# **Appeal Decision**

Inquiry held on 5, 6, 7, 8 September, 31 October and 1 November 2023 Site visits made on 5 September and 31 October 2023

# by J P Longmuir BA(Hons) DipUD MRTPI

an Inspector appointed by the Secretary of State

Decision date: 16th February 2024

# Appeal Ref: APP/U1105/W/23/3319803 Pound Road BESS, Land North East Of Axminster National Grid Substation, Pound Road, Hawkchurch, EX13 5XN

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by Enso Green Holdings B Limited against the decision of East Devon District Council.
- The application ref 22/2216/MFUL, dated 3 October 2022 was refused by notice dated 3 March 2023.
- The development proposed is the installation of a battery energy storage system with associated infrastructure and works.

# **Decision**

1. The appeal is dismissed

# **Preliminary Matters**

- 2. In response to a request submitted by the Appellant ahead of the Inquiry, the proposal was screened by The Planning Inspectorate¹ under Regulation 14(2) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017. It was not found to be Environmental Impact Assessment development. Hawkchurch Action Group (HAG) submitted a Pre-Action Protocol Letter questioning that decision. However, following a response from The Inspectorate this action was not pursued further.
- 3. HAG participated in the Inquiry as a Rule 6 Party.
- 4. The National Planning Policy Framework (the Framework) was amended in December 2023 and all parties were given the opportunity to comment on the significance of the changes. The comments made have been incorporated into my decision below.
- 5. A very similar proposal on the appeal site was the subject of a subsequent planning application<sup>2</sup> which included an additional water tank and further information. It was referred to at this Inquiry as the parties noted the arising consultee responses.

<sup>&</sup>lt;sup>1</sup> 4 August 2023 letter

<sup>&</sup>lt;sup>2</sup> 22/2216/MFUL

### **Main Issues**

- 6. The main issues are:
  - the effect of the proposal on the character and appearance of the area, including any potential cumulative impact;
  - whether the proposal represents a renewable energy or low carbon scheme for the purpose of the development plan;
  - the effect of the proposal on the use of best and most versatile agricultural land and whether any loss of such land would be justified; and
  - whether there is sufficient information on the health and safety measures proposed and the extent to which there would be significant risk to local residents and the environment.

#### Reasons

The effect on character and appearance

- 7. Strategy 7 of the East Devon Local Plan (LP) limits development in the countryside to where it is in accordance with a specific policy that explicitly permits such development and where it would not harm the distinctive landscape, amenity and environmental qualities. Particular reference is made to landform, natural and man-made features and disruption of publicly accessible views which are distinctive.
- 8. Strategy 39 is centred upon renewable and low carbon energy projects. The parties disputed whether this is such a project. I consider this in principle in the next section, nonetheless the policy includes landscape considerations including cumulative landscape impact, detailed design measures to avoid harm and removal of equipment when the project ceases.
- 9. Strategy 46 seeks to ensure that development conserves and enhances the quality and local distinctiveness of the landscape character of East Devon.
- 10. The appeal site is not within a valued landscape as defined in paragraph 180(a) of the Framework nor within a designated landscape. The Dorset<sup>3</sup> National Landscape lies to the north and east, and whilst there is intervisibility, no landscape features are overtly discernible. It is however closest to the south, approximately 660m<sup>4</sup> but with no clear intervisibility. The East Devon and Blackdown Hills National Landscapes are further distant. No party raised concern about the impact of the proposal on the setting of the national landscapes and I similarly concur.
- 11. The appeal site is within National Character 'Area 147 Blackdowns' which are described as consisting of long, dark ridges, deep valleys and dynamic cliffs. Long flat topped Greensand ridges are noted as well as woodland and hedgerows. Whilst these characteristics are reflected in the vicinity of this appeal site, they are not evident on the site itself.
- 12. More locally, the Devon Landscape Character Assessment places the site within the 'Wootton Hills Landscape Character Area', which is a relatively

 $<sup>^3</sup>$  As shown in Ms Bolger Figure 1 Site location and Designations. AONBs are termed National Landscapes since 23/11/23

<sup>&</sup>lt;sup>4</sup> Ms Bolger Proof of Evidence page 22

- compact area. It is noted for its rounded hills linked by rolling ridges and with an intimate and tranquil quality which is reflected in the appeal site. 'Open island plateaux', are also typical. Whilst some of the environs reflect this characterisation, the appeal site itself does not by being largely enclosed from Pound Road by trees and shrubs on the boundary and is largely featureless.
- 13. HAG suggested the sequence of views along and off Pound Road and the offshoot Stonebarrow Lane include important features and extensive views that set a context for the appeal site. Whilst I fully concur with HAG that landscapes are usually experienced as a sequence of views, I do not find that the appeal site is significant in this respect as it is distanced from such outward viewpoints: the essence of these views is lost by the time one reaches the appeal site. Indeed, the continuity of the landscape has been disrupted by the neighbouring solar farms and the sprawling Axminster substation<sup>5</sup> and its overhead pylon.
- 14. I saw the site and surroundings initially during summer and returned in the autumn when there was partial leaf coverage when I was able to gauge winter visibility.
- 15. The site is glimpsed at several points from its Pound Road frontage as there are some gaps in the tree/shrub coverage including the existing access. Between late autumn and spring, the site is conspicuous from Pound Road<sup>6</sup> as the frontage vegetation is deciduous.
- 16. Further to the east of Pound Road, the site is also visible from a public right of way (footpath 18) just off Stonebarrow Lane, which appears well used judging by the worn surface. The view is of an open grass field, the hedgerow of Pound Road and in winter, albeit filtered, the site beyond. However, it is not prominent due to the distance and intervening hedges on both sides of Pound Road. The neighbouring New House Farm and its outbuildings are more prominent in these views and therefore draw the eye.
- 17. The site is also visible from Monarch's Way footpath, which broadly runs north-south along the west of the site and goes around the sides of extensive solar farms and the Axminster sub-station. This is not designated as a national trail but nonetheless is a notable long distance footpath following the assumed escape route of Charles II.
- 18. The site itself has open rough grass with no trees except on the boundaries. It has a slight slope, but it has no notable outward views. It is dominated by overhead power lines.
- 19. The proposal includes the enlargement of the existing access off Pound Road, which would necessitate a new visibility splay leading to the removal of some vegetation. This would increase the prominence of the access and form a gap in the site's verdant frontage, which would be harmful.
- 20. The new access would cut across the open fields and be detracting, much of its impact would be reduced by its wavering directional line so that it would not wholly be within the particular line of sight but would nonetheless lead to landscape harm.

<sup>&</sup>lt;sup>5</sup> Ms Bolger Figure 8B plots the extensive footprints

<sup>&</sup>lt;sup>6</sup> Viewpoints 3-9 and 4-9 LVA as photographed on 19 April 2022

- 21. A 4m high acoustic fence which HAG measures at 106m<sup>7</sup> is proposed parallel to a Devon hedgebank, so that the lowest 1.5m of it would be obscured. The Appellant envisaged that the fence would be painted in a shade of green or a dark stain; such muted shades would allow the fence to blend with the landscape particularly bearing in mind its siting back from the frontage. The appearance of the fence could be secured by a suitably worded condition.
- 22. In addition, the Pound Road frontage would be reinforced with tree and shrub planting to fill the gaps. The plans also show an approximately 9-10m<sup>8</sup> depth of new planting would be in front of the acoustic fence, albeit with a gap for the new access. All parties felt that growing conditions should be favourable, leading to trees reaching 4m height in 10-15 years.
- 23. During winter the fence would be stark in year 1, but by year 10 I find that there would be sufficient screening so that it would be barely discernible from public views.
- 24. Whilst the planting fronting the acoustic fence is denoted on the submitted plans in a regimented block which would appear unnatural, the details of planting would be secured by condition, and it is anticipated that would have mixed species giving varied height and texture to blend with the surroundings.
- 25. The proposal includes large scale oaks to which HAG advised would be slow to establish and flourish. However, a mix of field trees could be detailed and specified in a condition. HAG were also concerned that the trees on the hedgebank would be shaded by the fence on the west side (looking away from Pound Road and into the development). However, I would not expect this to be significant since the screening objective would be to the Pound Road side.
- 26. The access would lead to a gated entrance where there would be a gap in the hedgebank and tree planting. The gate would be visible, which would be likely to appear abrupt, but would only be experienced at a narrow viewpoint and distant from Pound Road.
- 27. The batteries would be arranged in 48 shipping style containers 2.9m<sup>9</sup> high, beyond which would be 3.9m high switch and control rooms. These structures would be close to or lower than the acoustic fence in height and set further back from public views. The hard surface base for the batteries would be largely inconspicuous from public view. In any event the batteries and hard surfaces would be seen against the context of the metallic surfaces of the adjacent solar panels. Overall, I find that the proposed batteries would not have a significant impact in landscape terms.
- 28. A 2.4m high steel wire mesh fence would be around the boundaries of the appeal site, which would have a very slightly adverse impact but would be coloured green and obscured from public view by adjacent boundary hedging when that matures. Also, around the edge of the development, CCTV cameras would be mounted on 3m high posts. The cameras would be small and insignificant. The supporting posts whilst slender, at the height proposed would be slightly obtrusive.

<sup>&</sup>lt;sup>7</sup> Ms Bolger Proof of Evidence page 43

 $<sup>^8</sup>$  The parties disagreed on the proposed depth of planting: Appellant  $10 \mathrm{m}$  and Rule 6 Party  $9 \mathrm{m}$ 

<sup>&</sup>lt;sup>9</sup> Mr Ben Croot Proof of Evidence page 29

- 29. From Monarch's Way the appeal site is narrow and much of it lies behind a hedge, so that only a glimpsed view is possible from public vantage points. The development would not be prominent and in any event given the surrounding energy infrastructure the proposal would not be perceived as obtrusive. I find that the impact from this viewpoint would be negligible.
- 30. In terms of cumulative impact, the proposed development would be experienced<sup>10</sup> together with the surrounding sub-station and solar farms, which are adjacent to three of its sides. Although the opposite side of Pound Road from the appeal site is undeveloped there are other solar farms in the vicinity. The site except for the frontage provides little softening to the cumulative development as views are limited and detracted by overhead wires and a pylon. The proposal provides open grassed areas aside the Pound Road frontage and new landscaping, so whilst there would be some perception of a collective spread of development, the cumulative impact would be very limited.
- 31. The application details included a noise assessment. The plotted noise contours show that at publicly accessible points the resulting noise levels would not be significantly different from the existing. Consequently, I do not find that the proposal would undermine the tranquillity of the area.
- 32. HAG also raised the recreational value of the site in relation to the nearby Hawkchurch Spa. However, I note that the site has no public access and has very limited public visibility so that the proposal would have negligible impairment in this respect. Whilst there was also mention that the site has not changed over time and so has historic value, no evidence was provided of any archaeological or cultural remains or associations and even the field boundaries are not historic.
- 33. After the intended 40 years use as energy storage, the submitted<sup>11</sup> restoration plan shows the batteries, and their associated infrastructure would be removed and replaced by a grass surface. The hedging and tree planting associated with the development would remain, which was suggested would look irrational and out of place. Whilst I concur that it would not be purposeful, I do not find that most people would find it unacceptable: the presence of trees and hedges would not be regarded as obtrusive and the field boundaries in this particular area are not so distinctive or consistent that they need to be defined around a use, shape or size of field.
- 34. Existing and proposed land levels were not provided at this stage and their submissions are suggested by condition. The proposal would require hard surfacing as well as a below ground liner which would be likely to influence resulting land levels. However, the condition could control and shape the landform. In addition, a significant proportion of the site would remain undeveloped, and this would provide the potential for accommodating spoil and no evidence was produced to the Inquiry that this could not be achieved sensitively.
- 35. The site is outside a designated landscape and makes a limited contribution to the character of the area and the existing surrounding energy infrastructure is a detracting feature. It has capacity to absorb change and I find that the

<sup>&</sup>lt;sup>10</sup> LDA Figure 9 Cumulative Sites and appendix 3 of Rule 6 Party Evidence

<sup>&</sup>lt;sup>11</sup> LDA Figure 10 : Landscape Legacy Plan

impact of the proposal both on the site and its surroundings, including cumulative impact, would be localised, causing limited harm at the completion of construction, reducing to very limited harm after 10 years as the proposed landscaping flourishes.

- 36. As the proposal would cause harm to the landscape it would be contrary to Strategies 7, 39 and 46 of the LP. Similarly, it would be contrary to paragraph 180(b) of the Framework which requires recognition of the intrinsic character and beauty of the countryside.
- 37. Policy D1 seeks quality design and respect of local distinctiveness. Policy D2 promotes retention of landscape features and quality new planting and similarly Policy D3 protects existing trees and hedgerows. In terms of layout and landscaping the proposal minimises harm and so would not conflict with these policies due to the design and extent of the new landscaping and very limited loss of trees and hedging.
- 38. The Council and HAG raised the need to look at the potential for alternative sites. The Appellant emphasised that the site was chosen to avoid impact on the national landscapes and the setting of heritage assets, as well as site availability. Moreover, battery storage is linked to the national grid power supply and there needs to be an appropriate connection point, which has sufficient capacity to deal with the power involved. Whilst this site does meet the above considerations, the submitted evidence does not show a detailed consideration of alternative sites. However, bearing in mind the very particular requirements for suitable sites and the level of landscape harm arising, I give this only very limited weight.
- 39. There was dispute between all the parties whether the submitted photomontages conveyed the representativeness of the potential planting and the visibility of the proposal. I have given them consideration as indicative illustrations but placed more reliance on the submitted layout in reaching my conclusion.

Whether the proposal represents a renewable energy or low carbon scheme for the purpose of the development plan

- 40. Strategy 39 supports renewable or low carbon projects where they are subject to best practice guidance and the adverse impacts being satisfactorily addressed.
- 41. The Council and HAG contend that the proposal does not comply with Strategy 39 as the use would be located in the countryside and would not be generating renewable energy rather it would take energy from the national grid at low peak and release it at peak times.
- 42. Whilst the proposal would not generate renewable energy, it would nonetheless store power. This is significant as typically wind turbines and solar panels have variable generation and this supply needs to be managed. Demand too will vary according to season and time of day. Given these variables, battery storage is essential to help manage the use of renewables so that they can be relied upon, which supports their continued development and a low carbon future. Whilst the proposal will manage all electricity use, including that generated by fossil fuel, it will still manage some renewables. Moreover, the proposal is for a 40 year use and the vast majority of energy

- stored would be from renewable sources: the Overarching National Policy Statement for Energy (NPS) foresees<sup>12</sup> that by 2035 all our electricity will need to come from low carbon sources, subject to security in supply.
- 43. The reason for refusal refers to inappropriateness of the use in the countryside, but such battery storage facilities need to be located where national grid connections are capable of dealing with the current. The site is within an area of energy infrastructure so its presence would not appear out of place. It would also be experienced together with extensive solar panels clearly generating power and a substation managing energy.
- 44. Indeed, the Renewable and low carbon energy Planning Practice Guidance, (the PPG) encompasses battery storage and acknowledges its de-carbonising role<sup>13</sup>. The NPS<sup>14</sup> goes further stating storage has a key role in achieving net zero. Similarly, the Glossary to the Framework defines low carbon technologies as those that can help reduce emissions. Consequently, I find these confirm that the proposal represents a low carbon project for the purpose of the development plan and the proposal would not be contrary to Strategy 39.

The effect of the proposal on the best and most versatile agricultural land and whether any such loss would be justified

- 45. Policy EN13 protects the best and most versatile agricultural land (BMV), Grades 1, 2 and 3a from development. It states that permission will only be granted exceptionally if there is an overriding need and the benefits of the development justify the loss. Paragraph 180(b) of the Framework also encourages the retention of the best and most versatile agricultural land.
- 46. The site is classed as 80.8% Grade 3a and 19.2% other lower Grade BMV land. It has been used for grazing in the past but at the time of my site visits was uncut grass interspersed with several seemingly immobile vehicles and a boat. The Appellant's consultant advises that the land has been used as a 'hobby farm', which was not contested. There was no evidence before the Inquiry that it has had any more intensive agricultural use.
- 47. The western part of the site has an irregular and very constricted shape which would be likely to impair the use of agricultural machinery. Consequently, intensive cultivation would be likely to be challenging, which would limit the usefulness of the extent, particularly as the site area is only 2.3ha. The site is not currently being intensively farmed and it cannot be assumed that it would be irrespective of this appeal proposal, particularly bearing in mind its small size and in part constricted shape.
- 48. During the intended 40 year use, the energy storage equipment would occupy most of the site leading to a loss of agricultural land. The Appellant suggests that whilst operational some of the site outside of the security fencing could be grazed as sometimes occurs on solar farms. However, this would involve only a small part of the site.
- 49. The submitted restoration plan shows the site grassed over after the battery use. The Appellant accepts that this would not be restored back to its original

<sup>&</sup>lt;sup>12</sup> Paragraphs 3.3.57 and 3.3.82 of NPS published November 2023

<sup>&</sup>lt;sup>13</sup> Paragraph 32

<sup>&</sup>lt;sup>14</sup> Paragraph 3.3.25 of NPS published November 2023

Grade 3a status due to the removal of the topsoil to accommodate the development. In addition, it was highlighted at the Inquiry that a concrete or similar liner would also be required, which being impervious would not promote the best soil conditions. Some, albeit limited, soil depth would be provided allowing grazing but not to the same value. Hence the resulting land quality would be a lesser grade than currently.

- 50. Whilst it was not proven that other lesser Grade land was available for the proposal the site's 2.3 ha small size suggests it makes a minimal contribution to the agricultural economy, national output and food security.
- 51. I find that there would be a loss of BMV, but bearing in mind my findings above that loss would be of extremely limited significance. Policy EM13 resists the loss of BMV land other than in exceptional circumstances. These include where the benefits of the development justify the loss of high quality agricultural land. Such battery storage facilities require specific locational requirements and accordingly this proposal meets the exceptional criterion. The proposal is important for energy management and low carbon delivery, and the loss would be justified in terms of Policy EN13 and therefore accord.
- 52. The proposal would conflict with paragraph 180(b) of the Framework in terms of eroding the quality of the agricultural land, but in terms of the whether such loss would be justified, this would be offset by the proposal's use in energy management in accordance with paragraph 8 of the Framework.

Whether there is sufficient information on the health and safety measures and the extent to which there would be significant risk to local residents and the environment

- 53. Policy EN14 precludes development which would lead to unacceptable levels of pollution to aquifers and air. EN18 requires developers to take appropriate measures to ensure that development does not affect the quality of groundwater. Strategy 39 supports low carbon projects where they follow current best practice guidance.
- 54. It was uncontested at the Inquiry that there are 32 identified wells/boreholes and springs in the vicinity of the site, 10 of which are directly below the groundwater gradient of the appeal site and two are immediately adjacent to its eastern boundary. The groundwater permeates into the aquifer, which via boreholes supplies approximately 12 houses with their water, hence its quality is critical to the health and well-being of local residents.
- 55. Water is normally used to extinguish battery fires and thereafter their cooling. However, the spent water would be likely to incorporate the resulting lithium ions from the electrolyte which would be contaminated and hazardous. The uncontested evidence of Mr Carpenter for the Rule 6 Party is that water runoff would go towards the site boundary and into the land drain. All parties agree that spent firewater here would need to be contained due to the aquifer. I consider the hydrological implications shortly after firstly looking at the risk in general and then secondly the layout of the batteries and emergency access.
- 56. Whilst there are nationally a good number of battery storage facilities, they are not so long established to prove that the safety risk is not significant; indeed in 2020 a fire occurred at a battery storage facility in Liverpool. There

- was conflicting evidence before the Inquiry on the probability of the risk, nonetheless Mr Tough on behalf of the Appellant accepted<sup>15</sup> that there is a risk, and the point is to reduce the risk to as low as possible.
- 57. Whilst lithium batteries are widely used in everyday technology the battery cells involved in this proposal would be vastly more numerous than a mobile phone or electric car. The basic component is the individual cell, which consists of a cathode and anode, forming positive and negative terminals and a liquid electrolyte in between which conveys the current. During the manufacturing process there is potential for the terminals to develop imperfections, which in spite of testing can be undetected lending themselves latterly to degradation and failure of the cell over time. The Inquiry was advised that whilst there are some countries with a standard for batteries, there is no British Standard safeguarding their quality.
- 58. The degradation of a cell may potentially lead to overheating causing pressure to build within the electrolyte, spreading the overheating into the adjacent cells. The cells have to be maintained between 20 and 35.C<sup>16</sup> otherwise failure will result. If this overheating is not alleviated, it can potentially lead to an explosion due to the pressure. The racks are fitted with fans to assist against the fluctuations of the external environment and heating during the discharging and charging process. The racks and containers are also fitted with battery management systems which monitor temperature within the cells as well as their effectiveness in charging and discharging.
- 59. The cells are organised in racks, in a vertical stacking arrangement within each container. The racks are fitted with fans to assist against the fluctuations of the external environment and heating during the discharging and charging process. The racks and containers are also fitted with battery management systems which monitor temperature within the cells as well as their effectiveness in charging and discharging. The monitoring systems are operated remotely and digitally and cannot be wholly guaranteed. They were in place in the battery storage facility at Liverpool<sup>17</sup> and did not avert that incident.
- 60. The Appellant stated at the Inquiry that the cells would be likely to be replaced every 5-10 years. This would help reduce the risk of cell failure (as well as holding charge) but nonetheless it cannot eliminate the potential risk.
- 61. To prevent the spreading of a fire between the containers, known as thermal runway<sup>18</sup>, separation is needed particularly due to their narrow safe temperature range. The National Fire Chiefs Council (NFCC), November 2022, guidance for its services recommends<sup>19</sup> a minimum separation of 6m between containers. This proposal includes a detailed layout showing the number, spacing and arrangement of the 48 containers, submitted for consideration as part of this appeal. The parties all agree that the separation distance proposed here would be broadly two metres apart<sup>20</sup>. This would be substantially below the guidance, consequently if there was a fire in one container there is a significant risk of it spreading leading to a thermal

<sup>15</sup> Appellant's closing paragraph 74

<sup>&</sup>lt;sup>16</sup> Paragraph 4.4 Orsted BESS Canregie Road Liverpool L13 7HY incident report

<sup>&</sup>lt;sup>17</sup> Orsted BESS Canregie Road Liverpool L13 7HY

<sup>&</sup>lt;sup>18</sup> PPG paragraph 34

<sup>19</sup> Page 7

<sup>&</sup>lt;sup>20</sup> As measured during the Inquiry on 8 September

runway. Whilst the guidance indicates a lower gap may be feasible, this is predicated on modelling and engineering measures to prove safety. No such evidence has been produced here to demonstrate it would be safe to vary even slightly the 6m separation distance and Mr Tough, on behalf of the Appellant, confirmed that no fire engineer has been involved in the design of the proposal.

- 62. The NFCC guidance has a footnote referring to FM Global advice<sup>21</sup>, where it was advocated at the Inquiry that its interim revision has allowance for foreshortening the 6m separation. However, no evidence was shown how this proposal departing away from the minimum NFCC guideline would be safe. Indeed, the NFCC guidance has not been changed and is promoted by the very recent PPG.
- 63. The Fire Service incident report into the Liverpool case found the fire largely involved only one container, with some damage to a neighbouring one, but the resulting debris was carried up to 23m away.
- 64. Whilst the final technological battery details are not specified there was also no evidence before the Inquiry that any particular battery specification here could be safe with the 2m separation distance.
- 65. In addition, the NFCC recommends<sup>22</sup> 'at least two separate access points to a site to account for opposite wind conditions/direction'. However, in this proposal the submitted detailed layout shows that only one is proposed which may be likely to inhibit the ability to get near to the affected container.
- 66. Whilst the Appellant produced a diagram indicating the prevailing wind is southwest to justify a single access, the diagram shows significant variation. In any event, a fire at the eastern side of the development would hinder the use of the access due to the prevailing wind spreading smoke/flames whereas an additional separate western access would give an unaffected firefighting point.
- 67. The Appellant suggested that the site and battery area is small, so the risk would be low, but the guidance does not make such an allowance. In any event the plans show the 48 containers arranged in groups of 5 which would have potential to spread as the Liverpool facility only had 3 battery containers. Image 3 of the incident report is an aerial photograph which clearly shows a gated entrance at one end and a hard surface route around another side occupied by a fire engine.
- 68. The Appellant also suggests a maintenance corridor around the periphery of the developed area would be accessible to fire engines but turning areas and width would be narrow due to the siting of the acoustic fence and no vehicular tracking has been provided to indicate otherwise. In addition, the maintenance corridor could only be reached by traversing the eastern side of the batteries which could be the location of a fire. Consequently, I do not find that the single access would be likely to be expedient for the emergency services to extinguish and cool a fire.

<sup>22</sup> Page 7

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<sup>&</sup>lt;sup>21</sup> Footnote on page 7 of the NFCC guidance: FM Global (2017) Property Loss Prevention Data Sheets: Electrical Energy Storage Systems, para. 2.3.2.2.

- 69. The Appellant proposes storing firewater in below ground tanks with a combined capacity of 1,153 m3 which would give approximately 11 hours<sup>23</sup> firefighting based on 1,900 litres/minute which is the ballpark the NFCC give for battery storage. The incident report into the Liverpool fire, states defensible firefighting was required for 59 hours<sup>24</sup> to extinguish and thereafter for cooling. That situation involved only one container on fire with the need to protect the other 2 battery containers, whereas here 48 are proposed, which could lead to an even greater amount of firewater being needed.
- 70. The Appellant suggested at the Inquiry that tankers could be used to transport spent fire water off site to a safe storage/treatment area. The Appellant indicates that 210 tankers would be likely to be needed, whereas HAG concluded a need for 498 as tankers would be required at the same rate at which the water was being used. Even taking the Appellant's figure this would be a considerable undertaking, particularly on rural roads.
- 71. Details of potential wastewater transporters were not supplied to the Inquiry, and it was suggested they come from the west of Southampton. This would be a significant distance leading to a build-up of contaminated water. The tankers would also have to offload at an offsite facility, which together with the necessary water testing would add to the delay. In addition, there is doubt that the Fire Service would want any non-fire brigade staff in the area due to the risk to their safety and potential to impinge on the firefighting process which is reflected in the comments from the West Yorkshire Fire Service on a different battery storage proposal<sup>25</sup>. Moreover, not only would the tanker drivers be at risk from the fire and heat, but also the fire would also be likely to contain a range of toxic fumes<sup>26</sup>.
- 72. I therefore find that there is considerable doubt over the ability of this scheme to contain fire water and that off-site transport has not been demonstrated to be feasible.
- 73. The Appellant suggested that a gravel base to the batteries may help neutralise contaminants. However, no clear information was provided on the surfacing or its effectiveness across various potential contaminants to ascertain the benefits. Indeed, at the Liverpool site the spent water was able to go to soakaways and unlike the appeal site did not involve an aquifer. There is also mention of potentially re-using firewater but on the basis of the evidence submitted to the Inquiry I am not persuaded that there would be potential since the water may itself be contaminated and increase risks further.
- 74. There are no hydrants in the area for firefighting. One water tank is shown on the revised 2023 planning application drawing with a 450,000 litre capacity which is suggested for firefighting<sup>27</sup>. The Fire Service in their response do not confirm that this would be adequate but refer to how additional water would be brought in. Due to the distances involved, I find that this potentially would be likely to add to the burden on the fire service and the time taken to put the fire out.

<sup>&</sup>lt;sup>23</sup> Paragraph 87 Appellant closing

<sup>&</sup>lt;sup>24</sup> Page 8 of the above report

<sup>&</sup>lt;sup>25</sup> 10 July 2023 to 22/01460 Land south of Wakefield B Substation

<sup>&</sup>lt;sup>26</sup> Liverpool Incident report found notes the various gases arising from lithium cells burning

<sup>&</sup>lt;sup>27</sup> Appellant closing paragraph 79

- 75. This is a rural location, and the Fire Service response indicates that the nearest fire station is at Axminster which has a 'medium rescue pump', but attendance would be likely to be supported by stations at Chard, Honiton, Colyton and Seaton. 'Water carriers' could also be mobilised which are based at Exeter, Bridgwater and Yeovil. However, the Fire Service action would not be immediate due to the distances involved and this would lead to a fire and heat spreading. In addition, this may divert the Fire Service away from other emergencies for a considerable time, thereby exacerbating risk to lives and property in the wider community.
- 76. The Appellant suggests that additional tanks could be required by the imposition of a Grampian style condition. However, this would be likely to take up room required for the access and landscaping and so cannot be assumed to be achievable. Accordingly, a Grampian condition would not be appropriate.
- 77. The submission of a Battery Safety Management Plan (BSMP) is included in the suggested conditions and a draft has been provided. However, the separation distances, arrangement, number of containers and access are clearly shown on the submitted plan for determination in this appeal. The BSMP would be limited to providing additional details and could not overrule or change the submitted plans.
- 78. Even if the BSMP was updated every 5 years as suggested by the Appellant, there was no evidence before the Inquiry that this would alleviate the above risks.
- 79. The PPG encourages the early engagement of the Fire Service at preapplication: 'the siting and location of battery energy storage systems in particular in the event of an incident, prevention of the impact of thermal runway and emergency services can be considered before an application is made'. This approach ensures that safety is intrinsic to the detailed design of the proposal. No evidence has been submitted to demonstrate whether this had occurred here.
- 80. Nonetheless the Fire Service responded on 25 July 2023 to the more recent application on this site. Its response raises some concern: limited or no commentary on deflagration prevention and venting, space separation between units, emergency access and firefighting water supplies. The Appellant provided further information pursuant to these comments, including a draft BSMP, the NFCC guidance, a wind direction diagram, water supplies and a layout showing a maintenance route. The response from the Fire Service did not object to the proposal, but nor did it comment on the adequacy or the separation distance between batteries, the access arrangement or the water supply/storage. Consequently, I find that their response does not direct me to a conclusion that the above aspects have been sufficiently addressed for this detailed proposal at this stage.
- 81. The Fire Service do not comment on the containment of firewater but refer to the Environment Agency. They were not party to details submitted to this Inquiry and their response pre-dates the firewater containment strategy.
- 82. Various allowed appeal decisions and Development Consent Order decisions were submitted to the Inquiry. In these cases, BSMPs were conditioned. However, this particular proposal is for 48 containers shown in a detailed

layout for consideration where separation distances consistently and substantially fall short of the national recommended standard without safety being demonstrated, with the risk compounded by only one access and unclear measures on containment of firewater and the potential to contaminate the aquifer, as well as the likely need for widespread importation of firewater.

- 83. Therefore, based upon the evidence before the Inquiry I find that it has not been demonstrated that the proposal would not be a significant risk to local residents and the environment.
- 84. The PPG notes the risk of a thermal runway and encourages the consideration of the NFCC guidance<sup>28</sup>. Whilst the PPG is not binding and only guidance, it is nonetheless cautionary on safety which all parties agree is a main issue. Indeed Paragraph 8 of the Framework seeks to avoid pollution and refers to the health and well-being of communities. The proposal also threatens the safety of the aguifer which would be contrary to Policy EN14. Appropriate measures have not been put in place to ensure that the quality of groundwater would not be harmed, contrary to Policy EN18. Similarly, Strategy 39 states renewable or low-carbon energy projects will in principle be supported and encouraged subject to them following current best practice quidance. Whilst there is reference to a solar and wind farm advice note in the preceding wording, this does not restrict consideration and indeed it would not be future proof (and effective) if it did so. I therefore find that Strategy 39 is pertinent to this proposal as a low carbon project and for the reasons above conclude it would conflict as it has not been demonstrated to follow best practice.

#### **Other Matters**

- 85. High Stonebarrow is a Grade II listed late seventeenth century farmhouse, list entry 1305955, notable for its mix of fenestration, hipped ends and chimney stacks. It is approximately 620m away from the appeal site. Lamberts Castle a Scheduled Monument, list entry 1017035, is a 2,500 year old hillfort, with a barrow and defensive mounds. It lies 425m to the west of the appeal site. Neither have such visibility with the appeal site that the proposal would be readily apparent and similarly outward views of the assets from the appeal sites are not important. No evidence was provided of any historic or cultural connection with the appeal site. No main party raised any concern that the proposal would harm the setting of heritage assets and I also find no harm to their significance.
- 86. Several responses in the committee report mention bats in the area and species rich meadows to the north, however the appeal site does not have any protected habitat or intrinsically linked to critical species. No evidence was produced to the Inquiry to show any harm and the main parties had no such concern and I similarly concur. Additionally, the extensive new tree and hedgerow planting could reinforce and create new habitat, provide cover and foraging, thereby supporting a range of species leading to a biodiversity net gain.

<sup>&</sup>lt;sup>28</sup> Paragraphs 34 and 36

# **Planning Balance**

- 87. Section 38(6) of The Planning and Compulsory Purchase Act 2004 states determination must be made in accordance with the plan unless material considerations indicate otherwise. This is echoed in paragraph 11(c) of the Framework.
- 88. Bearing in mind the surrounding energy infrastructure and the proposal is a low carbon project the proposal would accord with Strategy 39 in this particular regard.
- 89. The proposal would lead to limited/very limited harm to the landscape. As Strategies 7 and 46 of the LP seek to protect the landscape the proposal would be in conflict. These policies do not include a balance of landscape impact with benefits.
- 90. I find no conflict with Policies D1, D2 and D3 since the proposal includes substantial new landscaping with limited loss of existing vegetation and the sensitive siting of the elements of development.
- 91. The proposal would lead to the loss of BMV agricultural land. However, I have found this would cause very limited harm which would be offset by the benefits of the proposal as below. The wording does require an exceptional justification which has been partly justified by the site's connectivity to the grid, although the sequential look at alternative sites has not been wholly robust. On the whole I find the proposal would accord with Policy EN13.
- 92. Strategy 39 on low carbon projects seeks to firstly avoid harm by consideration of location, scale and design and secondly reduce and mitigate any unavoidable harm, the policy wording requires compliance with both of these criteria; as the proposal causes harm it would conflict. The Strategy also does not include a balance of landscape impact with benefits. It does require applicants to demonstrate that they have taken appropriate steps in considering options in relation to location. There would be some conflict since the proposal lacks a robust assessment of possible alternative sites to avoid harm, but I have found this aspect only warrants very limited weight.
- 93. Strategy 39 includes the need to follow current best practice. The NFCC guidance seeks at least two separate accesses and separation distances for safety. The detailed layout of battery containers and single access point would contravene the expert national guidance and have not been demonstrated to be safe. These are matters detailed for consideration as part of this proposal. The availability of sufficient water for the efficient extinguishing and cooling of a fire has not been demonstrated. The proposal would be in conflict, and this warrants considerable weight. When taken as a whole I find that the proposal would be contrary to Strategy 39.
- 94. Policy EN14 precludes unacceptable levels of pollution to aquifers. Similarly, EN18 requires development to provide appropriate measures to prevent pollution. The proposal as submitted does not demonstrate adequate measures for the containment or removal of contaminated firewater, which could lead to its potential spreading, thereby contaminating the aquifer. Accordingly, the proposal is contrary to Policies EN14 and EN18.

- 95. The above considerations are reflected in the most important policies and go to the heart of this proposal. When taken as a whole I find that the proposal would be contrary to the Development Plan.
- 96. The proposal would provide some benefits, particularly due to its 120MW capacity. It would help towards smoothing out the delivery and security of the supply of energy as the energy generation from renewable sources varies greatly according to conditions. Similarly, energy demand varies according to the season, weather and time of day<sup>29</sup>. Importantly demand should be matched by supply.
- 97. The proposal would assist in the storage of energy at peak production and releasing it at peak demand, which leads to cheaper energy prices, to the benefit of all consumers and the wider economy. Indeed, if excess solar or wind power starts to be generated, these facilities have to be shut down with re-imbursement costs<sup>30</sup> paid to the energy operator.
- 98. The proposal would assist in the management of the variables in the energy supply emanating from various sources including solar, which is likely to be particularly helpful in Devon. It makes their use efficient and practical which promotes their further development elsewhere.
- 99. The construction process would also benefit the local economy and provide employment opportunities, albeit for a short period. Biodiversity would also be improved.
- 100. I find that collectively these planning benefits would be significant. However, I do not conclude that they would outweigh the potential considerable harm arising from the proposal. Consequently, a decision other than that in accordance with the Development Plan is not justified.

#### **Conclusion**

101. I therefore conclude that the appeal should be dismissed.

John Longmuir

**INSPECTOR** 

 $<sup>^{29}</sup>$  2022 Review Britain's Electricity Explained: 12 June 04:00 15GW whereas 15 December 17:00 46GW  $^{30}$  Mr Peter Lo Proof of Evidence paragraph 2.11 : £1.956 billion paid in 2022.

# **Appearances**

For the Appellant

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# For the Council

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# Rule 6 Party: Hawkchurch Action Group

Mr Andrew Parkinson Counsel Landmark Chambers

Mr Clive Carpenter BSc(Hons) MSc FGS C.Geol C.WEM AMAE GWP Consultants

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Ms Michelle Bolger FLI, DipLA, BA(Hons), PGCE, BA Expert Landscape Consultancy

Mr Elliot Jones BSc(Hons) DipTP MRTPI Director Planning Potential Ltd

#### Interested parties

Ms Ann Nolan Chair Hawkchurch Parish Council

Mr Phiilip Wallis Local Resident

Councillor Duncan MacKinder East Devon District Council

### **Documents submitted during the Inquiry**

INQ1 UK Parliament questions, answers and statements. Health and Safety : Batteries, dated 03/09/23

INQ2 Opening Statement on behalf of Appellant

INQ3 Opening Statement on behalf of East Devon District Council

INQ4 Opening Statement on behalf of Hawkchurch Action Group

INQ5 Suggested conditions

INQ5 Closing Statement on behalf of East Devon District Council

INQ6 Closing Statement on behalf of Hawkchurch Action Group

INQ7 Closing Statement on behalf of Appellant