemes are not available for the battery cells, the Site Operator would arrange for the battery cells to be sent for recycling to an Approved Battery Treatment Operator (ABTO) or Approved Battery Exporter (ABE) in accordance with the Waste Batteries and Accumulators Regulations 2009. Preference in this scenario would be for the use of an ABTO over an ABE, as this would be more compliant with the requirements of the UK Waste Framework Directive. The Site Operator will regularly review available outlets for reuse/recycling of panels and batteries during the operational life. This means the operator will stay informed about recycling facilities or programs and will utilise the best available option at the time of any disposal. The Applicant is not proposing to appoint, or to commit to, a specific waste management contractor at this stage. Any such appointment would be made at the relevant time during operation and decommissioning.

Question from Mr Les Rant regarding the capacity of the drainage lagoon

- 2.2.29 The rainfall input is calculated using the 1% annual exceedance probability plus a 40% upper allowance for climate change using the Upper Bedford Ouse catchment applied to the 2070s epoch (2061 – 2125) in accordance with Environment Agency guidance. The fire water requirement is using the National Fire Chief Council guidance. Taken together, the calculated volume in total is 1904m³ which includes 456m³ for firewater (i.e. 456 thousand litres). In addition, there is 309m³ available in the swale running parallel to the main access track, although in a separate unit. There is also a freeboard of 300mm included in the design of the attenuation basin to ensure that the maximum depth of water does not exceed a 2m threshold suggested in the Ciria SuDS guidance.

Question from ExA as to whether the lagoon would be supplemented by natural water sources for firefighting

- 2.2.30 The Applicant confirmed that the drainage lagoon described above is the attenuation basin to which water will flow once used on a fire. The supply of water for firefighting will come from two separate water storage tanks.

Question from the ExA as to whether there would be sufficient water supply if a fire lasted more than 4 hours.

- 2.2.31 The Applicant explained that there would be additional water in the attenuation pond from rainfall, but that its use for firefighting is not part of the design or the calculation of water capacity. The supply of water for the fire service would come from the two water storage tanks that are separately designed and provided for on site.

Question from the ExA as to whether there would be sufficient water supply noting that the area suffers from water stress issues

- 2.2.32 In short, there would be sufficient water supply within the on-site water storage tanks. The water storage tanks would initially be filled from water tankered to the site from a commercial or licenced source, with water levels then expected to be maintained via rainwater harvesting throughout the operational phase.
- 2.2.33 The Applicant confirmed that most current BESS systems are designed to safely burn out without internal fire suppression systems (to remove the risk of stranded energy in the battery systems), Large Scale Fire Testing (LSFT) must be conducted to demonstrate that loss will be safely limited to one enclosure without the intervention of fire fighters. Most of the current BESS enclosures integrate LFP prismatic cells and have demonstrated fire propagation does not occur to other BESS enclosures at distances ranging from 15cm – 100cm to adjacent or back-to-back BESS enclosures with spacing of 3-3.5 metres across from the next row / block of BESS enclosures.
- 2.2.34 The East Park illustrative design uses a minimum separation of 2m between back-to-back and adjacent BESS and 3m minimum separation to ESS equipment with a minimum of 11m separation to the next block of BESS enclosures which conforms to National Fire Protection Association (NFPA) 855 requirements and National Fire Chiefs Council (NFCC) guidance.
- 2.2.35 As witnessed in numerous BESS LSFT (2024-2026), the peak of fire propagation of battery systems results in maximum flame heights of 4-5 metres out of the roof of the BESS. Typically, these flames are channelled through roof level deflagration vents resulting in peak flaming of 8-9 metres above ground level.
- 2.2.36 These current BESS designs integrate high levels of thermal insulation to prevent a fire from spreading to adjacent BESS enclosures. The insulation is designed to ensure that external heat from a BESS fire does not increase internal temperatures of adjacent BESS to critical levels i.e. <100C.

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- 2.2.37 LSFT involves deliberately burning a complete BESS enclosure to evaluate thermal exposure, heat release rates, burn duration, maximum temperatures and, critically, the potential for fire propagation to adjacent BESS or associated equipment. The purpose of this testing is expressly to validate minimum equipment spacing and to demonstrate that cascading or multi container ignition does not occur where tested layouts and mitigation measures are implemented. These tests therefore explicitly address the type of multi BESS fire propagation risks, including scenarios observed in real world incidents, by requiring evidence that propagation risk is controlled through design rather than reliance on emergency intervention.
- 2.2.38 Because the illustrative current BESS design utilised for **oBSMP [APP-162]** drafting and fire emission modelling demonstrated that a fire did not propagate during LSFT the Applicant has demonstrated that the loss of a single BESS enclosure is a credible worst-case event for the safety and risk assessment documentation submitted for the DCO.
- 2.2.39 Real world, worst-case scenario BESS fires have involved fires that have generally consumed two BESS enclosures i.e. fire has propagated from one BESS to another BESS unit. The worst-case propagation of four BESS enclosures occurred in Lyme, New York which involved battery systems integrating NMC pouch cells in air cooled modules, these battery systems will not be considered for the Scheme.
- 2.2.40 These worst-case real-world incidents have involved legacy BESS systems which had not undertaken LSFT, many systems were not NFPA 855 or UL 9540 compliant. The Applicant regularly evaluates BESS system defect and root cause analysis reports to inform all critical aspects of BESS safety required for procurement, construction, installation, commissioning, and decommissioning phases of projects. Factory Acceptance Testing (FAT) and Site Acceptance Testing (SAT) are key components in ensuring credible BESS failure scenarios are prevented and fully mitigated should they occur.

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- 2.2.41 Multiple BESS enclosures catching fire simultaneously has not occurred in real world BESS failure incidents to date and should be considered a highly improbable worst case scenario. Reports such as the Intertek CEA: Global Energy Storage Manufacturing Quality Report 2026 highlight critical BESS system safety issues and demonstrates how corrective actions should be taken before a failure incident can occur.
- 2.2.42 As now mandated under NFPA 855 (2026) the Applicant will only be able to select a BESS system that has undertaken LSFT. At the detailed design stage, the selected BESS LSFT data will be leveraged to fully inform inputs for risk assessment tools which will be utilised together with detailed consequence modelling to provide a comprehensive site operations and emergency response safety audit, this is stipulated in the **oBSMP [APP-162]** pre-construction requirements (Section 5).
- 2.2.43 Final comprehensive risk assessment reports, BESS design and site-specific consequence modelling, and detailed Emergency Response Plans (ERPs) can only be drafted when based upon the specific BESS design selected at the detailed design stage. Key safety content requires that all equipment within the BESS area is defined, battery system operating limits and test data are fully defined, and the BESS failure protection system is defined. Incident response tactics require significant test data and rigorous consequence modelling from the specific BESS design to develop safe protocols for incident response.
- 2.2.44 Sections 5.1.3, 5.1.4 and 5.1.6 of the **oBSMP [APP-162]** mandate the key risk analysis reports (Failure Modes and Effects Analysis (FMEA), Layer of Protection Analysis (LOPA), Hazard Mitigation Analysis (HMA), Hazard Identification (HAZID), Hazard and Operability Analysis (HAZOP), etc.) which consider how to prevent and mitigate a multi-BESS failure incident. These reports must be provided at the detailed design stage and are BESS system and site layout specific. These types of risk analysis provide confidence to demonstrate that under day-to-day operation there is a low risk of a BESS

failure incident, and in the event of an incident the credible hazards are understood and have been evaluated both at the illustrative and detailed design stages to demonstrate that the risk to site operatives, first responders, and the local population remains very low.

- 2.2.45 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.
- 2.2.46 Fire hazards i.e. burning thermal runaway events in BESS systems and variations in burn out times are significantly influenced by failure scenarios, State of Charge (SOC) and battery rack configurations and materials. Cell and module propagation times during thermal runaway is driven by heat generated through internal current flow, parallel circuits, damaged circuitry and wiring, additional battery module and BESS enclosure combustibles, and internal / external module heating from vented gases and flames.
- 2.2.47 The Applicant emphasises that generalisations and claims regarding the safety of specific battery chemistries should be disregarded. Predictions of gas properties and volumes from a battery chemistry or form factor is unwise. Testing on actual BESS cells and battery systems is the only way to accurately define gas production which will inform the fire and explosion risk for a specific battery system.
- 2.2.48 Gas composition defines burning velocity, flaming / explosive limit ranges, and overpressure levels which could be generated in an explosive event. Exposure of battery cells to higher levels of heat tends to generate higher volumes of gas.
- 2.2.49 UL 9540A testing defines specific battery vent gas mixtures, maximum burn velocity, maximum explosion pressure (P_{max}), and duration of flaming. Fire / combustion data recorded during testing is Peak Heat Release Rate (PHRR), Heat Release Rate (HRR), Total Heat Release (THR), cell propagation rates,

temperatures within modules, and deflagration event data i.e. debris or shrapnel (if observed).

- 2.2.50 NFCC, NFPA, FSRI (Fire Safety Research Institute), and all BESS OEMs advise that hose streams should not be directly discharged on BESS battery systems. Claims that millions of litres of water are required to tackle a single BESS fire (as regularly referenced on internet forums) are incorrect, this type of assumption is based upon a two ground monitor units being deployed each discharging 1900 LPM for 24 hours, i.e. 5,472,000 litres of water directly on battery systems within a BESS enclosure.
- 2.2.51 This tactic is not necessary and could create environmental pollution risks and significantly prolong any BESS fire event, as seen at Carnegie Road. If firefighters are applying water fog or spray patterns to adjacent BESS enclosures or deploying defensive spray plates that form a water curtain between the affected enclosure and adjacent BESS these “boundary cooling” tactics would likely be applied intermittently in 15-minute application periods with internal and external BESS temperature changes measured between application periods.
- 2.2.52 The peak fire load for most current BESS designs when at 100% State of Charge (SOC) lasts for 1-3 hours and the rest of the fire, another 4-8 hours, would be at a lower intensity which reduces the impact of the fire. The maximum Peak Heat Release Rate (PHRR) occurs when propagation rate of battery cells is at peak level and decays to a smaller steady fire that is burning through fewer battery cells / modules and BESS system combustible materials and emitting significantly lower levels of flame and heat flux. FRS interventions in credible BESS failure scenarios would be limited to boundary cooling during a short-term peak fire load period.
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Comments from Mr Les Rant querying quantity of available firewater and suggesting that there would be less fire risk if the BESS containers were dispersed rather than centralised

2.2.53 The Applicant confirmed that the BESS used in the Scheme are AC coupled rather DC coupled. In DC coupled systems the BESS would generally be grouped together. The incidents described by Mr Rant involved legacy systems that had not undertaken LSFT. Water was applied directly (for example in Carnegie Road), there was no Emergency Response Plan like there would be here, and therefore there were no firefighting tactics agreed at that time.

2.2.54 The Applicant explained that section 1.4.3 of the OBSMP stipulates the key safety objectives for the design of the BESS. The final BESS design and site layout will be validated through LSFT mandated in NFPA 855 (2026) (Ref 3) and rigorous consequence modelling to minimise the requirement for any CFRS intervention in a thermal runaway incident. LSFT must validate minimum safe equipment spacing distances to demonstrate there is no fire propagation to adjacent BESS enclosures or Energy Storage System (ESS) equipment i.e. transformers, inverters, and switchgear. CFRS intervention in worst case scenarios would typically be limited to boundary cooling of adjacent BESS and ESS units to prevent the fire from spreading. This strategy will be finalised with CFRS and be clearly communicated in the Emergency Response Plan (ERP):

- to ensure that any firefighting water run-off can be safely contained and tested for pollutants before release, reuse or, if necessary, removed by tanker and treated off-site; and
- to ensure that fire, smoke, and the spread of toxic gasses do not significantly affect occupants in surrounding buildings and areas, first respondents and the local community.

2.2.55 In terms of the quantity of firewater available, the illustrative design for the Scheme includes two water tanks, each with approximately 228,000 litres of

water. This would provide 1,900 litres per minute for approximately 4 hours of water (456,000 litres) with the attenuation basin designed to accommodate this firewater.

Comment from Mr Les Rant asking whether previous BESS that have suffered failure would have gone through the same planning system

- 2.2.56 The Applicant confirmed that the Carnegie Road BESS fire related to 4 BESS in an industrial area, which wasn't a nationally significant infrastructure project. Moreover, the Applicant believes that the site was built in 2018 and so the planning requirements are different to what they would have been for a small scheme at that time.

Question from the local authorities as to whether the decommissioning strategy will require removal of any silt from the drainage lagoon basin to prevent contamination

- 2.2.57 The Applicant confirmed that this is correct. At decommissioning all structures associated with the BESS will be removed, including the drainage lagoon.

2.3 Agenda Item 3c – BESS Safety

- 2.3.1 The Applicant explained that the **oBSMP [APP-162]** has been prepared to prevent and fully mitigate the risks from a BESS failure event. The Safety Objectives are listed in Section 1.4 of the **oBSMP [APP-162]**.
- 2.3.2 The Applicant has ensured site design is fully compliant with National Fire Chiefs Council (NFCC) guidance and has worked closely with Cambridgeshire Fire & Rescue Service (CFRS) to address some site specific operational and access requirements for CFRS.
- 2.3.3 Requirement 10 of the **draft DCO [REP3-009]** requires the Applicant to submit a battery safety management plan for approval by the local planning authority in consultation with Cambridgeshire Fire and Rescue Service and the Environment Agency prior to carrying out any part of the BESS works (Work No. 2). The battery safety management plan must be in substantial accordance with the **outline BSMP [APP-162]**.
- 2.3.4 Section 1.6 of the **oBSMP [APP-162]** documents the consultation process with CFRS and the safety or information requirements for the Scheme
- 2.3.5 Section 4 of the **oBSMP [APP-162]** covers all requisite firefighting considerations including, fire breaks, firefighting water containment, firefighting water supply requirements, all aspects of Emergency Planning including Emergency Response Plans and RM plans, and summaries of Plume Study consequence modelling to validate BESS site locations.
- 2.3.6 The Applicant and CFRS signed a Statement of Common Ground (SoCG) which demonstrates that the Applicant has followed all key BESS safety guidance and has fully assessed fire, explosion, toxic emission, and pollution risks.
- 2.3.7 The Applicant has worked with CFRS to ensure that emergency access routes are appropriate for CFRS appliances to operate in all weather

conditions. Access roads will be maintained to ensure vegetation does not impede vehicle access (**oBSMP [APP-162]** Section 4.2).

- 2.3.8 The Applicant will only select a BESS design where minimum equipment spacing has been validated through LSFT. The **oBSMP [APP-162]** stipulates these requirements in detail at paragraphs 1.4.3, 2.1.3, 2.2.2, 2.2.3, 2.4.2, 2.4.6, 2.6.11, 2.6.12, 2.7.1, 4.5.2, 5.1.1, 5.1.4, and 5.1.7.
- 2.3.9 As now mandated under NFPA 855 (2026) the Applicant will only be able to select a BESS system that has undertaken LSFT. At the detailed design stage, the selected BESS LSFT data will be leveraged to fully inform inputs for risk assessment tools which will be utilised together with detailed consequence modelling to provide a comprehensive site operations and emergency response safety audit, this is stipulated in the OBSMP pre-construction requirements (Section 5).
- 2.3.10 The **oBSMP [APP-162]** confirms in Section 2.6 (Detection and fire protection systems) that detection systems will meet all NFPA 855 and NFCC requirements and be approved by CFRS. The oBSMP also confirms in Section 2.6 how any fire suppression system efficacy will be validated through UL 9540A or 3rd party testing.
- 2.3.11 Section 2.7 of the **oBSMP [APP-162]** confirms that comprehensive explosion prevention and mitigation systems must be integrated into the BESS selected at the detailed design stage. The active and passive control systems will meet NFPA 855 and NFCC requirements and be approved by CFRS prior to construction.
- 2.3.12 The Applicant has provided suitable and appropriate access to the BESS. Section 4.2 of the **oBSMP [APP-162]** provides details of how the Applicant will comply with NFCC guidance and accommodate all CFRS operational requirements for safe emergency response.
- 2.3.13 The Applicant has proposed an adequate water supply through the provision of two firefighting water storage tanks of no less than 228,000 litres in

capacity, capable of delivering 1,900 litres per minute for 4 hours. This is set out at paragraph 4.3.3 of the **oBSMP [APP-162]**, which is secured by requirement 10 of the **draft DCO [REP3-009]**.

- 2.3.14 Section 4.3 and paragraph 4.3.5 of the **oBSMP [APP-162]** confirm that any fire hydrants and connections to dry pipe systems will be installed in accordance with BS 9990. If hydrants are installed on site they will be supplied by water tanks rather than a general water supply. The **oBSMP [APP-162]** is secured by requirement 10 of the **draft DCO [REP3-009]**.
- 2.3.15 The Applicant's oBSMP sets out at paragraph 4.2.8 that the final BSMP in line with NFCC guidance must include a site plan that shows all sensitive receptors within a 1 km radius of the Order Limits that could be affected by a fire. The Applicant has prepared a BESS Fire Emissions Modelling Report (Plume Study) at Appendix A of the oBSMP which assesses the battery fire emission impact in the five worst case fire locations (using the concept BESS design) on sensitive receptors within a 1 km radius of the BESS area. This is summarised at paragraphs 4.5.9 to 4.5.12 of the **oBSMP [APP-162]**.
- 2.3.16 The Applicant explained that the assessment presented in Appendix A of the outline Battery Safety Management Plan demonstrates that there would be no significant air quality effects on human receptors in the unlikely event of a fire.
- 2.3.17 The Applicant went on to provide details of the BESS fire emissions assessment undertaken.

Assessment methodology:

- 2.3.18 Concentrations of carbon monoxide, formaldehyde, hydrogen chloride, hydrogen cyanide, hydrogen fluoride, ammonia, nitrogen dioxide and particulates from a potential BESS fire have been modelled using an air quality dispersion model to determine the likely effects on human health.

2.3.19 A high-level visibility assessment has also been undertaken using the modelled particulates results to determine the effect of BESS fire emissions on visibility on the local road network.

2.3.20 The modelling uses conservative assumptions, including:

- Worst case BESS fire locations within the BESS area, positioned at the boundary of the BESS closest to sensitive receptors;
- Worst case release height, temperature and plume parameters;
- Worst case emission rates where peak emission rates are assumed to persist for extended durations.
- The use of five years of hourly meteorological data, with the maximum predicted concentration extracted at each receptor, assuming the fire coincides with the poorest dispersion conditions; and
- Assumption that nitric oxide converts fully to NO₂.

Assessment Results:

2.3.21 The results of the modelling indicated that effects are predicted to be below levels associated with harm to the general public:

- The predicted maximum PM10 concentrations were all well below the 8-hour Health and Safety Executive Workplace Exposure Limit and the predicted maximum CO concentrations were well below the relevant World Health Organisation guideline value. All other pollutant maximum concentrations were below their respective level 1 Acute Exposure Guidance Levels for all exposure periods.
- The lowest visibility predicted on the road closest to the BESS Area (the B645) was approximately 3.8km, which is considerably further than vehicle stopping distance at the national speed limit for this road.

Assessment Mitigation:

2.3.22 In terms of mitigation, the Emergency Response Plan (ERP) is to include:

- Public notification and exposure advice (e.g. stay indoors, close windows)
- Potential temporary movement of people if necessary
- Coordination with emergency services

Assessment Conclusion:

- 2.3.23 Based on the factors of distance to the nearest locations of human exposure and the anticipated short-term nature of a fire incident, the assessment concludes that there would be no significant air quality or visibility effects as a result of a BESS fire incident.
- 2.3.24 It should be noted that the assessment is deliberately conservative and therefore likely to overestimate, rather than underestimate, potential impacts.
- 2.3.25 Accordingly, the risk of adverse health effects is very low.
- 2.3.26 A single container fire has been assessed as this represents the credible worst case scenario for a modern BESS installation. Contemporary BESS design incorporates multiple integrated safety measures, including enclosure design, spacing and thermal management, which are specifically intended to prevent fire propagation. LSFT undertaken on modern systems demonstrates that, where these measures are applied, fire can be contained within the initiating enclosure without spreading to adjacent units. A full site fire would require the simultaneous failure of all such controls and is therefore not considered physically plausible or supported by empirical evidence. The assessment therefore adopts a realistic but conservative scenario in line with Environmental Impact Assessment requirements.
- 2.3.27 With respect to the spatial extent of effects, a 1 km study area has been adopted. This is considered appropriate as modelling shows that pollutant concentrations are highest close to the source and reduce rapidly with distance due to plume rise and atmospheric dispersion. This behaviour is characteristic of high temperature buoyant plumes, which tend to rise and dilute rather than remain at ground level over long distances. The approach is also consistent with National Fire Chiefs Council (NFCC) guidance and

established practice. As concentrations are already below relevant health based thresholds within 1 km, effects at greater distances would be expected to be lower still and therefore not significant.

- 2.3.28 Although the design is not yet finalised, the assessment remains robust as it adopts a deliberately conservative and precautionary framework. This includes: modelling fire locations at the boundary closest to receptors; applying worst case plume parameters; using five years of hourly meteorological data and reporting the highest predicted concentrations; deriving emissions from peak fire conditions; and assuming those peak emissions persist for an extended duration of up to eight hours. Additional conservative assumptions include pollutant conversion assumptions and the selection of worst case receptor locations. The assessment is therefore more likely to overestimate than underestimate potential impacts.
- 2.3.29 Regarding fire duration, the modelling already assumes that peak emission rates are sustained for up to eight hours, which is a conservative simplification rather than a realistic representation of fire behaviour. In practice, fires are characterised by a short peak followed by a decay phase. The assessment therefore combines both peak intensity and extended duration simultaneously, which is inherently precautionary. As such, variations in duration (including longer lasting events) would not lead to greater impacts than those already assessed.
- 2.3.30 Finally, the assessment does not rely solely on prevailing wind. Instead, it uses five years of hourly meteorological data, capturing the full range of wind speeds and directions. The model calculates concentrations for each hour of data, and the reported results represent the maximum predicted concentrations at each receptor across the full dataset. This ensures that worst case dispersion conditions are fully accounted for.
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Question from the ExA regarding how battery safety best practice will be captured when the final BSMP is implemented

- 2.3.31 The Applicant confirmed that section 1.4.2 of the **oBSMP [APP-162]** outlines how the Applicant will develop the BESS in line with all relevant legislation and good practice in force at the time, and a summary of anticipated BESS failure safety provisions is listed. Section 1.5 of the **oBSMP [APP-162]** documents the guidance and standards that were used to inform the design of the scheme. The system selected at detailed design will be tested in accordance with UL 1973, UL 9540, UL 9540A, BS EN IEC 62619, BS EN IEC 62933-5-2, UN 38, etc. or equivalent. At the detailed design stage, the latest version of these standards and guidance will be used. The codes are generally on two-to-three-year cycles and there was a new cycle in 2026. BESS design fully complies with NFCC guidance and will comply with 10m offset from vegetation or other combustible materials as set out in the original NFCC guidance.
- 2.3.32 BESS site design fully complies with NFCC Guidance (2026) except that NFPA 855 / NFCC 2026 guidance recommends that areas within 3m of the BESS equipment are kept free of vegetation or other combustible materials that could act to spread a fire. Original NFCC guidance recommended that the BESS equipment maintains a 10-metre clearance from vegetation or other combustible materials. Design of the Proposed Development would comply with original NFCC guidance by specifying that areas within 10m of BESS equipment would be finished with gravel or other non-combustible surfacing.
- 2.3.33 Section 4 of the **oBSMP [APP-162]** covers all requisite firefighting requirements for the BESS area.
- 2.3.34 Section 5 of the **oBSMP [APP-162]** documents the BESS safety commitments that will be adopted to ensure that the risks of a BESS failure event are minimised. The **oBSMP [APP-162]** integrates the latest BESS safety requirements contained in NFPA 855 (2026) and NFCC Guidance

ensuring that any credible risks associated with battery storage are either prevented or fully mitigated if a BESS failure event occurs.

- 2.3.35 The Proposed Development would meet required safety objectives for explosion detection and protection systems specified in NFPA 855 (2026), explosion prevention and protection is now the primary BESS safety focus. NFPA 855 incorporates in NFPA 68 – Standard on Explosion Protection by Deflagration Venting and NFPA 69 Standard on Explosion Prevention Systems. Together, these standards provide comprehensive guidelines and standards to manage and mitigate explosion risks in BESS facilities. BESS equipment and site design compliance with NFPA 68 and NFPA 69 are crucial for protecting both site personnel and property from incidents relating to explosions, redundancy will be integrated into the selected BESS design.
- 2.3.36 Section 2.7 of the **oBSMP [APP-162]** confirms that comprehensive explosion prevention and mitigation systems must be integrated into the BESS selected at the detailed design stage. The active and passive control systems will meet NFPA 855 and NFCC requirements and be approved by CFRS prior to construction.
- 2.3.37 If the BESS design integrates explosion protection solutions such as hybrid systems, sparker system, Active Ignition Mitigation System (AIMS), or performance design explosion protection systems will be validated through BESS full-scale destruction testing, lean gas mixture testing and requisite pressure testing required by NFPA and EN standards. Full-scale destruction testing validates all active and passive protection system integrated into a BESS enclosure.
- 2.3.38 BESS Enclosure gas exhaust vents and deflagration panels must direct flaming or toxic gases away from site personnel or first responders in line with NFCC guidance and NFPA 68 and BS EN 14797 standards, doors cannot be used as sole deflagration vents in BESS designs.

- 2.3.39 As a minimum, a BESS Combustible Concentration Reduction (CCR) (a gas exhaust system to exhaust explosive gasses) system will comply with NFPA 855 (2026) / NFPA 69 guidelines which require activation at no more than 10% of the Lower Explosive Limit (LEL) of the explosive gas(es). The CCR must ensure the prevention of a dangerous build-up of explosive gases (on average 25% of LEL within the BESS). The CCR system shall be suitable for its intended use and the temperatures to which it will be exposed to during a thermal runaway event. The CCR is considered a critical safety system and must comply with Section 4.10 of NFPA 855 concerning Emergency Power Supply Systems (EPSS) which requires emergency back-up power and system redundancy. Heating and cooling of the battery modules will be provided by an independent liquid cooling system which is separate to any HVAC system providing climate control for the BESS enclosure. Backup power for the gas detection system must have a 24-hour duration in standby and 2 hours in alarm, as demonstrated via NFPA 72 compliant battery calculations and required by NFPA 855.
- 2.3.40 Most LSFT test programs do not performance test BESS active protection systems, therefore any BESS explosion prevention or control/protection system will be validated through full scale BESS destruction testing, lean gas mixture testing and requisite pressure testing required by NFPA and EN standards. An independent Fire Protection Engineer specialising in BESS will review all UL 9540A test results and any additional fire and explosion test and modelling data which has been provided.
- 2.3.41 The implementation of the **oBSMP [APP-162]** is secured through requirement 10 of the draft DCO **[REP3-009]**. This stipulates that a final Battery Safety Management Plan (BSMP) will be submitted to and approved by the relevant local planning authority, in consultation with CFRS and the Environment Agency, prior to commencement of the construction of the BESS. That plan will be substantially in accordance with this **oBSMP [APP-162]** and the Applicant will provide third party fire protection engineer evaluation of all the

fire and explosion testing to inform the Fire Service and the Environment Agency to ensure all events are fully mitigated and protected against.

Question from the ExA as to how learning from other fire events concerning BESS would be applied to the site, and whether there would be periodic inspection of the site by CFRS

- 2.3.42 The Applicant confirmed that CFRS typically do two site inspections per year for their own risk management plans. Additionally the provider, when a system is selected, will typically provide a training programme for that specific energy storage system, for example. Each energy storage system is different, so training will be system specific.
- 2.3.43 With regards to incident response tactics for BESS incidents, the NFCC have a steering group which CFRS are heavily involved with and are looking at, and working, with a lot of BESS system suppliers to develop protocols for a wide range of different BESS systems. Training with the Fire Service would typically either take place during the site inspection visits or at other designated training periods on an annual basis.

Question from the ExA as to whether the oBSMP needs to be updated to include information on training with CFRS

- 2.3.44 The Applicant explained that there are examples in the oBSMP around the content template for emergency response plans including fire service training, which gives examples of what can occur although this will be BESS system specific. This will need to be integrated into the final BSMP.
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Comments from the local authorities regarding lack of local authority resources/expertise, request that the oBSMP contains a review

mechanism to take account of emerging legislation, request for confirmation of the battery chemical mix and quantities, request that water supplies and drainage infrastructure are operational before the batteries are delivered to site, and requested updates to the emergency response plan to include details of health services and consultation with the Cambridgeshire and Peterborough Resilience Forum.

- 2.3.45 The Applicant confirmed that the validation of the final BSMP will be provided by an independent fire protection engineer agreed with the statutory consultees.
- 2.3.46 The Applicant confirmed that section 4.4 of the oBSMP covers the chemical mix of the batteries.
- 2.3.47 The Applicant confirmed that firefighting water must be available pre-construction and the **oBSMP [APP-162]** can be updated if this is not already covered in the document.

*Post Hearing Note: The Applicant has updated the **oBSMP [as updated alongside this submission]** to confirm that the water storage tanks must be filled prior to delivery of any battery storage units.*

- 2.3.48 The Applicant confirmed that the emergency response contacts can also be updated to include health services, the highways authority and the resilience forum.
- 2.3.49 Additionally, the Applicant confirmed that if there is an update to UK legislation then the Scheme would need to be compliant with it.

Comments raised by Mr Andy Pike (on behalf of Stop East Park Energy) concerning the safety assessments undertaken by the Applicant given the matters to be finalised at the detailed design stage, including battery design, chemistry and provider, and the emergency response plan,

including reference to the potential for technologies to change during replacement cycles.

- 2.3.50 The Applicant explained that illustrative design is based on the dominant LFP prismatic cell chemistry. The site layout worst case scenario of one BESS enclosure fire is based on a worst case. BESS systems change every 12 to 18 months and so the selected design will go through extensive testing requirements as stipulated in the oBSMP to demonstrate that the loss of a single BESS won't propagate between BESS units in a single unit runaway.
- 2.3.51 In terms of the assessment carried out by the Applicant, the Applicant used LSFT data where available and conservative assumptions where data wasn't available. The assessment recognises uncertainty and addresses this through a precautionary framework, ensuring results are more likely to overestimate than underestimate impacts. The assessment concludes that there would be no significant air quality impacts on human receptors in the unlikely event of fire. Further details of this assessment can be found at paragraph 2.3.18 to 2.3.30 above.
- 2.3.52 The Applicant confirmed that, with regard to chemistry, LFP chemistry is typically a worst-case scenario as thermal runaway emits higher levels of hydrogen than other chemistries currently available, and produces higher levels of hydrogen fluoride, for example, than NMC chemistry.
- 2.3.53 The Applicant then provided additional information on emissions data, explaining that volumes of toxic gases and heavy metal particulates that can be emitted during thermal runaway are often partially contained within the BESS enclosure (modules, racks, interior structure of BESS enclosure) and not vented into the external environment. The EPRI white paper "The Evolution of Battery Energy Storage Safety Codes and Standards (2023)" notes: 'While laboratory testing identifies toxic compounds that are released by burning Li ion batteries, these may be consumed internally, combusted, or may react to form other non-toxic compounds before being released to the environment. In recent events where batteries have burned in this fashion,

fire services have announced that nearby air-quality monitoring has shown the air quality to be at safe levels.’

- 2.3.54 A common misnomer is the assumption that all battery electrolyte (fluorine) is liberated as HF, a range of published testing on a variety of battery cells has demonstrated that cells generally only release a third of the volume of fluorine as HF. Additionally, HF is incompatible with a range of materials and reacts on contact releasing hydrogen i.e. metals, glass, organic materials, rubber, ceramics, etc.
- 2.3.55 Known as “wall losses” HF concentrations will decay quite quickly in enclosed volumes due to reactions with surfaces and solid particles, i.e. internally within battery modules, within battery racks, and within the BESS enclosure. If no explosion or deflagration occurs during a thermal runaway event, concentrations of HF that are released externally to a BESS enclosure are therefore a fraction of the volumes that have been predicted / extrapolated from small scale laboratory testing.
- 2.3.56 Calculating emissions from scaling cell-level emission data to a full BESS system does not account for enclosure-scale combustion, thermal containment, venting, or dispersion; this is a typical error made in academic research where access to batteries is limited and tested batteries bare no relation to cells and modules integrated into BESS systems. However, this assumption has been made with respect to HF in the Plume Assessment Study as a conservative approach, with consideration given to full-scale tests, in terms compounds released.
- 2.3.57 Whilst certain gases (including hydrogen fluoride) have a higher molecular weight than air, their behaviour in a fire scenario is governed primarily by release conditions (temperature, turbulence and vertical velocity), rather than molecular weight alone. In addition, hydrogen fluoride is highly reactive and readily interacts with atmospheric moisture, reducing its persistence and potential to accumulate in concentrated form at distance from the source.

- 2.3.58 Furthermore, evidence from real-world BESS fire incidents indicates that emissions are short-lived, highly dispersed, and localised to the vicinity of the fire, with no empirical evidence of hazardous vapour clouds forming or accumulating in low-lying areas at distances relevant to public exposure.
- 2.3.59 Environmental monitoring data from real-world BESS fire incidents involving a single or two BESS enclosures does not support claims of widespread contamination from BESS failure incidents. Airborne emissions are short-lived and localised; soil and water contamination risks are minimal if appropriate BESS drainage systems are integrated. The peak fire load for most current BESS designs when at 100% State of Charge (SOC) lasts for 1-3 hours and the rest of the fire, another 4-8 hours, would be at a lower intensity which reduces the impact of the fire. The maximum Peak Heat Release Rate (PHRR) occurs when propagation rate of battery cells is at peak level and decays to a smaller steady fire that is burning through fewer battery cells / modules and BESS system combustible materials and emitting significantly lower levels of gases and particulate matter.
- 2.3.60 In terms of generic LFP BESS system emission assumptions: The combustion of plastic items in the BESS has also been considered with additional propane added to the off gas composition. Propane has similar yields of CO and CO₂ to polypropylene plastic which is typical for battery casings. DNV generic LFP Gas Composition (%) accounting for the plastics is:
- Hydrogen H₂ 42%
 - Carbon Dioxide CO₂ 24%
 - Carbon Monoxide CO 8%
 - Propane C₃H₈ 15%
 - Ethane C₂H₆ 5%
 - Methane CH₄ 6%
- 2.3.61 The fire modelling assessment conducted for this Scheme has appropriately defined a credible worst-case scenario based on current BESS design

principles and LSFT evidence, rather than hypothetical scenarios which are not supported by empirical data. The study area, receptor selection, and modelling approach are consistent with established guidance and precedent, and the selection of assessment criteria reflects the short-term, accidental nature of the scenario.

- 2.3.62 Whilst there is acknowledged uncertainty in this evolving field, this has been addressed through the application of conservative assumptions and sensitivity testing (including derivation of emission rates from cell level tests), which demonstrate that results remain well below relevant health-based thresholds. The commitment to further refinement at the detailed design stage, using BESS-specific test data, provides an additional safeguard to ensure that the assessment and emergency planning remain robust and evidence-based.
- 2.3.63 The Plume study of the selected BESS system commissioned at the detailed design stage will be conducted at approved third-party or government approved test laboratories. These facilities utilise large scale smoke hoods (cone calorimeters) capable to capture every type of battery gas & particle emitted during the thermal runaway process at module, battery rack or complete BESS enclosure level.
- 2.3.64 This equipment can measure total volume gas production (gas chromatography) and FTIR (Fourier Transform Infrared Spectroscopy) testing (PPM) for organic compounds (toxic gases) such as: Carbon Monoxide (CO), Carbon Dioxide (CO₂), Hydrogen (H₂), Sulphur Dioxide (SO₂), Nitrogen Oxides (NO_x), Hydrogen Fluoride (HF), Hydrogen Cyanide (HCN), Hydrogen Chloride (HCl), Hydrocarbon gases (THC content), PAHs, etc.
- 2.3.65 The equipment also integrates comprehensive particle capture by XRF (X-ray fluorescence) analysis checks for: Phosphorus, Aluminium, Nickel, Silicon, Calcium, etc. This means that heavy metal particulate emissions can be quantified and included in emission modelling if the selected battery system emits significant levels during fire testing. Therefore regardless of chemistry

or BESS system design this will be fully quantified and incorporated into modelling to demonstrate that the sensitive receptors within 1km radius above public safety levels.

- 2.3.66 In addition to what was stated at the hearings and in line with written responses provided by the Applicant to representations made by Stop East Park Energy, the Applicant wishes to emphasise that it is critical to understand that a planning consent granted under the Planning 2008 regime is fundamentally different from a planning consent granted under the Town and Country Planning Act 1990. The flexibility to amend proposals during the application process available to a Town and Country Planning Act 1990 application is not available in the Planning Act 2008 regime. Until the final design has been finalised and approved in accordance with the requirements proposed in Schedule 2 of the draft DCO, the Applicant cannot reasonably be expected to provide the level of detail Stop East Park Energy expect to see. This rational is applicable to all nationally significant infrastructure projects and is in line with statutory requirements and standard practice.

Question from the ExA as to whether the provision of expertise / support for local authorities could be captured in a planning performance agreement to provide the resources

- 2.3.67 The Environment Agency and CFRS are statutory consultees who will need to be satisfied with the evidence, which is provided in test data ratified by independent Fire Protection engineers.
- 2.3.68 Further details are provided in the Applicant's response to Hearing Action Point (HAP) 9 below.

HAP No.	Action Point	Applicant's Response
9	Applicant: to provide written response relating to ExA's query	It is the Applicant's position that, for the reasons set out below, it would not be

HAP No.	Action Point	Applicant's Response
	regarding whether the Planning Performance would provide resource for the discharge of requirement 10.	proportionate or necessary for the Applicant to secure independent funding to provide additional resources to assist the host authorities in discharging requirement 10 in light of recent changes to the Infrastructure Planning (Fees) Regulations 2024. At the outset, the Applicant notes that the host authorities have already consented several BESS projects within their local areas, which would have required similar considerations regarding battery safety; for example, the nearby Cobholden Farm BESS located adjacent to the East Park Substation (Bedford Borough Council application reference 22/01828/MAF), or the Rookery Farm Solar and BESS scheme (Huntingdonshire District Council reference 24/00883/FUL). Noting that the host authorities have been comfortable to approve other BESS Schemes, the Applicant is unsure why the host authorities consider that additional resources are required in relation to requirement 10 and approval of the BSMP, particularly so given that the final BSMP must be submitted to and approved in consultation with Cambridgeshire Fire and Rescue Service and the Environment Agency. Nonetheless, the Applicant notes that there has been a recent material change in relevant legislation that enables the host authorities to recover costs incurred in providing services in relation to NSIPs, including funding for the post-decision stage and implementation of the consent. Government has recently amended the Infrastructure Planning (Fees) Regulations 2024 and that as of the 8th June 2026, host local authorities for NSIPs now have a statutory route to recover all reasonable costs incurred in relation to NSIP applications. The guidance can be viewed here: https://www.gov.uk/guidance/planning-act-2008-infrastructure-planning-fees-regulations-2010-cost-recovery-by-the-planning-inspectorate-and-public-authorities The guidance states that: <i>“Cost recovery through the charging of fees enables specified public authorities to</i>

HAP No.	Action Point	Applicant's Response
		<i>recover the costs of providing their services in relation to NSIP applications/proposed applications and is designed to resource public bodies so they can provide reliable, high-quality advice on the Pre-application, Acceptance, Pre-examination, Examination, Decision, and <u>Post-decision/implementation stages</u> of NSIP applications/proposed applications.”</i> [emphasis added] For the post-decision and implementation stage the guidance states that the following services can be charged for: <i>“Services provided to the applicant, the Secretary of State or any other person (for example, the Local Planning Authority), after the decision is made by the Secretary of State or in relation to implementation of the decision, <u>such as the discharge of requirements</u>.”</i> [emphasis added] The host authorities will therefore be able to recover all reasonable costs, in accordance with a charging schedule that must be prepared by the host authorities and published by them transparently setting out the relevant services for which they are charging. The Applicant notes that this could allow the host authorities to obtain adequate resourcing for the discharge of requirement 10. If any fees are unpaid then the host authorities will be able to recover this from the Applicant as a civil debt. The Applicant considers that this statutory regime provides adequate security for the host authorities in respect of the discharge of requirement 10, and so it is not considered necessary to secure resources for the host authorities through separate measures such as a PPA.

Comment from Mr Nicholas Bolton referring to examples of previous BESS fires both in the UK and overseas and their duration (including the Moss Landing Fire), the meteorological data used in the plume assessment undertaken, and the potential impact on the local community and vulnerable receptors

- 2.3.69 The Applicant explained that the Moss Landing fire involved legacy systems that were not compliant with NFPA 855 and integrated NMC pouch cell, air-cooled battery systems that will not be considered for the Proposed Development. The battery systems were housed in an old gas plant integrating nearly 100,000 battery modules in over 4500 battery racks, battery racks were double stacked in many locations and housed on two separate floors in some parts of the building. It is not credible to consider that the range and impact of a smoke plume generated from more than 55,000 battery modules (which also burnt through a significant portion of a power station roof) is in any way comparable to the impacts of a smoke plume generated from a fire within a single non-combustible current BESS design typically containing 40-60 battery modules.
- 2.3.70 It should be noted that real-world monitoring from the Moss Landing incident, despite its scale and use of higher-risk NMC chemistries, indicated that air quality impacts in the surrounding area were generally transient and below public health thresholds¹.
- 2.3.71 Similarly, a 2025 EPA factsheet concluded that air quality monitoring during and after the fire identified no risk to public health.
- 2.3.72 Moss Landing incident response air monitoring efforts focused on monitoring hydrogen fluoride (HF), hydrogen chloride (HCl), carbon monoxide (CO), hydrogen cyanide (HCN), 2.5 µm particulate matter (PM2.5) instrumentation,

¹ County of Monterey (2026), Webpage detailing Moss Landing air quality monitoring/sampling results. Available at: <https://www.readymontereycounty.org/emergency/2025-moss-landing-vistra-power-plant-fire/testing/air>

along with percentage of the Lower Explosive Limit (%LEL) gases. Measurements were recorded at heights representative of community breathing zones. All instrumentation was calibrated at least daily or per manufacturer's recommendations, and particulate matter equipment had a sensitivity capability of recording 1 µm particulates. Monitoring was conducted in close proximity and in residential areas up to 4 miles from the Moss Landing site. During this monitoring period throughout the duration of the fire, all measurements were below site-specific public health threshold action levels.

- 2.3.73 The Applicant emphasises that even a worst-case scenario such as the Moss Landing Fire did not require mass evacuations, and the preliminary precautionary evacuation of 1200 people living in the closest proximity to the Moss Landing Site (not 4 miles away) was not triggered by air monitoring alerts. Emissions in these areas initially evacuated never exceeded public health thresholds.
- 2.3.74 In terms of duration, multiple large scale fire tests for large scale BESS from 2024 to current day show the peak fire lasting 1-3 hours, the remainder 4 to 8 hours and smouldering for a 24-hour time frame. The reference to Cirencester and East Tilbury was handed back within 24 hours by the fire service and Carnegie took days weeks etc. due to high pressure water flows being sprayed on battery systems, significantly elongating and worsening the situation. Scenarios with LSFT and boundary cooling do not result in this type of incident outcomes.
- 2.3.75 The Applicant went on to explain its approach to the BESS Fire Emissions assessment. Details of this assessment can be found at paragraph 2.3.18 to 2.3.30 above.
- 2.3.76 Further details are provided in the Applicant's response to Hearing Action Point (HAP) 7 below.

HAP No.	Action Point	Applicant's Response
7	Applicant to follow up on the points discussed on BESS safety in writing.	The Applicant has provided a written summary of its oral submissions in relation to BESS safety as part of Section 2.3 of this hearing summary note.

Comment from Mr Nicholas Bolton asking that the Applicant makes provision for a safety and evacuation plan for the evacuation of vulnerable receptors in the event of fire.

- 2.3.77 The assessment presented in Appendix A of the outline Battery Safety Management Plan demonstrates that there would be no significant air quality effects on human receptors in the unlikely event of a fire.
- 2.3.78 In terms of mitigation, the outline mitigation identifies the types of actions that could be implemented, such as notification of residents, advising people to remain indoors, or cancelling outdoor events. However, the specific extent of any such measures, such as distances or trigger criteria is not fixed at this stage. This is because the Emergency Response Plan will be developed at the detailed design stage and will be informed by the final BESS layout and the thermal runaway test data provided by the system supplier, allowing mitigation measures to be refined and targeted appropriately, including with respect to any nearby sensitive receptors such as care homes and schools.

Comments from Les Rant relating to vulnerability of UK energy infrastructure and security of the site

- 2.3.79 The Applicant confirmed that security measures form part of the wider oBSMP [APP-162].

2.3.80 Further details are provided in the Applicant's response to Hearing Action Point (HAP) 8 below.

HAP No.	Action Point	Applicant's Response
8	Applicant to respond to Mr Les Rant's submissions on the vulnerability of UK infrastructure to external influence, national security concerns, and the adequacy of site security.	The Applicant recognises the importance of ensuring that energy infrastructure is appropriately secured against unauthorised access, vandalism, theft and wider security risks, including the concerns raised regarding external influence and potential hostile activity. These concerns are not unique to this site, and the national security of UK energy infrastructure is a matter addressed by Government and NESO. The Applicant does not dismiss the possibility that ground-mounted solar infrastructure may be targeted for theft or other criminal activity, and has designed the Scheme to include appropriate security measures such as perimeter fencing, controlled access arrangements, CCTV and other appropriate monitoring and alarm systems. These are normal features of a commercial solar development and are not unusual or exceptional in nature. The impacts of such infrastructure have been assessed within the ES. The Applicant notes that the resilience and security of UK energy infrastructure as a whole is a national and sector-wide matter involving Government, regulators, network operators, security agencies, police forces and site operators. It would not be reasonable or proportionate to require an individual proposed solar development to address strategic national security risks beyond its control. The Applicant's responsibility is to ensure that the Scheme itself is designed, constructed and operated with appropriate security measures and in accordance with applicable legal, regulatory and industry requirements.

2.4 Agenda Item 3d – Archaeological Impacts of BESS

- 2.4.1 The Applicant explained that, within the area of the East Park Solar BESS, geophysical survey and archaeological trial trenching has been undertaken to inform the archaeological potential of this area.
- 2.4.2 In agreement with Cambridgeshire Historic Environment Team, the trial trenching comprised a 3.5% sample of the area as this area was deemed a high impact development area. The larger sample percentage allows a higher likelihood of recognising areas of archaeological activity at the site.
- 2.4.3 The results of the geophysical survey and archaeological trial trenching are laid out in reports **APP-042, APP-084 to APP-086** (Geophysical Survey) and **REP2-015 to REP2-018** (Trial Trenching Reports).
- 2.4.4 As an overview of the findings of the archaeological investigations within the BESS area, no geophysical anomalies were recorded. During the trial trench evaluation, of the 32 trenches excavated in the vicinity of the BESS area, only two trenches contained archaeological features. The archaeology was recorded in Trenches 872 and 874 which are located outside of the proposed BESS location. Trenches 872 and 874 contain an undated gully, and an undated ditch which would not be deemed worthy of further investigation.
- 2.4.5 The closest recorded datable archaeological features were recorded in Trench 861 c. 400m northeast of the BESS location, comprising two ditches, one of which contained fragments of pottery dating from the 1st century BC to the 1st century AD. Even though datable to the Romano-British period, these two ditches would not be deemed significant as they were found in isolation with no further archaeology recorded in the immediate vicinity.
- 2.4.6 In summary, the results of the trenching in this area have shown there to be a lack of archaeological activity taking place in this part of the site.
-

Question from ExA as to whether there has been any input from Historic England on this matter

- 2.4.7 The Applicant confirmed that the archaeological trial trenching was undertaken in accordance with a brief that was provided by Cambridgeshire Historic Environment Trust and Bedford Borough Historic Environment Trust with input from Historic England. As such, the brief for the trial trenching undertaken by the Applicant was provided by all three consultees.
- 2.4.8 Historic England has not provided any specific comments on the BESS area and it is considered to have limited to no archaeological potential, although they have commented on areas elsewhere within the Scheme.

2.5 Agenda Item 3e – Any Other Matters

Comments from Mr Andy Pike (on behalf of Stop East Park Energy) relating to the NESO TEC Register and Gate 1 status of the BESS

- 2.5.1 The Applicant confirmed that it will provide a written response setting out the gate status of the BESS.
- 2.5.2 Please refer to the Applicant's response to Hearing Action Point (HAP) 1 above for further information on the Gate 1 status of the BESS.
- 2.5.3 In respect of the NESO TEC Register, the Applicant's response to Q1.1.20 of the ExA's First Written Questions **[REP3-072]** confirmed that information in respect of the Applicant's connection offer is publicly available at NESO's TEC Register. The TEC Register can be viewed or downloaded from the NESO website². The Scheme has been allocated Project Number PRO-001513.

Questions from Mr Les Rant regarding water supply and whether fire hydrants will be connected to mains water

- 2.5.4 The Applicant confirmed that the water tanks will not be connected to mains water as public water mains cannot deliver the flow rate required by NFCC guidance of 1,500 LPM. If fire hydrants are integrated then water supply would be provided by the water tanks rather than water mains.

² <https://www.neso.energy/data-portal/transmission-entry-capacity-tec-register>

APPENDIX A: LIST OF ACTION POINTS

The following Hearing Action Points were taken by the Applicant at ISH4. The Applicant's responses to each point are set out in the relevant tables in Section 2 of this document.

HAP No.	Action Point
1	Applicant to set out information on the Gate 1 status of the BESS.
2	Applicant to provide written response regarding the capacity of the development to power homes.
3	Applicant to provide further details / schematic for attenuation lagoon.
4	Host Authorities: to provide comments on Applicant's technical note on the replacement phase.
5	Applicant to provide information on waste management companies capable of dealing with BESS waste.
6	Host Authorities: Statement from Cambridgeshire Fire and Rescue Service to be submitted to examination.
7	Applicant to follow up on the points discussed on BESS safety in writing.
8	Applicant to respond to Mr Les Rant's submissions on the vulnerability of UK infrastructure to external influence, national security concerns, and the adequacy of site security.
9	Applicant to provide written response relating to ExA's query regarding whether the Planning Performance Agreement would provide resource for the discharge of requirement 10.

APPENDIX B: RESPONSE TO MR WOODWARD

The Applicant provides the following response to the matters raised by Mr Woodward in submission **[AS-027]**. The Applicant notes that the submission **[AS-027]** included comments for both ISH3, and ISH4. The response here deals with the comments related to ISH4, with the response on ISH3 matters contained within the **Written Summary of Applicant's Oral Submissions at Issue Specific Hearing 3 and Action Points [EN010141/DR/8.41]**.

Mr Woodward's Comment	Applicant's Response
I wish to make a single, simple point regarding the East Park Energy application for the BESS element of the solar scheme application. It appears the applicant is seeking for much of the detail design and layout for this aspect of the application and it's compound to be finalised beyond the DCO being granted. Despite assurances I believe strongly that for such a substantial (and some would say controversial) development on this scale, the lack of fixed design detail and actualities mean robust testing and scrutiny cannot be properly made by the inspectorate, or third parties, which includes those responsible for the eventual safety of the site. Surely the applicant must be required to submit a full and complete final design, showing the layout and location, and positioning of all related elements on the landscape. It cannot be correct for details of a specific design to be decided and plans amended post DCO when the spotlight has moved and public scrutiny is no longer able to easily test the application. This 'push the details down the line' approach to planning may well be a standard and acceptable method in other areas of national planning where roads and bridges are concerned, but the siting of BESS and associated infrastructure can cause severe harm	The Applicant does not dismiss the concern raised and recognises that battery safety is an important matter which has been appropriately considered as part of the Application and this examination. However, the Applicant does not agree that a final detailed equipment layout must be fixed before the DCO can be granted. The approach taken by the Applicant is not unusual or unique for the consenting of BESS as part of an application for development consent, where the final supplier, equipment specification, and detailed layout are usually provided for approval post-consent. The Applicant has fixed the location and design parameters for the BESS through the draft DCO [REP3-009], with further control and mitigation measures set out in the outline Battery Safety Management Plan (oBSMP) [APP-162]. The matter of BESS safety has been addressed through the oBSMP. The reference in the Technical Note on Replacement Works to modules, racks or containers becoming unreliable, suffering faults, or requiring replacement should not be read as an expectation of catastrophic failure, but instead reflecting ordinary issues, management and maintenance that would be expected of a BESS. Should the DCO be granted, the Applicant cannot construct or operate the BESS without first submitting a detailed design and a final Battery Safety Management Plan for approval by the relevant local planning authority.

Mr Woodward's Comment	Applicant's Response
to residents and localities in the event of failure and should be defined from the outset. The applicant does expect some 'failure of components' as they state so in their maintenance replacement notes for components including cells. I quote ref: EN010141-000856-8.36 Technical Note on replacement Works PO1 <i>36. 2.3.37 Over time, individual modules, racks or containers could also become unreliable, suffer faults, or require replacement following damage or abnormal operation.</i> There have been numerous well documented thermal runaway events with solar schemes both under construction and at operational stages. As with aircraft, most will fly for a lifetime, but when problems occur the final result is almost always catastrophic. This is how I view current BESS technology, it may well never fail over a 40 year life, but if it does there must be thorough detailed plans for how to deal with it from the outset, not finalised later when beyond proper public scrutiny post DCO. I feel sure the applicant will dismiss my comments, but that does not mean they are of no merit. I hope the inspector we'll give weight to this issue in his appraisal and demand a full and proper detailed design and layout, specific, not general mitigation for that design and a full and proper maintenance and safety schedule for a specific design and layout before granting a DCO.	