



PLANNING STATEMENT

**BATTERY STORAGE DEVELOPMENT
LAND AT BATHAM GATE, BUXTON**

**FOR
ASTRA VENTURES**

JUNE 2017



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EXECUTIVE SUMMARY

Astra Ventures Ltd ("the Applicant") is proposing to develop a lithium-ion battery storage development to provide a backup supply to the National Grid ("the Development"). The Development is on land off Batham Gate Road, north of Buxton ("the Application Site"), in close proximity to the Western Power Distribution primary substation off Waterswallows Lane, to the south. The Application Site is currently vacant agricultural land used for grazing. An application for planning permission, accompanied by this Planning Statement ("the Statement"), is being made under the Town and Country Planning Act 1990¹ to High Peak Borough Council ("the Council").

The Development includes the construction of a battery storage compound within a secure 2.4 m high 'Hit and Miss' wooden fence. Within this fence will be the battery storage containers, inverter units, load banks, transformers, a smaller container housing high voltage infrastructure (switchroom/ control room), a welfare unit and storage container. Outside of the main compound will be a DNO substation with its own separate access. The compound will be levelled and provided with a crushed stone finish upon which the Development will be laid out. The footprint of the main compound is 95 m by 40 m (0.38 ha). The wider Application Site area is 0.63 ha which includes the access track to the public highway and the proposed planting areas.

There is a clear requirement to balance the peaks and troughs associated with electricity supply and demand to manage the strain on transmission and distribution networks and ensure there are no power blackouts. This is particularly important as coal generating plants are now being decommissioned and the replacement new nuclear generation remains in development with long timescales for the new generation coming on line. There has also been strong support for renewable energy generation resulting in the widespread distribution of onshore wind and solar, which is inherently intermittent creating peaks and troughs in supply. The Development is designed to smooth over the troughs in electricity supply, providing a critical service to the grid by being able to respond at short notice to requests from National Grid to generate electricity, such as periods when renewable sources are not generating or fossil fuel plants are unexpectedly offline.

This Statement is intended to provide the Council with sufficient information to allow determination of the planning application. The following subject areas are addressed in this Statement and the main findings summarised under the headings below:

- Consideration of the Principle of the Development;
- Landscape and Visual;
- Historic Environment;
- Ecology and Habitat;
- Hydrology/Flood Risk;
- Coal Mining Risk;
- Noise;
- Access, Transport and Traffic;
- Public Rights of Way;
- Agricultural Land Classification; and
- Existing Infrastructure.

Each of these subject areas is assessed in light of the planning policy context. Other relevant material considerations are also summarised and assessed.

Key Findings

Following the above assessments, it has been determined that there are **no unacceptable effects on the environment** predicted as a result of the Development. A review of planning

¹ Town and Country Planning Act 1990. [Online] Available at: <http://www.legislation.gov.uk/ukpga/1990/8/contents>

policy found the **Development to be both in compliance and supported by the Development Plan and relevant material considerations.**

It is therefore respectfully requested that the Council approve the planning application.

1 INTRODUCTION

1.1 Background

This Planning Statement ("the Statement") has been prepared to accompany a planning application submitted to High Peak Borough Council ("the Council") by Arcus Consultancy Services Ltd ("Arcus") on behalf of Astra Ventures Ltd ("the Applicant") for the construction and operation of a lithium-ion battery storage development to provide a backup supply of electricity to the National Grid ("the Development"). The Development is located on land off Batham Gate Road, north of Buxton ("the Application Site"), in close proximity to the Western Power Distribution primary substation off Waterswallows Lane, to the south. The location of the Application Site and layout of the Development are shown on Drawings 001 and 002 respectively.

1.2 The Applicant

Astra Ventures is a low carbon and renewable energy infrastructure, developer and advisor with headquarters in London. Astra was founded to originate investments, advise and develop projects within the global energy and infrastructure sector.

Specialising in the development of distributed generation and renewable energy infrastructure projects, Astra has capabilities covering the whole value chain of development, including site selection, securing grid connection agreements, land rights and obtaining planning consents.

The Astra team has more than 15 years combined experience in the renewable energy sector and has collectively been involved in the successful development of more than 350MWp of solar photovoltaic projects in the UK and internationally. The team is now involved with developing a battery storage portfolio of 290MW, looking at utility scale plant as well as behind the meter applications.

1.3 Development Overview

The Applicant is seeking planning consent for the construction and operation of a battery storage development which has been deliberately sited close to the primary substation off Waterswallows Lane to the south as this is one of the few places where such plants can connect efficiently to the network. The Application Site is currently vacant agricultural land used for grazing.

The Development is designed to provide rapid response electricity supply when requested by National Grid during periods of increased demand on the grid or where there are constraints on electricity generation; it will therefore serve an essential role in the balancing of the electricity network locally.

The Development includes the construction of a battery storage compound within a secure 2.4 m high 'Hit and Miss' wooden fence. Within this fence will be the battery storage containers, inverter units, load banks, transformers, a smaller container housing high voltage infrastructure (switchroom/ control room), a welfare unit and storage container. Outside of the main compound will be a DNO substation with its own separate access. The compound will be levelled and provided with a crushed stone finish upon which the Development will be laid out. The footprint of the main compound is 95 m by 40 m (0.38 ha). The wider Application Site area is 0.63 ha which includes the access track to the public highway and the proposed planting areas.

Further detail on the Development is provided in Section 2.

1.4 The Development and the EIA Regulations (2017)

The Town and Country Planning (Environmental Impact Assessment) Regulations 2017² define EIA development as either:

- Schedule 1 development; or
- Schedule 2 development likely to have significant effects on the environment by virtue of factors such as its nature, size or location.

Battery storage development is not listed in Schedule 1 of the regulations.

There is also no express threshold for battery storage developments to be considered as Schedule 2 development under the EIA Regulations. However, a development area threshold of 0.5 ha is applied to category 3 (a) industrial installations for the production of electricity. The Development exceeds the Schedule 2 area threshold of 0.5 hectares and, as such, whether the Development is EIA development or not depends on an assessment against the screening selection criteria, as set out in Schedule 3 of the EIA Regulations, which comprise:

- Characteristics of the development;
- Location of the development; and
- Characteristics of the potential impact.

PPG paragraph 018, states that EIA will only apply to a small proportion of projects and only those which are likely to have significant effects.

The key question is whether or not the project would be likely to give rise to significant effects on the receiving environment, taking into account the selection criteria in Schedule 3. Whilst applications for battery storage developments have only been forthcoming recently, given their simplistic nature, small footprints, low vertical extents and limited noise effects they have not generally triggered EIA.

The anticipated effects arising from the Development, as detailed in this Planning Statement and the Landscape and Visual Appraisal, are not sufficient to trigger the requirement for an EIA and hence the planning application is not accompanied by an Environmental Statement (ES).

1.5 Need for the Development

1.5.1 Electricity Market Reform

It is estimated that over the next decade, the UK will need around £100 billion of capital investment in its electricity infrastructure to accommodate projected future increases in electricity demand and to replace ageing power stations and prevent electricity blackouts. The Development is proposed in response to the requirement for continuity of supply of electricity, particularly during periods of peak demand.

Electricity Market Reform (EMR) is a government policy designed to:

- Incentivise investment in secure, low-carbon electricity,
- Improve the security of Great Britain's electricity supply, and
- Improve affordability for consumers.

The UK's electricity grid has historically relied on large centralised power plants. However, old coal power plants are in the process of reducing capacity and closing as they no longer meet the required environmental and performance standards and existing nuclear power plants are reaching the end of their design lives with new nuclear plants being slow to be realised. In parallel there is widespread delivery of a greater amount of renewable energy, but these technologies (e.g. wind and solar generation) are

² <http://www.legislation.gov.uk/uksi/2017/571/contents/made>

intermittent, only generating when the wind blows or sun shines. These different factors mean that demand and supply are more challenging to match.

Through the Energy Act 2013 the Capacity Market (CM) mechanism was introduced to ensure security of electricity supply at the least cost to the consumer. The Development will participate in the Capacity Market and a number of balancing mechanisms for the National Grid.

1.5.2 The Capacity Market

To deliver a supply of secure, sustainable and affordable electricity, the UK needs not only investment in new generation projects and innovative technologies but to get the best out of existing assets on the network. The Capacity Market aims to deal with both these issues by bringing forward new investment while maximising current generation capabilities.

The Capacity Market aims to balance the difference between demand and supply and to bring forward investment in new generation projects and innovative technologies, in parallel to maximising the utilisation of the existing generation capacity. The Capacity Market operates alongside the electricity market, which is where most participants will continue to earn the majority of their revenues.

The Capacity Market revenues are decided by auctions. In order to qualify for the auctions planning permissions need to be secured in advance of sites being entered into the auctions. Therefore the Applicant's planning timetable is driven by auction deadlines and its desire to participate in the auction with this Development.

1.5.3 Balancing the Network

National Grid has a constant supply of 'extra power' available for use when the power required by customers is not equal to the power generated and a reserve supply. The Balancing Mechanism is used to ensure that the network is in balance and reserve power is then used when the network comes under 'stress'.

When unforeseen demand is put on the network, such as when a large power station suddenly comes off line, then the National Grid control room need an alternative source of power. This is achieved from rapid responding generators such as that proposed by the Development.

1.6 Benefits of the Development

1.6.1 Clean, Efficient and Flexible Energy Source

The lithium-ion battery array will provide a very flexible and rapid release of electricity to the grid without any emissions to air.

1.6.2 Embedded Generation

The Development has been deliberately sited in close proximity to the primary substation off Waterswallows Lane, to which the Development will be connected via an underground cable. The Development constitutes Embedded Distributed Power (EDP) generation as it supplies power to the local distribution network at or near the point of use. By doing so it results in lower transmission losses which occur when power is transmitted over long distances.

It is an important local advantage of this application that in the event of power shortages in the future anyone whose power is supplied locally will not suffer from blackouts experienced elsewhere as the Development can be turned on to cover these shortages.

Local small-scale generation is less susceptible to widespread power failure because should a generating plant fail to operate, the net effect is that less generation is lost from an isolated small-scale plant failure because other similarly sized plants should remain operational. In contrast, when a large power station goes 'off line' and all of its output is lost, the effect is far greater.

However, local networks have many constraints and it can be difficult to identify suitable connection points with necessary capacity and 'fault headroom' for embedded generation. The Applicant has sought to locate the Development close to a primary substation, thereby placing less stress on the network.

The Applicant has assessed local distribution networks to identify sites close to DNO primary substations where the network could accept embedded generation. This has been done in consultation with the DNO. Not all substations are capable of accepting generation of the scale proposed by the Development. The Application Site meets the DNO's technical requirements as there is sufficient fault level head room and connectivity to accept generation.

1.6.3 Economic/ Employment Benefits

The Development will result in contract opportunities for local and regional contractors both for construction activities themselves and throughout the supply chain. The investment in the Development has the potential to generate a range of economic opportunities for local businesses, most notably employment opportunities and local spending. In addition the Development will provide the landowner with a more diverse income, providing further economic benefits.

Potential social and economic effects can be divided into:

- Direct effects: for example, employment opportunities during construction and decommissioning of the Development.
- Indirect effects: such as employment opportunities created down the supply chain by those companies providing services to the Development during construction and decommissioning; and
- Induced effects: for instance employment created by the additional spend of wages into the local economy.

These effects are considered below for construction of the Development. Effects during decommissioning would be broadly similar. During the operational phase much of the maintenance will be undertaken remotely, although specialist jobs will be retained for the maintenance of this and other similar plants.

Construction contracts will be placed for services and materials and local sourcing will be preferred where possible, however this is subject to competitive tendering and constrained by the specialist nature of the equipment. Examples of direct opportunities for local contractors would include:

- Accommodation;
- Earth Excavation and ground works;
- Cabling;
- Fencing;
- Quarry Products and Ready Mixed Concrete;
- Security;
- Plant;
- Haulage;
- Landscape and Renovation;
- Civil Engineering;
- Surveying; and
- Mechanical, Electrical and Supervisory Services.

1.7 Site Selection

Generation sites are primarily chosen for their access to the local electricity distribution network, which should be capable of accepting their export at an acceptable cost and which could then provide valuable support to local customers in times of stress on the local, and wider, electricity network.

The Application Site was chosen for its proximity to the primary substation, which provides access to the local network without having to travel large distances or cross major infrastructure, keeping connection costs to an acceptable level and minimising transmission losses.

The Application Site is agricultural land used for grazing, which reduces the impact on available land. There are also anthropogenic developments in close proximity, which include overhead transmission lines and pylons, the primary substation and large Nestle/Buxton Water facility off Waterswallows Lane.

The Application Site is located in Flood Zone 1, as designated by the Environment Agency; this is the lowest flood risk zone and achieves separation distances of 60 m and 90 m from the closest residential properties. Existing vegetation around the Application Site, in conjunction with the fencing design and planting proposed as part of the Development, would act with the limited vertical extent of the Development so as to limit the Development's visual presence in the landscape.

This combination of factors means that the Application Site represents the best option for the Buxton area, helping to improve the security of electricity supply for local residents and businesses.

1.8 Design Evolution

The final design has been achieved following a number of key layout iterations, considering specific onsite constraints. Principally this has involved:

- Avoidance of the overhead power lines to the southwest in accordance with Energy Networks Association Guidance³;
- Use of existing vegetation as screening;
- Allowing sufficient space for planting, particularly in the south/ southeast of the site, so as to screen views from the properties to the east;
- The use of sympathetic fencing, together with mitigation planting, has sought to minimise any landscape and visual effects; and
- Locating the DNO substation and site access point at the north of the Application site to maximise the distance from properties, particularly those to the east.

Refinements to design were undertaken throughout the pre-application process as new information and feedback became available.

1.9 The Planning Application Submission

The following plans and drawings are submitted with the planning application:

- Drawing 001 - Site Location Plan;
- Drawing 002a - Site Layout (OS base map);
- Drawing 002b - Site Layout (aerial photograph); and
- Drawing 2732-DR-LAN-101 – Landscape Masterplan.

In addition the following plans and elevation drawings are also submitted:

- Detailed Layout Plan of Main Compound;
- DNO Substation Elevation;

³ Energy Networks Association Technical Specification 43-8, Issue 3, 2004 'Overhead Line Clearances'.

- Security Fence and CCTV Elevation;
- Welfare Cabin Elevation;
- Storage Container Elevation;
- Transformer Elevation;
- Lithium Ion Battery Storage Container Elevation;
- Outdoor Inverter Elevation;
- Switchroom Foundation Elevation;
- Loadbank Elevation; and
- Access track cross section.

The following information is appended to this Planning Statement:

- Appendix 1 – Site Photographs (of the Application Site and surroundings).

2 THE DEVELOPMENT

An overview of the Development was provided in Section 1.3; further detail is provided below with descriptions of each component of the Development set out. Elevation drawings of the Development components are provided with the planning application alongside Drawing 001 (Site Location) and Drawing 002 (Site Layout). Planting proposals are detailed on the Landscape Masterplan (Drawing 2732-DR-LAN-101). A detailed plot showing the main compound is also provided.

2.1 Development Components

2.1.1 Physical Infrastructure

The proposal is to construct a battery storage compound within a secure 2.4 m high 'Hit and Miss' wooden fence. Within this fence will be the battery storage containers, inverter units, load banks, transformers, a smaller container housing high voltage infrastructure (switchroom/ control room), a welfare unit and storage container. Outside of the main compound will be a DNO substation with its own separate access. The compound will be levelled and provided with a crushed stone finish upon which the Development will be laid out.

The storage units and containers housing the equipment are secure and designed to protect the contents from the elements. They are purpose built and designed.

The site would be unmanned during operation, and would be operated remotely with only rare maintenance visits. Given the compound is unmanned there is no requirement for permanent lighting; the only lighting would be motion activate security lighting on 2.4 m columns located in the corners of the main compound. This avoids unnecessary light pollution.

- 1 x DNO Substation housing the switch room and metering room. This will be 2.94m in height and will sit atop a 100mm plinth. The building will be 3.64 m wide and 6.24 m long.
- A security fence will run along the perimeter of the main compound and entry will be provided by gates. The fencing will be wooden 'Hit and Miss' design as illustrated in the elevation drawing provided. The fence will be to a height of 2.4 m. CCTV cameras will be situated at the corners of the main compound and will sit atop of poles that are 2.4 m in height. Up to two security cameras will be situated at the top of each pole.
- 1 x welfare container unit. This will be 4.88 m in length, 3.05 m in width and 2.59 m in height.
- 1 x storage container. This will be 2.99 m in length, 2.44 m in width and 2.59 m in height.
- 10 x transformers. These will be 3.06 m tall with a footprint of approximately 3.11 m x 1.6 m and housed within an area 4.65 m x 4.95 m.
- 10 x Lithium ion battery storage containers, each will be 12.19 m in length, 2.5 m in width and 2.9 m in height. The height above ground level would increase to a maximum of 3.5 m including the height of concrete foundation pads upon which the containers will sit.
- 20 x outdoor inverter units, each will be 2.32 m in height, 2.78 m in length and 1.59 m in width and will be sat on a concrete plinth above the ground.
- 1 x high voltage switchroom and control room container, 12.1 m in length, 2.5 m in width and 2.9 m in height and will be sat on a 1 m high concrete plinth.
- 18 x Load Bank units, each will be 2.25 m in height, 4.15 m in length and 1 m in width.

- Access track within the compound, approximately 4 m in width. A new access road will be constructed to reach the main compound off Batham Gate, the minor road to the east.

Consent to construct and operate the grid connection does not form part of this application and will be subject to a separate application. Permission is sought within this application for the construction of the DNO switch room building and the cabling between the containerised units and the building.

2.1.2 Technology

The Development comprises a battery storage array of Lithium Ion batteries. The battery manufacturing industry is continuously evolving and designs continue to improve technically and economically. The most suitable technology can change with time and therefore a final choice for the Development would be made before construction.

The UK Government has identified energy storage as one of the eight great technologies in which the UK can become a global leader⁴. In the United Kingdom in 2015 there were 23 electrical energy storage projects in all forms of development, or operational, with total capacity exceeding 25 MW⁵, most of which were carried out by Distribution Network Operators under permitted development rights and many of the projects have been trials and demonstrations supported by Ofgem's Low Carbon Network Fund.

The UK Government Postnote⁶ on energy storage suggests that if there is successful innovation a plausible future could be 9,000 MW of grid connected electricity storage by 2020, and 27,000 MW by 2050. This would cumulatively save the energy system (and consumers) £4 billion by 2050, with the UK industry contributing an estimated £11.5 billion to GDP over that time period. The Development would make an important contribution to these requirements.

2.2 Landscape Planting

The traditional field boundaries of the area around the Application Site are limestone drystone walls approximately 1.2 m in height. However, linear belts of trees and occasional hedges are found in the landscape. There is a linear belt of trees along Batham Gate Road to the south of the Application Site and it is proposed to plant a belt of trees along the southern boundary of the Application Site to reflect this characteristic. Along the eastern boundary a hedge with hedge trees will be planted with predominantly trees in the south eastern corner to provide mitigation for nearby properties. There will be tree planting along the northern boundary and hedge planting along the western boundary with hedge trees. A bund approximately 1 m in height will be created along the western boundary and a 1.5 m bund in the south eastern corner. The bunds will be planted with trees and hedges. The landscape and planting proposals are shown on Drawing 2732-DR-LAN-101.

2.3 Access

A new access will be formed to reach the Application Site off Batham Gate, the minor road to the east of the Application Site. The highway network will easily be able to accommodate the minor increase in vehicle movements associated with the short term construction phase of the Development, which is anticipated to last approximately 16-20 weeks. Construction traffic will consist of a small number of heavy goods vehicles (HGVs), light good vehicles (LGVs) and cars. During the operational phase of the Development

⁴ Parliamentary Office of Science and Technology (April 2015); Energy Storage, Postnote Number 492

⁵ <http://www.energystorageexchange.org/>

⁶ Parliamentary Office of Science and Technology (April 2015); Energy Storage, Postnote Number 492

traffic would be restricted to occasional maintenance visits. Further information of anticipated vehicle numbers is provided in Section 4.2.11.

The new access track will be formed using crushed stone with the design of the new access point to be agreed with the Highways Authority.

2.4 Development Timeline – Construction, Operation and Decommissioning

2.4.1 Construction

The construction process would consist of the following principal activities:

- Construct access track and site preparation/ laying of hardstanding;
- Delivery of containerised units;
- Construct DNO switchroom;
- Testing and commissioning; and,
- Site restoration.

Most of these operations would be carried out concurrently, although predominantly in the order identified, in order to minimise the overall length of the construction programme. Site restoration would be programmed and carried out to allow restoration of disturbed areas as early as possible and in a progressive manner.

2.4.2 Operation

Maintenance would be overseen by suitably qualified contractors who would visit the Development as required but typically less than twice per month.

Ongoing track maintenance would generally be undertaken in the summer months when tracks are dry. Safe access would be maintained all year round.

2.4.3 Decommissioning

Decommissioning will take account of the environmental legislation and technology available at the time of decommissioning. Notice will be given to the Council in advance of commencement of the decommissioning works, with all necessary licenses or permits being acquired. Decommissioning will be timed to minimise its environmental impact.

The Applicant will develop a decommissioning plan, and the works will be undertaken in accordance with a statement of operations, covering safety and environmental issues during decommissioning. It is assumed that the requirement for the decommissioning plan would be secured by an appropriately worded planning condition, attached to any planning consent that may be granted for the Development.

3 SITE AND SURROUNDINGS

3.1 Description of Site

The landownership area extends to 4.2 ha, as a triangle of land east of the A6 and north of Batham Gate Road, north of Buxton, measuring approximately 250 m by 315 m. A high voltage overhead transmission line crosses the southwest part of the site in a southeast – northwest orientation.

Within the Application Site the main compound is regular in shape, with dimensions of approximately 40 m wide and 95 m long (0.38 ha). The Application Site is currently used for grazing and is generally flat, with a gentle slope from northwest (353 m above ordnance datum (AOD)) to southeast (347 m AOD).

There are no public rights of way (PRoW) or watercourses or water bodies within the Application Site.

A series of photographs depicting the Application Site and surrounding area are presented in Appendix 1.

3.2 Land Use Surrounding Application Site

The Application Site is bounded by roads and then agricultural land with isolated properties and small settlements. The Peak District National Park boundary is located approximately 1.5 km west of the Application Site.

A substation, into which the Development would connect, is located approximately 450 m from the Application Site, off Waterswallows Lane. Opposite the substation is a large industrial/ commercial facility (Nestle/ Buxton Water). Tarmac's Tunstead Quarry is located at a distance of approx. 1.8 km southeast.

The closest residential properties are approximately 60 m east (along Batham Gate Road) and 90 m west (along the A6) of the Application Site.

The closest PRoW is a footpath located approximately 750 m southeast, linking Longridge Lane and Waterswallows Road.

Despite the proximity to the Peak District National Park the surrounding landscape is considered a working landscape and one which has very much been altered by anthropogenic influences.

3.3 Planning History of the Application Site

A review of the Council's online interactive planning map⁷ confirms that the Application Site has no planning history.

⁷ <https://www.highpeak.gov.uk/article/265/Interactive-planning-map>

4 PLANNING POLICY FRAMEWORK AND ASSESSMENT

4.1 Introduction

This section of the Planning Statement reviews the key Development Plan policies and guidance which cover the Application Site and relate specifically to the Development. The aim of this section is to establish the land use implications of the Development, consider its compliance with the Development Plan, and identify other material considerations to be taken into consideration during the determination process.

4.2 Legislative Background

The Town and Country Planning Act 1990 Section 70(2) states that:

"In dealing with such an application the authority shall have regard to the provisions of the Development Plan, so far as material to the application, and to any other material considerations."

The Planning and Compulsory Purchase Act 2004 forms and amendment to the Town and Country Planning Act 1990. Section 38(6) of the Planning and Compulsory Purchase Act states that:

"If regard is to be had to the Development Plan for the purpose of any determination to be made under the Planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise."

The process for determining a planning application can be defined as:

- Identification and consideration of the key provisions within the Development Plan;
- Clarification of whether the Development is in accordance with the Development Plan;
- Identification and consideration of relevant material considerations; and
- Conclusions on whether planning permission is justified.

The Development Plan for the Application Site comprises the High Peak Borough Council Adopted Local Development Plan 2016⁸ (adopted on 14th of April 2016) ("the LDP").

A review of the Development Plan is set out below.

4.3 Planning Policy Framework

The LDP sets out the long-term development strategy for the High Peak Area, encompassing a wide range of planning issues. The overriding spatial vision for High Peak is to *"achieve sustainable development that delivers the housing, employment, retail and community facilities that High Peak needs whilst ensuring that the area's distinctive natural assets, built heritage and character are conserved and protected."*

A range of key issues are set out within the LDP, including **KI3: Addressing the Challenges of Climate Changes**, stating that *"given the area has high levels of per capita carbon emissions and national targets are seeking an 80% reduction on 1990 levels by 2050 it is necessary to ensure that this issue is addressed."*

Strategic Objectives (SO) are contained within the LDP, and those relevant to the Development are considered to include:

SO 3: To ensure new development is well designed, promotes local distinctiveness and integrates effectively with its setting.

⁸ https://www.highpeak.gov.uk/media/160/The-High-Peak-Local-Plan-Adopted-April-2016/pdf/The_High_Peak_Local_Plan_Adopted_April_2016.pdf

SO 5: To address, mitigate and adapt to the effects of climate change on people, wildlife and places; promoting the safeguarding and prudent sustainable use of natural resources.

SO 10: To protect existing, and support the delivery of new services, facilities and infrastructure that improves accessibility and connectivity.

The following LDP Policies are deemed to be relevant to the Development:

Policy S 1: Sustainable Development Principles requires all new development to make a positive contribution towards the sustainability of communities, maintaining and where possible enhancing the environment, and mitigating the impacts and effects of climate change. Specific routes to achieving this goal are outlined by the policy, including:

- Ensuring developments make effective use of land and existing infrastructure;
- Take account of the distinct character. Landscape, setting and settlements in High Peak;
- Protect and enhance the natural and historic environment;
- Minimise the need for energy through a range of methods, including the use of renewable energy and ensuring energy efficiency;
- Deliver further mitigation towards the impacts of climate change by supporting delivery of low-carbon and renewable forms of energy where acceptable against all other LDP Policies. Forms of energy cover stand-alone installations or installations integrated within new and existing developments;
- A requirement that all new development addresses flood risk mitigation and adaptation appropriately;
- An aim to ensure that all developments provide a high standard of amenity for existing and future occupiers of land and buildings;
- Ensuring that infrastructure and services have the capacity to support development when required.

Mitigation measures may be required to enable required development to occur and manage the impacts of any development proposed on existing infrastructure and nearby sensitive areas. Developments *"should be designed to be sustainable, seek to enhance the environment, have regard to both direct and indirect cumulative impact over the longer term, and provide any necessary mitigating or compensatory measures to address harmful implications."*

Policy S 1a: Presumption in Favour of Sustainable Development builds upon the presumption in favour of sustainable development outlined within NPPF. The Council are committed to taking a *"positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework."* The Council are committed to working with applicants in a pro-active manner to deliver development and investment that offers tangible benefits to economic, social and environmental conditions in the area. Applications that accord with the planning policies contained within the LDP will be approved without delay, unless material considerations indicate otherwise.

Policy S 2: Settlement Hierarchy states that development proposed outwith settlement boundaries of defined settlements will be limited to that which has an essential need to be located in the countryside.

Policy EQ 1: Climate Change states that *"the Council intends to meet part of its future energy needs through renewable or low carbon energy sources and will therefore encourage and support the provision of renewable and low carbon technologies, including stand-alone installations."*

Renewable energy developments must ensure:

- They do not have any adverse impacts on the integrity of protected sites, or the landscape and landscape setting of the Peak District National Park;
- They are supported by a relevant Supporting Statement that includes an assessment of how any impacts on environmental and heritage assets, including cumulative landscape, noise and visual impacts, can be avoided and/or mitigated through consideration of location, scale, design and other measures.

Decentralised energy systems will be supported, particularly those powered by renewable or low carbon sources, and where it can be demonstrated that there is capacity to supply the proposed development.

Policy EQ 2: Landscape Character states that the Council will aim to protect, enhance and restore the landscape character of High Peak by ensuring that development maintains the aesthetic and biodiversity qualities of natural and man-made features within the landscape, ensuring that developments are appropriately informed by the landscape character areas as identified within the Landscape Character Supplementary Planning Document and other factors (including landscape sensitivity, impact and setting of the Peak District National Park). Developments are expected to protect and/or enhance the character, appearance and local distinctiveness of the landscape and landscape setting of the Peak District National Park.

Policy EQ 3: Rural Development advises that the Council will seek to control new development proposed outwith defined settlement boundaries, to ensure that the landscapes intrinsic character and distinctiveness is protected. All development is expected to offer high quality design to protect or enhance landscape character.

Policy EQ 5: Biodiversity states that biodiversity and geological resources will be conserved, and where possible enhanced, by ensuring that development proposals do not cause significant harm to biodiversity and geodiversity interests. Designated sites will be conserved and enhanced, including locally designated sites unless it can be demonstrated that there is no alternative site available, all statutory and regulatory requirements have been satisfied, appropriate conservation and mitigation measures are provided, or if these aims are not possible, the need for and benefit of the development is demonstrated to clearly outweigh the need to safeguard the intrinsic conservation value of the site and compensatory measures are implemented.

Policy EQ 6: Design and Place Making requires all development to be well designed and of a high quality that responds to the environment and climate change, whilst contributing to local distinctiveness and sense of place. Development proposals must positively contribute to an areas character in respect of the scale, height, density materials and appearance of the proposed development.

Policy EQ 7: Built and Historic Environment states that the Council will seek to ensure that all heritage assets are conserved in a manner appropriate to their significance. Development proposals are expected to contribute positively to the character of the built and historic environment, with particular protection given to designated and non-designated heritage assets and their settings.

Policy EQ 8: Green Infrastructure advises that through partnership working, the Council will work to develop, protect and enhance networks of Biodiversity and Green Infrastructure. Measures to achieving improvements in Green Infrastructure include ensuring that development proposals do not have a detrimental effect on the amount or function of existing green infrastructure, unless replacement provision is provided; ensuring that where appropriate development proposals contribute to the creation of new or enhanced green infrastructure; and identifying and protecting key wildlife corridors, access routes linking High Peak settlements to the surrounding countryside and the development of a network of Greenways in accordance with the West Derbyshire and High Peak Gateway Strategy.

Policy EQ 9: Trees, woodland and hedgerows sets out the Councils aim to protect existing trees, woodlands and hedgerows from loss or deterioration, in particular those designated as ancient woodland, veteran trees and ancient or species-rich hedgerow. The Council will require that healthy trees, woodland and hedgerows are retained, unless the benefits of a proposed development clearly outweigh any loss. Developments that cause a direct or indirect impact to existing ancient woodland, veteran trees or species-rich hedgerows will be resisted.

Policy EQ 10: Pollution Control and Unstable Land states that the Council will seek to protect people and the environment from unsafe, unhealthy and polluted environments. Development proposals must ensure that they avoid potentially adverse effects, with consent only granted to development proposals that do result in pollution if any potential adverse effects are mitigated to an acceptable level. Adverse effects arising from air pollution, pollution of watercourses, noise or vibration, light intrusion, land contaminations or other nuisances will be assessed as part of the determination process and adverse impacts will need to be avoided or appropriately mitigated.

Policy EQ 11: Flood Risk Management states that the Council will support development proposals located outwith areas of current or future flood risk and which do not lead to an increased risk of flooding elsewhere.

Policy CF 6: Accessibility and Transport states that the Council will seek to ensure that development can be safely accessed in a sustainable manner. Development proposals are expected to integrate within existing or proposed transport infrastructure, whilst ensuring that they do not increase levels of on-street parking.

4.4 Assessment of the Development

4.4.1 Spatial Strategy and Site Specific Policies

There are no specific policies contained within the LDP related to battery storage installations, such as that proposed by the Development. Under the LDP Proposals Map, the Application Site is designated as 'countryside'.

Whilst there are no specific policies in relation to electricity generating stations such as the Development proposed, it is clear that investment and improvement of the existing generating capacity within the region will support the wider strategic objectives and vision set out within the LDP.

A recent planning appeal decision⁹ involving a battery storage development offers support to battery storage developments proposed for areas outwith urban settlements, such as the Development. The appeal decision confirmed that whilst this type of development was *"not specifically provided for by other policies in the Local Plan"*; significant weight was granted to the *"purpose of the development and the more recent policies with which it would accord."* It was considered that *"planning should support the transition to a low carbon future in a changing climate, and that decisions should recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions."*

In addition, landscape effects arising from the proposed development were not considered to cause any harm to the immediate landscape setting or character, as a result of existing overhead power lines and electricity pylons in close proximity to the site. The inspector concluded that the benefits of the facility outweighed any conflict with local planning policy, owing to the economic, social and environmental contributions made by the proposed development in maintaining stable electricity supplies.

⁹ The Planning Inspectorate (2017). Appeal Decision APP/N1730/W/17/3167123 – Little Holt, Holt Lane, Hook, RG27 9ER. Decision date: 16th of May 2017.

The Development will increase energy capacity within the region and consequently support economic investment, regeneration and growth, whilst contributing to reduction the impacts of climate change as per SO 5. The Development is considered to meet the goals set out within the overriding spatial vision for High Peak, and the principle of the Development is considered to be supported by the LDP.

4.4.2 Landscape and Visual Impact

4.4.2.1 Environmental Context

An independent Landscape and Visual Appraisal (LVA) has been undertaken of the Development, which is submitted in support of the planning application. The key findings of the LVA are summarised below. The LVA described an objective appraisal of the effects of the Development on landscape character and visual amenity taking into account proposed embedded mitigation measures that form part of the Development.

The LVA indicates that the landscape at and around the Application Site is considerably modified such that its key characteristics have less influence on the way the landscape is experienced and the quality of the landscape as a whole. The landscape has been modified by quarrying, road, rail and transmission line infrastructure and by manufacturing plants and warehouses. This prevailing modified character is present at and around the Application Site and indicates that appropriately sited and designed development could be accommodated without substantial adverse effects on landscape character.

The location of the Development within a large triangular field near the A6 on the fringes of Batham Gate beneath a high voltage transmission line is judged to be appropriate, reflecting the pattern of development in this area. Proposed mitigation in keeping with the area and reflecting the existing pattern of tree and hedge growth will reduce effects of the Development after 3-5 years such that adverse effects on landscape character will be limited to a small geographical area.

Effects on the setting of Peak District National Park will be very limited due to the low height, small scale of the Development and prevailing pattern of existing development visible from the eastern edge of the National Park.

Effects on the quality of visual amenity experienced by residents will be limited such that it will not become a dominant focal point in views. Mitigation planting will soften the outline of the Development and screen the taller components after 3-5 years.

Effects on the visual amenity of motorists will be limited due to the transient nature of views and the small scale of the Development.

Effects on recreational receptors will be limited due to the effects of distance and existing screening elements in the landscape.

Overall effects on visual amenity will be limited to a small geographical area and without an overbearing effect on any residential or recreational receptors.

The Development is expected to offer a limited visual impact on overall landscape character and visual amenity, and will create no significant impacts on designated areas including those outlined within Policy EQ 2. The Development will not impact on views from protected features, and is designed to an appropriate scale, particularly with regard to the fencing design and proposed planting.

4.4.3 Ecology and Habitat

There are no internationally, nationally or locally designated ecological sites at or close to the Application Site; a review of the MAGIC website¹⁰ has identified the closest ecologically designated sites to be Waterswallows Quarry Site of Special Scientific Interest (SSSI), approximately 1 km to the south, and the Duchy Quarry SSSI, located approximately 2 km northeast. Given the nature of the Development, and the intervening distances, the Development is not considered likely to impact on ecologically designated sites.

The habitat at the Application Site appears to be grassland used for grazing, with field boundaries provided by stone walls to the south and post and wire fence to the east from which access is taken. A review of aerial photographs and OS maps has not identified any surface water ponds within the Application Site. There will be no tree removal or trees affected by the Development.

The Development will not impact any protected interests, and the Development has been designed to ensure trees and vegetation remain in situ. The Development is not considered to adversely impact any biodiversity interests considered to be of importance, and there will be no adverse impacts arising at designated ecological sites. The Development is therefore considered to fully comply with the LDP, particularly policies EQ 5 and EQ 9.

4.4.4 Historic Environment

4.4.4.1 Environmental Context

A review of the MAGIC website¹¹ identified no archaeological or heritage assets within the Application Site. The absence of known archaeological assets within the Application Site means the potential for unidentified archaeological remains to exist is considered to be low. However, as the Application Site has not been previously developed the potential for undiscovered archaeological remains to be present cannot be discounted. Investigation of such potential could be adequately secured by the imposition of an appropriately worded planning condition, attached to any consent that may be granted.

The only designated heritage assets within 2 km are 8 listed buildings in the north of Buxton. Given the low vertical extent of the Development, intervening distance and intervening screening from topography, buildings and vegetation the potential for significant effects on these heritage assets is considered unlikely.

The closest scheduled monuments are 2.5 km east (two Bowl Barrows on Withery Low) and 3 km southeast (two Bowl Barrows on Bole Hill); given the nature of these features they are elevated in the landscape. However, given the low vertical extent of the Development and intervening distances the potential for significant effects on these heritage assets is considered unlikely.

Given the limited vertical extent of the Development, its small footprint, and its setting, impacts occurring at heritage assets as a result of the Development are considered unlikely. Additionally existing vegetation and landform is expected to offer a degree of screening of any views of the Application Site.

The potential for heritage assets to exist in site is considered limited, however best practice will be employed should the Development be permitted to manage any unknown archaeological features that may exist on-site.

As such the Development is considered to fully comply with the LDP, including policy EQ 7.

¹⁰ <http://www.natureonthemap.naturalengland.org.uk/>

¹¹ <http://www.natureonthemap.naturalengland.org.uk/>

4.4.5 Noise

The closest properties are located along the western side of the A6 (circa 5 properties) and on either side of Batham Gate Road (circa 5 properties). The properties are within 60 m of the Application Site to the east and 90 m to the west. Beyond these there are further isolated properties and small settlements.

The Application Site is located adjacent to the A6, close to the junction with Batham Gate Road. There is also a high voltage overhead electricity transmission line which passes close to the Application Site. These features will result in an elevated background noise environment, when compared to other open countryside locations, which reduces the sensitivity of the receiving environment to the Development.

Construction of the Development would be undertaken in accordance with best practice and any effects would be short term. Once operational the principal noise source would be the radiators and air conditioning units. Further noise attenuation will be provided in the form of existing vegetation, landform and proposed planting, which would all act to further reduce any noise immissions at receptors.

It is considered that potential noise effects of the Development will be fully assessed during the determination process to ensure that the Development introduces no unacceptable noise impacts on nearby receptors. The elevated background noise currently present at the Application Site, together with the limited introduction of new noise sources, is likely to mean that there is limited ability for any noise receptors to receive a significant change in noise levels as a result of the Development, and where possibly appropriate mitigation will be deployed to ensure that no significant changes to the baseline noise level occur at receptors.

As a result the Development is not expected to result in a significant shift from the existing baseline noise levels currently present at nearby receptors, and is considered to fully comply with the LDP, including policy EQ 10.

4.4.6 Hydrology and Flood Risk

There are no surface water courses or features within the Application Site or immediate vicinity; the closest is a stream located approximately 300m west.

The Application Site is located in Flood Zone 1, as designated by the Environment Agency¹²; this is the lowest flood risk zone (less than 1 in 1,000 annual probability, <0.1%). As the planning application boundary for the Development does not exceed 1 ha a flood risk assessment is not required for the planning application.

It is noted that the Application Site is gently sloping with elevations of approximately 353 m AOD in the northwest and 347 m AOD in the southeast.

The Development would not impact on the integrity and water quality of existing aquatic ecosystems at the Application Site or elsewhere in the vicinity of the Application Site. Furthermore the Development is not located within a flood plain or an area at risk from flooding, and the Development will not increase flood risk elsewhere. As such, the Development is considered to comply with the LDP, including policy EQ 11.

4.4.7 Coal Mining Risk

Much of High Peak District has been subject to historical coal mining. A review of the hazard risk map¹³ confirms that the Application Site is outside of both high and low risk

¹² <http://maps.environment-agency.gov.uk/wiyby/wiybyController?x=406500.0&y=373500.0&topic=floodmap&ep=map&scale=11&location=Buxton,%20Derbyshire&lang=en&layerGroups=default&distance=&textonly=off#x=407521&y=375379&lg=1,2,10,&scale=9>

¹³

www.gov.uk/government/uploads/system/uploads/attachment_data/file/531443/2016_High_Peak_District_B_Development_Ri

areas, and as such does not require a coal mining risk assessment to be submitted with the planning application.

4.4.8 Access, Transport and Traffic

4.4.8.1 Environmental Context

A new access will be formed to reach the Application Site off Batham Gate, the minor road to the east of the Application Site. The new access track will be formed using crushed stone with the design of the new access point to be agreed with the Highways Authority.

The main impacts arising from access, transport and traffic would be during the construction period. The Application Site is readily accessible from the highway network by way of the A6 and Batham Gate Road, which readily connect to the wider highway network.

The Development would generate the following vehicle movements over the entire construction period. The typically generated movements (to and from the Site) are as follows:

- Delivery of Batteries, Battery Racks and Battery Containers – 75 HGVs
- Delivery of Inverters – 24 HGVs
- Delivery of Transformers – 16 HGVs
- Delivery of Loadbanks – 16 HGVs
- Delivery of customer substation/ DNO substation and communication room – 18 HGVs
- Concrete and aggregate deliveries – 160 lorries
- Hi-ab/ concrete pump deliveries – 84 movements
- Crane 60t – 20 movements

No abnormal loads movements would be required although a crane, with a handling capacity of 60 tonnes, will be required to be delivered to site.

The operational phase of the Development would generate an extremely low number of vehicle movements, predicted to be less than 2 per month, related to intermittent maintenance visits. These vehicles would also be 4x4's or vans and would not be HGVs.

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The local road network can readily accept this level of traffic without highways safety or capacity issues.

The decommissioning phase will generate slightly higher volumes than the construction phase, as materials cannot be as concisely moved as when during construction. Nevertheless, the local road network can readily accept this level of traffic without highways safety or capacity issues.

The Development would not adversely affect the existing transport network or outdoor access routes, with any increase in traffic volumes as a result of the Development being contained to limited periods during the construction period. Furthermore the Development is considered accessible in a safe and sustainable manner. The Development is therefore considered to fully comply with the LDP, including policy CF 6.

4.4.9 Public Rights of Way

There are no public rights of way on the Application Site; the closest footpath is located approximately 750 m southeast, linking Longridge Lane and Waterswallows Road. The footpath passes through very open areas with extensive views. However, it is likely that the large Nestle/ Buxton Water facility would obscure views of the Development from the footpath. Given the low vertical extent of the Development, and intervening distance and screening, impacts on users of the footpath are not considered likely to be significant.

The Development will not result in any significant detrimental impacts on outdoor access, including interests associated with promoting Green Infrastructure, and is therefore considered to fully comply with LDP Policy EQ 8.

4.4.10 Agricultural Land Classification

The Application Site is categorised as Grade 4 agricultural land. Given this, and the small footprint of the Development, no significant impacts on agricultural land are anticipated.

4.4.11 Existing Infrastructure

4.4.11.1 Environmental Context

The closest high voltage (132kV) overhead electricity transmission lines pass approximately 50 m southwest of the Application Site.

A Linesearchbeforeudig search¹⁴ was undertaken which confirmed that one of their registered asset owners (Western Power Distribution) has infrastructure at or in the vicinity of the Application Site. Further correspondence from WPD provided mapping which covered the Application Site and did not identify any of their infrastructure within the Application Site; the closest was a 33kV overhead transmission line approximately 430 m south.

Given that there is no existing infrastructure on site and the Development is not anticipated to cause any unacceptable implications to existing infrastructure, the Development is considered to comply with the LDP in respect of existing infrastructure.

¹⁴ Online search undertaken on 17/05/2017

5 RELEVANT MATERIAL CONSIDERATIONS

The need for the Development has been detailed in Section 1.4 and through the Capacity Market the government has set up a framework for the delivery of projects such as the one proposed. There is a clear requirement to balance the peaks and troughs associated with electricity supply and demand to manage the strain on distribution networks and ensure there are no power blackouts. This is particularly important as coal generating plants get decommissioned and given the time it takes to develop new nuclear generation. There has been strong support for renewable energy generation, such as onshore wind and solar which is inherently intermittent. The Development is designed to smooth over the troughs in electricity supply, being able to respond at short notice to requests from National Grid to generate, such as periods when renewable sources are not generating or fossil fuel plants are unexpectedly offline.

5.1 Energy Storage Drivers

There is a focus at International, European and national level on how the UK can deliver secure, clean and affordable electricity to consumers. The UK is legally bound through the Climate Change Act (2008) to reduce carbon emissions and through Renewable Energy Directive 2009/28/EC to increase electricity consumption from renewable resources. Energy storage facilities, such as the Development, will play an important role in achieving this.

Users of the UK electricity system have historically been:

- Generators (producers of electricity);
- Consumers (users of electricity); or
- Interconnectors (transfer electricity between the UK system and other countries).

Energy storage does not fit within the three categories above. It imports electricity, stores it for a period of time, and then exports it.

Following on from a number of successful trials and demonstration projects, advances in the technology and reductions in the cost of batteries have seen battery storage projects become viable in the UK. There are a number of benefits of battery storage which deliver an overarching purpose of increasing grid stability and providing a secure supply of electricity. Energy storage does not receive or require consumer subsidies to make projects economically viable.

The need for the Development has been detailed in Section 1.4 and through the Capacity Market the government has set up a framework for the delivery of projects such as the one proposed. There is a clear requirement to balance the peaks and troughs associated with electricity supply and demand to manage the strain on distribution networks and ensure there are no power blackouts. This is particularly important as coal generating plants get decommissioned and given the time it takes to develop new nuclear generation. There has been strong support for renewable energy generation, such as onshore wind and solar, which is inherently intermittent. The Development is designed to smooth over the troughs in electricity supply, being able to respond at short notice to requests from National Grid to generate, such as periods when renewable sources are not generating or fossil fuel plants are unexpectedly offline.

The use of energy storage can avoid costly grid infrastructure upgrades or reinforcement works. It was reported in the Committee on Climate Change Report¹⁵ that significant cost savings for consumers will be delivered by the deployment of energy storage.

A report by the National Infrastructure Commission¹⁶ (in 2016) estimates that smart power systems in the UK, which include energy storage *"could save consumers up to*

¹⁵ <https://www.theccc.org.uk/publication/reducing-emissions-and-preparing-for-climate-change-2015-progress-report-to-parliament/>

£8billion a year by 2030, help the UK meet its 2050 carbon targets and secure the UK's energy supply for generations."

Another report produced for the Committee on Climate Change¹⁷ in 2015 finds that technologies which provide flexible solutions, such as energy storage, *"will be essential for managing the costs associated with integrating low carbon plant onto the power system and achieving high levels of decarbonisation."*

5.2 National Planning Policy Framework

The National Planning Policy Framework (NPPF) recognises that the purpose of the planning system is to contribute to achieving sustainable development (economic, social and environmental).

Paragraph 17 sets out a number of core land use planning principles. Of particular relevance to the Development are:

- *"proactively drive and support sustainable economic development to deliver the [...] infrastructure that the country needs.*
- *support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change, and encourage the reuse of existing resources, including conversion of existing buildings, and encourage the use of renewable resources (for example, by the development of renewable energy)."*

Section 10 of the NPPF, 'Meeting the challenge of climate change, flooding and coastal change', recognises that planning plays a key role in helping to shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure. This is considered central to the economic, social and environmental dimensions of sustainable development (para 93).

Paragraph 97 states that to help increase the use and supply of renewable and low carbon energy, local planning authorities should recognise the responsibility on all communities to contribute to energy generation from renewable or low carbon sources, which involves having a positive strategy to promote energy from renewable and low carbon sources.

In addition, paragraph 98 specifies that when determining planning applications local planning authorities should recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and should approve the application if its impacts are (or can be made) acceptable.

5.3 Assessment of Relevant Material Considerations

The material considerations are considered to provide weight in favour of the Development.

The NPPF is clear that the planning system has a fundamental role in ensuring that Government objectives for energy and climate change policy are fulfilled. The effects from the Development are modest and are clearly outweighed by the benefits of the Development, which will make a valid contribution to a varied, localised grid infrastructure network.

¹⁶ <https://www.gov.uk/government/publications/smart-power-a-national-infrastructure-commission-report>

¹⁷ <https://www.theccc.org.uk/publication/system-integration-costs-for-alternative-low-carbon-generation-technologies-policy-implications/>

6 CONCLUSIONS

There is a clear requirement to balance the peaks and troughs associated with electricity supply and demand to manage the strain on transmission and distribution networks and ensure there are no power blackouts. The Development is designed to smooth over the troughs in electricity supply caused by intermittent generation such as that from wind and solar, providing a critical service to the grid by being able to respond at short notice to requests from National Grid to generate electricity.

Considerable care has been taken in both the location and design of the Development. It is sited on vacant agricultural land off the A6 and Batham Gate Road, in close proximity to the primary substation off Waterswallows Lane and other industrial uses (high voltage electricity pylons and transmission lines and large Nestle/ Buxton Water facility). The design of the Development avoids unacceptable environmental and amenity effects, whilst ensuring that the Development can make a contribution to embedded generation and a more stable grid network. The Application Site will be well screened by existing vegetation and proposed planting.

The Development has been considered against all the relevant Development Plan policies set out in the Local Plan. The Application Site represents the best option for the Buxton area, helping to improve the security of electricity supply for local residents and businesses. The potential minor landscape and visual impacts are clearly outweighed by other considerations in this case, including employment and economic benefits and substantial benefit to the local electricity grid network, such that circumstances exist to enable the Development to proceed.

The Development does not lie in a national landscape designation, but is located approximately 1.5 km east of the Peak District National Park. The landscape and visual effects have been appraised in an independent Landscape and Visual Appraisal. Any effects on local landscape character and visual amenity would be localised and modest. Any effects would be further reduced by planting proposed as part of the Development.

The Development is also considered acceptable with regards to ecology and habitat; the historic environment; hydrology and flood risk; coal mining risk; noise; and access, transport and traffic. The Development is considered to accord with Development Plan policies which concern these environmental and amenity matters, particularly considering the fact the Development will provide a back-up supply of electricity.

It is integral to planning decision-making that a balancing exercise has to occur in respect of considering the benefits of development against the impacts. In this case, there are clear benefits which arise from the energy generation credentials of the Development which clearly outweigh the modest impacts.

The material considerations, principally the NPPF, also weigh in favour of the Development. The UK is legally bound through the Climate Change Act (2008) to reduce carbon emissions and through Renewable Energy Directive 2009/28/EC to increase electricity consumption from renewable resources. The connection of such intermittent generation to the distribution network can introduce significant strain on the network which the Development can offset by responding rapidly to short term supply requirements from National Grid. The Development would contribute towards meeting these requirements, and would also be fully supported by energy policy because it would contribute to increased domestic energy security, assist in replacing outdated energy infrastructure and provide decentralised or embedded generation.

Taking into account all policies relevant to the Development, and material considerations, the Development is in compliance with these policies and considerations, and planning permission should therefore be granted. It is therefore respectfully requested that the Council approve this planning application.

APPENDIX 1

Site Photographs (of Application Site and surrounding area)



Plate 1: View southwest from junction of Batham Road and Longridge Lane to Batham Gate.



Plate 2: View southeast from junction of Batham Road and A6 to the substation and Buxton Water Bottling Plant.



Plate 3: View looking southwest from Longridge Lane to the Buxton Water Bottling Plant.



Plate 4: View east from the trig point on Black Edge in the Peak District National Park with Tunstead Quarry and Buxton Water Bottling Plant visible.