Report No. SRE1144/PDAS
Date: October 2022

PLANNING, DESIGN AND ACCESS STATEMENT
PROPOSED BATTERY ENERGY STORAGE SYSTEM

CELLARHEAD SUBSTATION | WETLEY ROCKS

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1. INTRODUCTION

1.1 FOREWORD

1.1.1 In October 2021, the UK Government launched Its Net Zero Strategy: Build Back Greener which includes the target for decarbonising the electricity grid by 2035. To deliver the strategy, overall electricity demand is expected to Increase 40-60% by 2035, all met from low carbon sources.

1.1.2 As we move forward and aim to achieve a carbon neutral economy and mitigate the risks and effects of climate change, cleaner and more sustainable methods of power generation are being brought online which are intermittent in character (e.g wind and solar PV) and place certain demands on the electricity grid due to fluctuations in power generation and demand.

1.1.3 The National Grid experiences a large fluctuation of demand throughout the day and throughout different times of the year. During periods of high demand the National Grid aim to increase supply to maintain a 20% supply margin which is essential in eliminating, as far as possible, the risk of power shortages and blackouts, when there is an unexpected change in demand, or a sudden loss of supply. Historically, conventional power stations could be operated with some certainty. However as the UK moves towards a more environmentally sustainable energy supply system, with an increase in renewable energy sources, there is an increased risk of electricity supply fluctuations, depending on prevailing weather conditions, and therefore an increased need for facilities to store energy, in order to try and match the supply to the demand. Such storage facilities include Battery Energy Storage Systems (BESS).

1.1.4 BESS do not emit Carbon Dioxide or generate electricity but provide a balancing mechanism drawing electricity (charging) when levels on the Network are above that of demand. When levels of electricity on the grid are below that of demand the electricity stored in the batteries can be fed back (discharged) onto the network to meet the demand so that there is no loss of power to end users. Smooth grid operation relies on the provision of rapid reactive power services either by generation or dedicated facilities to enable frequency stabilisation. BESS provides sub-second response times, so offer a reliable solution to a number of the Grid's balancing issues thus supporting the development and deployment of low carbon intermittent energy technologies upon which society must increasingly rely on to satisfy its energy requirements.

1.1.5 Sirius Renewable Energy Limited seeks to support the increase in renewable energy generation and its transition to a lower carbon energy supply system through developing a BESS on the site.

1.2 PURPOSE OF THIS STATEMENT

1.2.1 This Planning Statement, incorporating a Design and Access Statement, has been prepared by Sirius Planning on behalf of Sirius Renewable Energy, in support of a planning application for a battery energy storage system (up to 280MVA export capacity) at Cellarhead, Rownall Road, Wetley Rocks.

1.2.2 Sirius Renewable Energy Limited seeks to support the increase in renewable energy generation and its transition to a lower carbon energy supply system through developing a BESS on land directly opposite to the existing Cellarhead Substation.

1.3 THE APPLICANT

1.3.1 The applicant, Sirius Renewable Energy is developing an expanding portfolio of low carbon energy projects throughout the UK, including solar, wind and battery energy storage systems.

1.4 OUTLINE DESCRIPTION OF THE SITE AND PROPOSAL

1.4.1 It is proposed to construct a battery energy storage system across 5.4ha of farmland adjacent to the eastern boundary of the existing substation Cellarhead. The application site is located approximately 1.5km to the west of the village Wetley Rocks.

1.4.2 There are no ecological or historical statutory designations within the application site or within close proximity to the site.

1.4.3 The BESS and associated infrastructure at Cellarhead will have a maximum export capacity of 280MVA. The proposed development will comprise of up to 112 no. battery container units and 56 transformers and feed pillars, together with internal access roads, perimeter fencing, acoustic fencing and associated infrastructure and equipment. The proposed development will connect into the point of connection located within the adjacent Cellarhead substation compound via underground cabling.

1.5 BACKGROUND

1.5.1 This application is a revised version of application SMD/2022/0047 which was refused by way of a decision notice dated 21st June 2022. The application was considered at Committee on 16th June 2022 where members expressed support for the principle of the development and concluded that the Very Special Circumstances to justify development in the Green Belt had been demonstrated. However, members suggested that the scheme could be improved through the provision of bunding around the perimeter of the site which could help to screen views across the site.

1.5.2 The revised proposal now submitted for consideration seeks to address the comments made by Committee members and incorporates bunding around the northern, eastern and southern boundaries of the BESS compound. As a result of the bunding the internal layout has been reconfigured.

1.5.3 The bund is to be mainly 3m high with one section 4m high along the western part of the southern boundary. The addition of the bund means that no part of the proposed equipment will be visible above the top of the bund, as Illustrated by the updated photomontages. The bund will be planted up to assist in blending the facility into the surroundings and enhancing local biodiversity.

1.5.4 Due to the acoustic screening properties of the proposed bunding this has reduced the requirement for an extensive acoustic screen, with the revised proposal now only requiring two short sections of acoustic fencing within the BESS compound.

1.5.5 Details of the substation have been provided and this is to be sunken into the ground; a request made by members.

1.5.6 In comparison to the original submission, the revised version includes tree planting alongside the eastern edge of the proposed access road to help screen views.

1.6 PRE-APPLICATION ADVICE

1.6.1 Prior to this original planning application being submitted, pre-application advice was sought from Staffordshire Moorlands District Council regarding the key issues of the proposal. The pre-application advice (ref. PAD/2021/0038) was issued on 21st July 2021 and is presented in Appendix A.

1.6.2 In summary, the pre-application response identified that the scheme would need to demonstrate Very Special Circumstances sufficient to justify development in the Green Belt, which may include the specific locational requirements of the development in conjunction with the need for the development.

1.7 REQUEST FOR A SCREENING OPINION

1.7.1 Prior to the planning application being submitted, an EIA screening request was made to the Local Planning Authority. The EIA screening opinion, presented in Appendix B, was issued by Staffordshire Moorlands District Council on 25th August 2021. The screening opinion confirmed that the proposal is non-EIA development and therefore no Environmental Statement will be provided as part of this planning application.

1.8 PLANNING, DESIGN AND ACCESS STATEMENT STRUCTURE

1.8.1 This Planning Statement has been organised into the following chapters:

- The Site and Surroundings;
- The Proposed Development and Design;
- Environmental Considerations;

- Planning Policy and Material Considerations; and
- Summary and Conclusions.

1.8.2 Accompanying the Planning, Design and Access Statement are numerous Drawings and Appendices.

2. THE SITE AND SURROUNDINGS

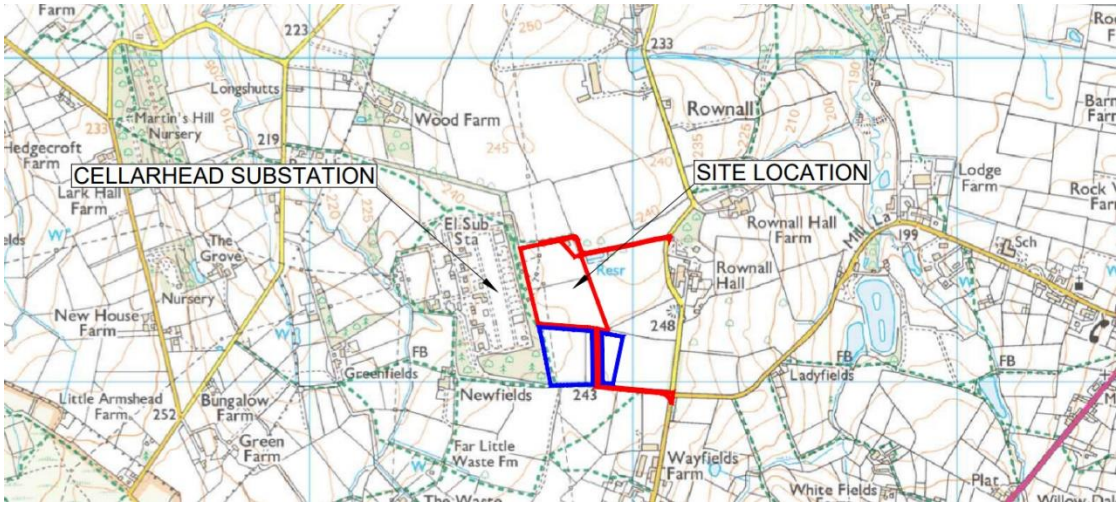
2.1 INTRODUCTION

2.1.1 This chapter provides a description of the application site in terms of location, history, and surrounding land uses.

2.2 LOCATION

2.2.1 The application site is located adjacent to the Cellarhead Substation off Rownall Road, Wetley Rocks. The site is located approximately 1.5km to the west of the village Wetley Rocks and approximately 1.2km north of the village of Werrington. The site location is illustrated on drawing SRE1144/03/01 and Figure 2.1 below.

Figure 2.1 – Site Location



2.3 SITE AND SURROUNDINGS

2.3.1 The site comprises an area of relatively flat agricultural fields totalling circa 5.4Ha immediately to the east of and adjacent to the Western Power Distribution and National Grid Cellarhead Sub-Station which itself extends to c.10Ha as defined on the attached location plan. Additional off-site land is to be utilised to the south west of the proposal site to deliver biodiversity gains.

2.3.2 Cellarhead substation was initially commissioned in 1963. The ownership of the 132kV elements of the substation is shared between National Grid and Western Power Distribution. SP Energy Networks own an interconnector circuit within the substation site which provides a strategically important Super Grid infeed to Crew Grid 132kV substation which Is located to the north west of Crewe. The SP Energy Networks circuit at Cellarhead GSP secures supply to 78,263 industrial, commercial, domestic load, and generation customers in the Crewe area of Cheshire East and in the Whitchurch area.

2.3.3 The proposal site is set within a rural context surrounded by agricultural land to the north, east and south. There are two high voltage overhead electricity pylons located in the western half of the main body of the site. To the north of the site is a track which is separated from the site by a hedgerow and several trees and to the north east of the site is a collection of agricultural barns. To the east is agricultural land. To the west of the site is a narrow belt of trees, beyond which is the National Grid Cellarhead Sub-station.

2.3.4 To the south of the main body of the site is a hedgerow and a number of trees. The proposed access is located to the south eastern corner of the main body of the site and this extends in a south easterly direction through agricultural fields before joining the existing access to Cellarhead Sub-Station which runs in a north west/south east direction, where it meets with Rownall Road to the east.

2.4 SITE ACCESS

2.4.1 The site is currently accessed via a private track from the north. It is proposed that the BESS development will be accessed from the south via the existing substation access road and a new access track to the south, this will be utilised during the construction phases and for routine maintenance checks once operational. In addition, a secondary access is to be utilised during the operational phase by the DNO (District Network Operator) who will have access to the substation compound to the north eastern corner of the site.

2.5 IDENTIFIED RECEPTORS AND DESIGNATIONS

2.5.1 The nearest residential receptor to the application site is within a cluster of four properties and a farmstead, located approximately 260m to the east of the site. The benign nature of the proposal and existing vegetation screening (which will be screened further with additional landscaping to the north, east and south) means there is limited opportunity to create significant environmental effects on identified receptors.

2.5.2 There are no ecological designations within the site or within close proximity to the site, the nearest statutory ecological designation is Wetley Moor SSSI which is located approximately 1.5km to the south east of the site. The nearest non-statutory ecological designation is located approximately 3.8km to the south east of the site.

2.5.3 The application site does not lie with any historic statutory designations. The nearest Listed building is 350m to the east (Grade II Stables to Rownall Hall). There are a collection of listed buildings in Rownall including 'Barn approximately 10 metres south of Rownall' which is Grade II listed, 'Rownall Farmhouse' (Grade II), 'Barn and Stables to the South West of Ivy Farmhouse' (Grade II) and 'Ivy House Farmhouse' (Grade II) all of which are located approximately 680m to the north east of the site.

2.5.4 Environment Agency Flood Risk Maps advise that the site is located within Flood Zone 1 and so has a low risk of flooding. All types of development are deemed appropriate in Flood Zone 1 from a flood risk perspective.

2.5.5 There are three public rights of way within close proximity to the application site. These run to the north, west and south of the site. There are three pylons sited in the north western corner of the site and an overhead powerline that runs across part of the site, from the south western corner, running broadly parallel with the western boundary of the site before passing through the northern boundary where It continues northwards.

2.6 SITE HISTORY

2.6.1 A review of the planning application search facility on Staffordshire Moorlands District Council's website identifies no planning applications relating to the site.

2.6.2 As noted earlier, a Screening Request was previously submitted to Staffordshire Moorlands District Council. Staffordshire Moorlands District Council issued a Screening Opinion on 25th August 2021 which advised that the proposal is non-EIA development.

2.6.3 We are aware of a planning application for a similar scheme on land to the north east which is currently pending a decision (at the time of writing). The application reference is SMD/2022/0444 and this represents a revised application (having originally being considered under application reference SMD/2021/0695) and the description of development is noted as 'Erection of a Flexible Energy Facility'.

3. THE PROPOSED DEVELOPMENT AND DESIGN

3.1 INTRODUCTION

3.1.1 Sirius Renewable Energy is seeking planning permission to construct and operate a 280MVA battery energy storage system on land adjacent to the existing Cellarhead Substation, located approximately 1.5km to the west of the village Wetley Rocks.

3.2 PROPOSED LAYOUT

3.2.1 The proposed development will comprise of the following:

- Up to 112 no. Battery Container Units;
- Up to 112 inverters and 56 transformers arranged in a 'U' formation located adjacent to each container;
- Developer and Distribution Network Operator (DNO) substation compound and associated cabins including a switchgear/meter room;
- 2 no. Spare Storage Cabins;
- Underground cable to the point of connection with the local distribution network;
- Perimeter fencing 2.4m high and inward facing infra-red CCTV; and
- Internal service road and vehicle turning area.

3.2.2 The point of connection is to the west, within the Cellarhead substation compound. The BESS will connect into this via underground cabling.

3.2.3 The proposed layout provided in figure 3.1 below and drawing SRE1144/03/03, shows the associated infrastructure with the proposed BESS development.

Figure 3.1 – Indicative Site Layout

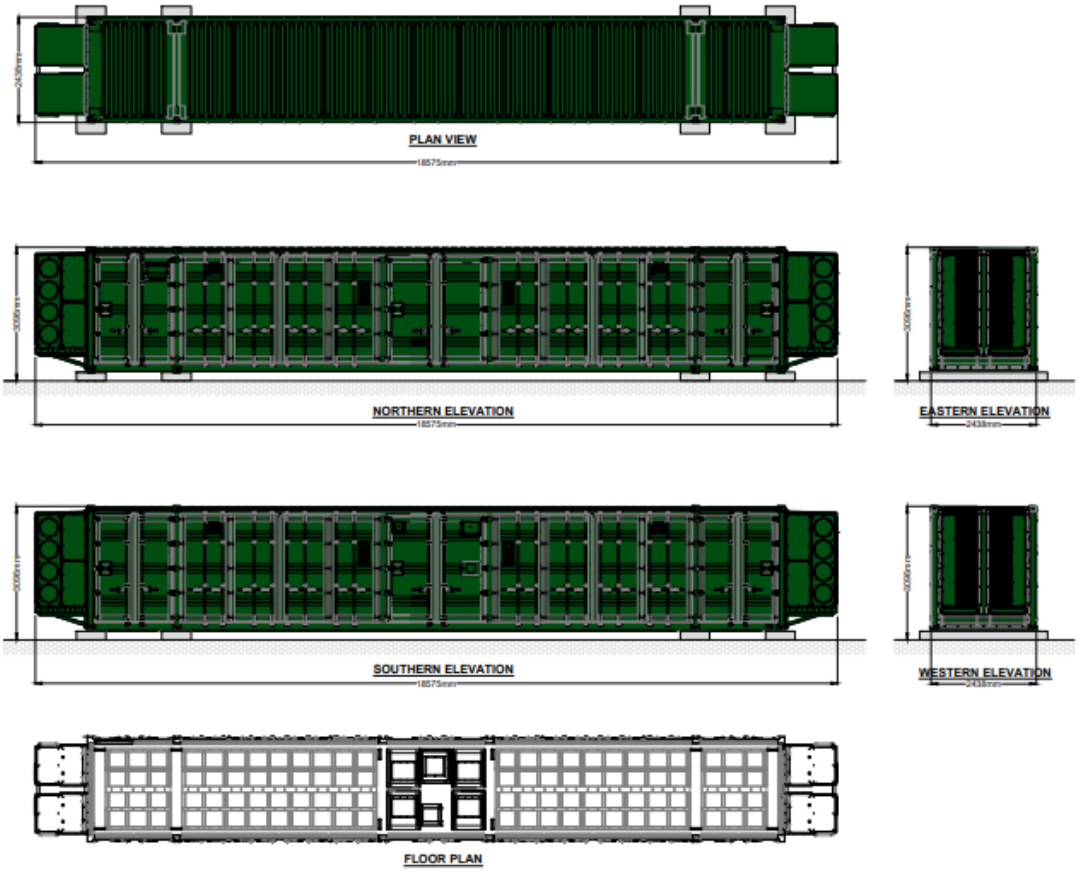
3.3 USE

3.3.1 National Grid owns and operates the national electricity network. They are obliged to ensure that the electricity supply system runs within specified limits. Many factors change these operating conditions, but none more so than the balance between the electricity being demanded by customers connected to the national network and the electricity generators available to produce the electricity they require.

3.3.2 The proposed development is for the installation and operation of a battery storage facility with capacity to store and export up to 280MVA of electricity to the local distribution network for up to two hours. The facility will provide balancing services to National Grid to ensure the future security of the country's electricity supply. The facility will provide power to the local distribution network in a short space of time when demand is greater than available supply.

3.3.3 The proposed development will consist of up to 112 battery container units and 56 transformers. Each battery container will accommodate 2.6MW of capacity. Indicative elevations of the containers are presented in figure 3.2 below and drawing SRE1144/03/10. The transformer elevations are presented in drawing SRE1144/03/11.

Figure 3.2 – Battery Container Elevations



3.3.4 The batteries will operate whenever called upon by the National Grid. But as electrical demand is greatest in the morning and early evening this is when the facility is most likely to be delivering power to the grid.

3.4 SCALE

3.4.1 The proposed battery storage energy system is located on approximately 5.4ha of farmland directly to

the east of the existing Cellarhead Substation. The largest structures on site will be the battery container units measuring 12.15m long, 2.43m wide and 2.89m high, drawing SRE1144/03/10 provides elevation of the battery containers.

3.4.2 The containers have two externally mounted air cooling units at either end. The cooling units are c.1.27m deep each which add an additional 2.54m on to the length of the containers. The total length of each container with the air cooling units installed is 14.69m.

3.4.3 Other proposed equipment includes the transformers, inverters, switch room and storage containers which will measure no higher than 4.045m. Drawings SRE1144/03/08, SRE1144/03/09, SRE1144/03/10, and SRE1144/03/11 provide details on all the proposed equipment.

3.4.4 The switch room and battery containers are to be painted in a dark green colour to help assimilate the development into the landscape.

3.4.5 The scale of the proposed facility reflects a number of factors including the capacity of the facility and the location of the existing substation directly to the west of the proposed site and of sensitive receptors. Following appraisals of various environmental and technical assessments, it was considered that the site and the proposed infrastructure would be of a suitable scale.

3.5 AMOUNT

3.5.1 The proposed BESS development will comprise of up to 112 no. containerised battery unit sets providing up to 280MVA export capacity and 51 no. transformers are also proposed as part of the BESS development.

3.5.2 As part of the proposal, a 2.4m high perimeter fencing and inward facing infra-red CCTV will be included for security reasons. A 3m high acoustic fence is to be installed in two short sections within the BESS compound.

3.5.3 The construction of the battery storage facility is expected to take 9 months to complete.

3.6 LANDSCAPING AND BIODIVERSITY

3.6.1 The proposal involves an extensive scheme of landscaping and biodiversity enhancements. Together these works form an integral part of the scheme and are shown on the Landscape Mitigation Plan. In summary the enhancements include:

- A block of woodland planting along the eastern boundary with some larger specimen species;
- Filling in gaps in hedgerows and planting new hedgerow trees;
- An area of grassland beneath the existing pylons to be harrowed and re-seeded with green hay methods;
- Creation of an infiltration basin in the north western corner of the site and two drainage swales adjacent to the site access planted with an appropriate wetland seed mixture; and
- Planting up the bunds.

3.6.2 In addition to the on-site landscaping and ecological enhancement works, an area of land off-site is to be utilised. This will be planted with additional native hedgerows, trees and the grassland managed and improved to enhance its ecological value. These works will deliver a net gain in biodiversity.

3.7 ACCESS

3.7.1 The site will be accessed via the existing Cellarhead Substation access road which runs to the south of the site. It is proposed to construct a new access to the application site from the substation road to the south of the main body of the site, as shown on drawing SRE1144/03/03 and SRE1144/03/05 and SRE1144/03/15.

3.7.2 The proposed access from will allow for the majority of vehicles associated with the construction and maintenance phases to avoid passing and potentially impacting the few farmsteads and residential

receptors to the east of the application site.

3.7.3 The proposed access will serve the site during the construction phase and will provide on-going access during the operational phase for maintenance purposes. Once operational, the facility will be unmanned, but traffic generation will be for occasional maintenance and inspections.

3.7.4 Access to the site will be invitation only.

3.7.5 In addition, a secondary access is to be utilised during the operational phase by the DNO (District Network Operator) who will have access to the substation compound to the north eastern corner of the site.

3.7.6 The application is accompanied by a Transport Statement and Outline Construction Environmental Management Plan (CEMP).

4. ENVIRONMENTAL CONSIDERATIONS AND SITE SELECTION

4.1 INTRODUCTION

4.1.1 This section sets out the site selection process and environmental assessments that have been undertaken in support of the planning application. Where necessary they have also informed the design and management of the proposed battery energy storage system. Several environmental topics areas have not been considered in detail; this section provides a justification for this.

4.2 SITE SELECTION

4.2.1 The application site was selected through an extensive site search exercise. The applicant reviewed a number of sites to assess the potential for the development of a BESS project. A range of technical, environmental and economic factors are considered when assessing a site for battery storage development. Key factors for consideration include:

- Availability and proximity of the local distribution network (grid);
- Proximity to sensitive receptors;
- Topography;
- Site size and shape;
- Development Plan Policy;
- Access to the site for construction/decommissioning traffic;
- Agricultural land quality;
- Landscape sensitivity and visual impact amenity;
- Nature conservation and potential for enhancement;
- Flood risk; and
- Land availability.

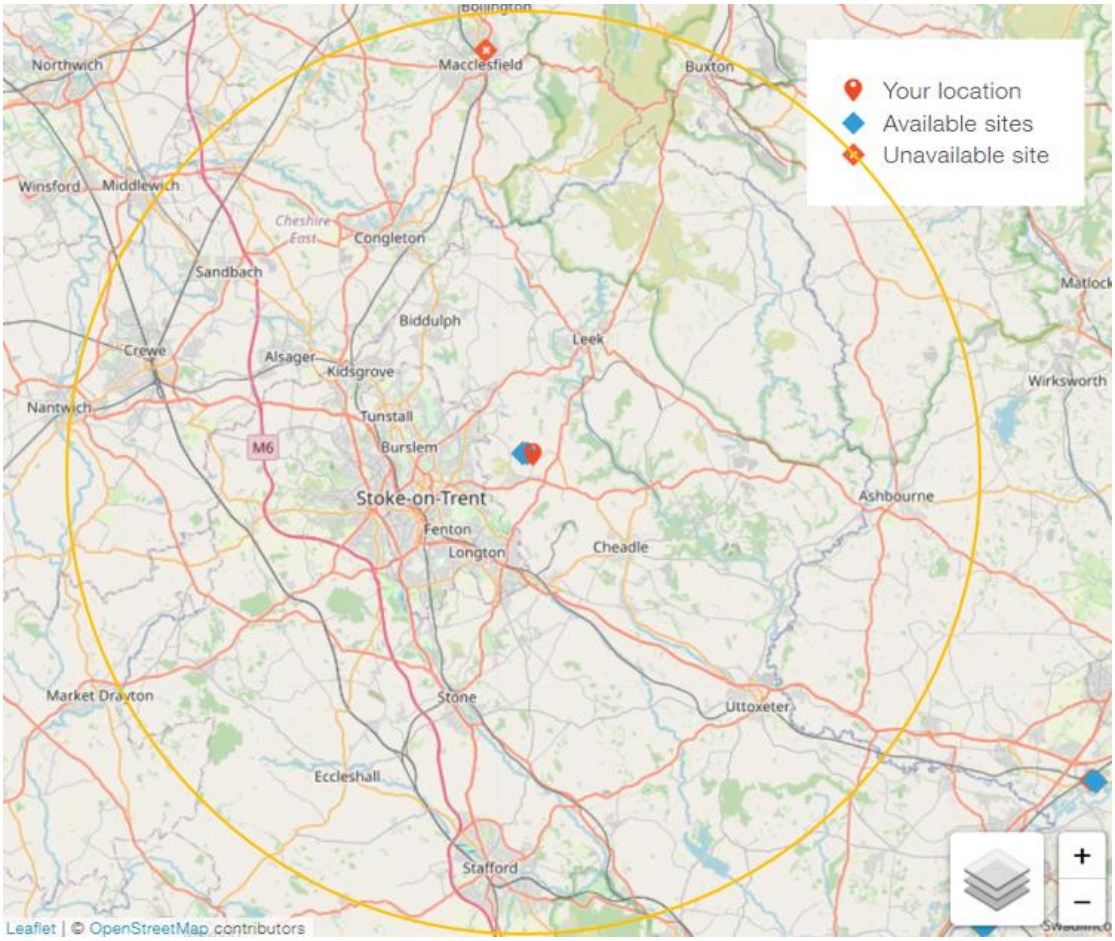
Availability and Proximity to Distribution Network

4.2.2 An important aspect of battery energy storage system development is having access to the local distribution network, or 'grid'. Smooth grid operation relies on the provision of rapid reactive power services either by generation or dedicated facilities to enable frequency stabilisation. BESS provides sub-second response times, so offer a reliable solution to a number of the Grid's balancing issues thus supporting the development and deployment of low carbon intermittent energy technologies upon which society must increasingly rely on to satisfy its energy requirements.

4.2.3 As part of the grid application process the distribution network operator provides a point of connection on the network or grid where the power can be supplied to, stored and distributed from the BESS. These points of connection are limited in number and capacity, meaning that there are only a relatively small number of locations throughout the UK where a development of this nature is able to connect, thus the availability of a viable grid connection point is paramount to the identification of potential development sites. It is important that the BESS is not far from the point of connection on the network. This is principally because long cables introduce voltage drops and unwanted energy losses which cause further difficulties for the distribution network operators and also due to the excessive costs of the cable and the trenching works, and easement requirements... For these reasons a location immediately adjacent to the sub-station and point of connection would be considered optimum from a technical perspective.

4.2.4 National Grid's ConnectNow online tool advises of the available capacity at all substations in the UK. Cellarhead substation has sufficient import and export facility to accommodate the proposed BESS. Figure 4.1 below shows a summary of the results for all Grid Supply Points (GSP's) within a 30km radius of Cellarhead Substation.

Figure 4.1 - National Grid Summary of Capacity at Nearest GSP's (30km radius circled)



4.2.5 Within a 30km radius of Cellarhead Substation there is one other substation (Macclesfield - 400kV) which is noted as being unavailable to accommodate the proposed capacity. Subsequently, it is concluded that there are no other GSPs with any available demand headroom. This illustrates that Cellarhead is an essential location for a storage facility.

4.2.6 The maximum feasible distance to a point of connection is 1km. Beyond this distance the cost of cabling and practicalities associated with crossing third party land would render a project unviable. There are no locations within a viable connection distance i.e 1km of Cellarhead substation which are outside of the Green Belt.

4.2.7 It is clear that without a viable connection point the proposal would not succeed. The reasons outlined above indicate why this particular site has been chosen.

Proximity to Sensitive Receptors

4.2.8 For any development, minimising potential impacts to residential amenity is a key aspect. Therefore sites remote from centres of population is a key locational factor.

4.2.9 For this site, the proposed landscaping, screening and the generally flat nature of the topography means that longer distance views from nearby villages are limited as confirmed by the Landscape and Visual Impact Assessment.

4.2.10 The deployment land was selected due to its relative distant location from nearby village of Wetley Rocks and the north edge of Werrington. Furthermore, as illustrated on the site location plan (drawings SRE1144/03/01) the site is some distance from the nearest residential properties.

Topography

4.2.11 Flat land is preferred for battery energy storage system developments as construction is more straightforward. Furthermore, flat land is generally less visible than an undulating topography.

4.2.12 The site slopes slightly from east to west. The highest point of the site is c. 245m AOD in the south eastern corner and the lowest is c.237m AOD in the south western corner. The site topography is well suited to the proposed development.

Development Plan Allocation/Designation

4.2.13 The adopted Staffordshire Moorlands District Council Local Plan Proposals Map identifies the site as outside defined development limits and is therefore considered to lie within the 'countryside' and is designated as forming part of the Green Belt. Policy SS10: Other Rural Areas Strategy regards development in the countryside and the Green Belt, has strict control over inappropriate development within the Green Belt. It does state that exceptions will be allowed as defined by Government policy, therefore proposals that are justified as *'very special circumstances'* will be supported.

4.2.14 Battery energy storage facilities are essential in supporting the deployment of renewable energy. They offer a reliable solution to a number of the Grid's balancing issues thus supporting the development and deployment of low carbon intermittent energy technologies upon which society must increasingly rely on to satisfy its energy requirements.

4.2.15 Further information in respect of the very special circumstances are included in section 5.5 of this statement.

Landscape Designations

4.2.16 Consideration of national and local landscape designations such as Areas of Outstanding Natural Beauty, National Parks and Special Landscape Areas was undertaken when assessing the potential battery energy storage facilities sites.

4.2.17 The application site is not subject to any national or local level landscape designations. Potential effects on landscape character and visual amenity have been assessed in the landscape and visual impact assessment presented in Appendix C.

Nature Conservation Designations

4.2.18 Consideration of national and international ecological designations such as Sites of Scientific Interest (SSSI), Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites was undertaken when assessing the potential battery facility sites.

4.2.19 One statutory designated site, Wetley Moor SSSI was located 1400m from the site. Given the distance from the site and the designated feature it is considered very unlikely that the proposal would impact the integrity of the SSSI and is therefore not considered a constraint to development.

Flood Risk and Drainage

4.2.20 Although BESS developments are not strictly flood sensitive infrastructure, some ancillary elements of the development are such as the associated electrical infrastructure including substations and transformers. The application site is located within Flood Zone 1 and therefore considered to be at little or no risk of fluvial or tidal/coastal flooding.

Land Availability

4.2.21 The selection process was based on a number of factors including the availability of import and export capacity on the Local Distribution Network ('grid') and the distance of the facility to the point of connection, proximity to sensitive receptors, such as residential properties and ecological sites. The process found there were no available spaces within existing industrial areas and the application site would be the most suitable due to its distance from sensitive receptors and its proximity to the existing substation.

4.2.22 All of the alternative sites were located within the Green Belt (same as the application site), but were located closer to residential receptors and further from the proposed point of connection i.e Cellarhead substation when compared to the application site. The application site was also being promoted by a willing landowner.

4.2.23 The availability of suitable substations to connect battery storage is so limited that many of the remaining opportunities are located within the Green Belt. These sites must be utilised if the UK is to secure sufficient battery storage to deliver its transition to a low carbon electricity generation, meet its carbon reduction targets and maintain an effective electricity grid in the coming decades. Without a storage facility at Cellarhead, the region will be at increasing risk of localised grid failure which could not be effectively mitigated by storage facilities in other parts of the country due to the effect of power losses when electricity is transmitted over long distances.

Conclusion

4.2.24 The key factors to identifying the location of a BESS is proximity to available grid capacity. Once grid capacity has been identified, the distribution network operator provides a point of connection. It is from this point onwards that the developer has some control to determine the best location for the battery storage facility. Distance from the point of connection, potential planning and environmental constraints and a willing landowner will then determine the location and extent of an application site.

4.3 SPECIFIC ENVIRONMENTAL AND TECHNICAL ASSESSMENTS

4.3.1 The following environmental assessments have been undertaken:

- Landscape and Visual Impact Assessment;
- Preliminary Ecological Appraisal;
- Arboricultural Assessment;
- Heritage Assessment;
- Flood Risk Assessment and Drainage Strategy; and
- Noise Impact Assessment.

4.3.2 These environmental and technical assessments are provided in full within Appendices C – I, respectively, but are summarised below.

Landscape and Visual Impact Assessment

4.3.3 A Landscape and Visual Appraisal has been prepared by FPCR and accompanies the planning application.

4.3.4 The effects of the proposed development on the landscape are considered to be limited in extent, largely due to the adjacent substation, vegetation and buildings.

4.3.5 The surrounding landform and vegetation along field boundaries within the surrounding rural context limits visibility to the far north and south.

4.3.6 Visual receptors likely to experience highest effects are mostly users of Public Rights of Way within the immediate vicinity with effects reducing for less sensitive receptors and those further from the site.

4.3.7 The proposal is considered to be reflective of the existing landscape context, and once established, the proposed planting will assimilate the development into the surrounding green infrastructure and restore elements which are currently deteriorating in terms of the native hedgerows, trees and grassland.

4.3.8 Proposed landscape improvements including native woodland, hedgerow and tree planting with enhancements to the currently low value grassland will also provide visual softening of existing obtrusive elements, including the existing pylons and substation infrastructure.

4.3.9 The site is within the Green Belt but not covered by any landscape character designations. The proposed development is not anticipated to limit the capacity of the land parcel in its contribution to the purposes of Green Belt policy.

4.3.10 Associated mitigation planting is to be retained in perpetuity following the operational period.

4.3.11 Overall it is anticipated that the site could be developed in accordance with the landscape and visual guidance for the area, and that the proposed mitigation measures which includes the addition of planted bunding could effectively integrate the scheme into the existing landscape.

Ecology

4.3.12 A Preliminary Ecology Appraisal (PEA) was undertaken to identify any potential ecological constraints or opportunities and an extended phase 1 habitat survey and desktop study was undertaken in November 2021.

4.3.13 One statutory designated site (Wetley Moor SSSI) was identified and this is located c.1.4km from the site and is not considered to provide any constraints on development.

4.3.14 The site is dominated by improved grassland which Is considered to be of no more than local importance and is considered a common and widespread habitat supporting limited botanical diversity. Off site fields comprise modified grassland dominated by perennial rye-grass and with very few herb species.

4.3.15 Hedgerows form the boundary of the site with a single hedgerow through the centre, In an east-west orientation. All of the hedgerows comprise at least 80% native species and are therefore considered habitats of principal importance (NERC, S41).

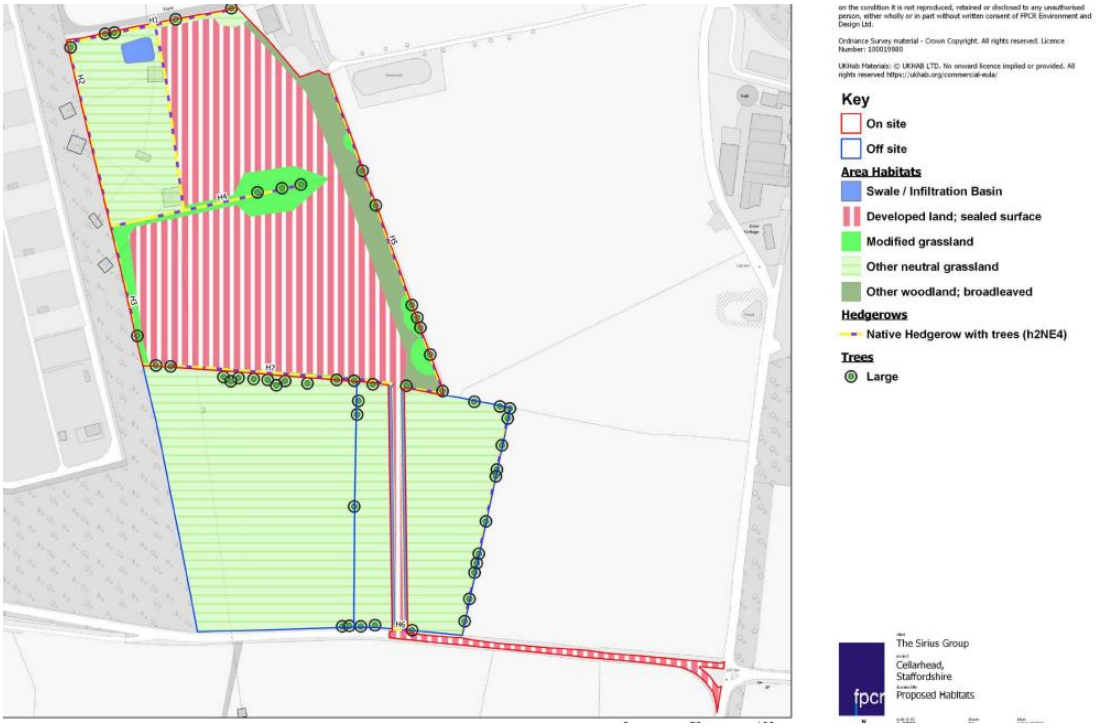
4.3.16 Ten mature trees are located within the hedgerows.

4.3.17 At present, the on-site baseline consists of 19.97 habitat units and 7.58 hedgerow units. On-site post intervention consists of 9.35 habitat units and 11.98 hedgerow units. The off-site area baseline consists of 15.38 units and post habitat creation delivers 29.97 units. This represents a total of 19.85% gain in habitat units and 58.13% gain in hedgerow units, set against a minimum net gain of 10% which is recommended. The plan below at Figure 4.1 shows how the net gain is to be delivered.

4.3.18 A range of additional enhancements are to be introduced including bat and bird boxes and native species planting within landscape proposals.

4.3.19 It is concluded that the proposed development will deliver a measurable net gain to biodiversity and from an ecological perspective is deemed to be acceptable.

Figure 4.1: Biodiversity Net Gain Plan



Arboriculture

4.3.20 An Arboricultural Assessment has been prepared and accompanies the application.

4.3.21 There are a number of trees within the site itself and adjacent to the boundaries.

4.3.22 The proposed layout Is led by the constraints and is sympathetic to existing trees. All of the proposed battery container units, switchgear units, transformers, Inverters and customer substation are to be located outside of the root protection areas of existing trees, so as to avoid any potential damage to the trees.

4.3.23 The proposed bunding has been designed and positioned as such to avoid the root protection areas of the trees and hedges on and adjacent to the site.

4.3.24 Only a small number of arboriculturally unremarkable trees are to be removed to facilitate the access point from the existing substation road, and there is a requirement to place some of the sections of security fencing within the RPA's of a small number of trees. This is deemed to be 'low impact' and managed through the supervision of the works and hand digging of the post holes.

4.3.25 Mitigation for the small number of tree losses to form the access is to be provided through extensive landscaping. This will include standard, individual tree planting, additional hedgerows and areas of woodland planting. This will greatly increase the overall amount of tree cover in the area, providing much needed succession to the existing maturing population.

4.3.26 There will be no change to the character, composition or environmental value of the tree cover or the amenity which that tree cover provides as a result of the proposals and it is concluded that the proposal meets the aspirations of both local and national policy in respect of arboriculture.

Heritage

4.3.27 An Archaeological Desk Based Assessment and Heritage Impact Assessment has been undertaken to determine the archaeological potential of the application site as well as the potential impact the development may have on known heritage assets. The Assessment reviewed archaeological investigations recorded on the Staffordshire Historic Environment Record within a search area of 1km

around the site. A 3km search radius from the site was used to determine the presence of any registered Historic Parks and Gardens, Scheduled Monuments and Listed Buildings.

4.3.28 Six heritage assets were identified. All of the heritage assets are located outside of the proposal site:

- Stables to Rownall Hall (Hall now demolished) (LB118808) (0.3km east);
- Rownall Farmhouse (LB1038081) (c0.6km north east);
- Barn Approximately 10 Metres South of Rownall (LB1038081) (c.0.6km north east);
- Ivy House Farmhouse (LB1038080) (c.0.75km north east);
- Barn Stables 20 Yards to South West of Ivy House Farmhouse (LB 118812) c.0.6km north east);
- Rownall Hall Park (MST6175) - A Landscaped Park recorded on the HER c.0.35km east).

4.3.29 All of the listed buildings noted above are Grade II and are assessed as medium significance. The non-designated Rownall Hall Park is of low significance. No listed building will be directly affected by the proposed development.

4.3.30 There may be a minor indirect impact on the setting of:

- Rownall Farmhouse (LB1038081) (c.0.6km north east);
- Barn Approximately 10 Metres South of Rownall (LB1038081) (c.0.6km north east);
- Ivy House Farmhouse (LB1038080) (c.0.75km north east);
- Barn Stables 20 Yards to South West of Ivy House Farmhouse (LB 118812) (c. 0.6km north east).

4.3.31 However, the proposed soft landscaping and bunding will lessen this impact and improve the setting of the heritage assets in relation to the existing Cellarhead Substation.

4.3.32 There will be no direct impact on Rownall Hall Park (a non-designated heritage asset).

4.3.33 There may be a minor indirect impact on Rownall Hall Park although proposed soft landscaping will lessen the Impact and improve the setting of the monument in relation to the pre-existing Cellarhead Substation through enhanced screening associated with the proposed development.

4.3.34 The potential for surviving sub-surface archaeological remains within the site is low.

4.3.35 Overall, the proposal is considered to be acceptable from an archaeological and heritage perspective.

Flood Risk and Drainage

4.3.36 Given the size of the site (1ha>) a Flood Risk Assessment and Drainage Strategy has been prepared.

4.3.37 A review of the Environment Agency's Flood Zones indicates that the site is located within Flood Zone 1 and therefore has a 'low probability' of flooding. The proposed use is considered to be 'less vulnerable/essential infrastructure', both uses are considered appropriate within Flood Zone 1.

4.3.38 Given the nature of the proposed use the site would be expected to remain dry in all but the most extreme conditions. The proposed development would be operated with minimal risk from flooding and would not increase flood risk elsewhere.

4.3.39 The site has a very low annual probability of flooding and from all sources and is unlikely to flood except in very extreme conditions.

4.3.40 Unnamed watercourses are located approximately 500m to the west of the site and 1km to the south of the site. A small reservoir is located adjacent to the eastern boundary. There is a drain around the perimeter of the adjacent substation.

4.3.41 In order to formulate a drainage strategy, soakaway tests were carried out on the site. There will be no net loss in flood storage capacity or impact on movement of floodwater across the site. The overall direction of movement of water will be maintained within the site and surrounding area. Conveyance

routes (flow paths) will not be blocked or obstructed.

4.3.42 The battery container raft or strip foundations are to be sited on permeable crushed stone bases. All internal access tracks are to be constructed using crushed stone which will not impact upon drainage. The access track leading to the main body of the site is to be comprise a tarmac surface which is impermeable. Drainage ditches/swales are to be created either side of this access track. Rainwater will run from the track into the ditches/swales where it will then infiltrate into the ground. The capacity of these ditches has been calculated based on the amount of permeable surface which is to be created.

4.3.43 The substation is to be constructed on an impermeable surface in the north eastern corner of the site. An infiltration basin is to be sited in the north western corner of the site, at a lower level in comparison to the substation. The land naturally slopes from east to west. Rainwater falling on the area of land to be utilised by the substation will drain via a piped system into the infiltration basin. The capacity of the infiltration basin has been calculated based on the area of impermeable land which it will serve.

4.3.44 The provision of a detailed drainage design could be secured by an appropriately worded planning condition. Sirius Renewable Energy Ltd would be responsible for the operation and maintenance requirements.

4.3.45 Further detail on how the development has been designed in respect of flood risk is presented in the Flood Risk Assessment & Drainage Strategy in Appendix G. It is concluded that the proposed development should not be precluded on the grounds of flood risk or drainage.

Noise

4.3.46 A Noise Assessment has been prepared in accordance with BS4142 to assess the potential impact of the operational noise arising from the running of the plant when assessed at the nearest residential receptors.

4.3.47 For the purposes of the assessment the nearest residential receptor was chosen. This is located to the east of the site on Rownall Road and is also representative of other residential properties In the Rownall Hall area to the east. Other properties to the north and south of the site are further away and therefore the noise impact will be lower than at the location assessed.

4.3.48 The proposed equipment will have mitigation measures designed by the supplier to ensure that the following noise levels are not exceeded:

- BESS HVAC (air cooling units): 65 dB(A) at 1m;
- Inverter: 65 dB(A) at 1m;
- Transformer: 72 dB(A) at 1m.

4.3.49 The noise generating items on the BESS containers are the HVAC units which are used for cooling. There will be two HVAC units on each end of each BESS container, making 4 per container. Each pair of containers will be served by a unit containing two inverters and one transformers (112 Inverters and 56 transformers).

4.3.50 A 3m high acoustic barrier is to be installed In two short sections within the BESS compound.

4.3.51 The assessment indicates a low noise impact during the daytime.

4.3.52 The night time assessment result is above the level which indicates a low noise impact but slightly below the level which indicates an adverse impact. However, this is based on the same noise levels being generated at night as during the day. This is considered to be a conservative assessment as the plant noise is mainly from cooling equipment which is at its highest noise level in the hottest conditions. Temperatures at night are very unlikely to be high enough to activate the cooling systems and therefore the noise levels used in the assessment are unlikely to be generated during real time operations. In addition, the assessment does not take account of screening by the units themselves.

4.3.53 BS4142 recommends that the noise levels also be considered in context. The consideration in context indicates that the noise impact would be low both during the day and at night.

4.3.54 The noise emissions can be satisfactorily controlled and therefore it is recommended that the application for planning consent for the BESS development should not be refused on noise grounds

4.4 ADDITIONAL ENVIRONMENTAL AND TECHNICAL CONSIDERATIONS

Traffic and Transport

4.4.1 A Transport Statement and Construction Environmental Management Plan (CEMP) are included in the supporting documents.

4.4.2 The construction period is anticipated to last 9 months. On average, it is anticipated that less than 3 vehicles a day will deliver materials to the site, over a 6 day working week. This excludes staff vehicles.

4.4.3 Any additional noise arising as a result of construction activities will largely be due to vehicle movements, and from plant and machinery operating on site. However, the construction phase is expected to last only 9 months and therefore any noise associated with the construction phase will be temporary and be restricted to certain times. Additionally, given the distance between the site and any nearby residential properties, and the limited number of properties between the site access and the A52 to the south (via the proposed construction traffic route) it is not anticipated vehicle movements will result in a significant adverse noise impact.

4.4.4 Measures to reduce dust, including wheel washing any vehicles exiting the site, are to be utilised.

4.4.5 Given the above, it is not considered that any adverse traffic and transport related matters would arise, particularly when the suggested mitigation measures are utilised.

Lighting

4.4.6 To suit the rural setting of the site, it is envisaged that the lighting scheme will be low level and minimal and incorporate light units of low lux levels around the entrances to the containers and transformers. Lights will be on infrared motion activated sensors and will shine downwards to avoid light pollution and disturbance to nocturnal animals. The lights will only be activated by human presence and will not be activated by animals.

4.4.7 During construction works it may be necessary to utilise floodlights during hours of darkness. These will only be in operation during normal construction hours or in the event of an emergency.

5. PLANNING POLICY AND MATERIAL CONSIDERATIONS

5.1 INTRODUCTION

5.1.1 This section sets out the national and local planning policies as well as material considerations which are relevant, both to the application site, and the type of development proposed.

5.1.2 Section 38(6) of the Planning and Compulsory Purchase Act 2004 and Section 70(2) of the Town and Country Planning Act 1990 require that planning applications are determined in accordance with the provisions of the adopted Development Plan unless other material considerations indicate otherwise.

5.1.3 The proposed development site falls within the administrative boundaries of Staffordshire Moorlands District Council. The adopted Local Development Framework for the application site comprises:

- Staffordshire Moorlands Local Plan (adopted September 2020); and
- Local Plan Policies Map.

5.1.4 This Planning, Design and Access Statement identifies and summarises the planning policies that are of relevance in determining this planning application.

5.2 LOCAL CONTEXT

5.2.1 The Staffordshire Moorlands Local Plan was formally adopted in September 2020 and provides the overarching planning framework for the District to 2033. The majority of decisions on planning applications in the area will be based on the contents of the Strategy.

5.2.2 The adopted Policies Map identifies the site as outside defined development limits and is therefore considered to lie within the 'countryside'. The site is designated as forming part of the Green Belt.

5.2.3 The following appraises the policies of the Staffordshire Moorlands Local Plan against the proposed development.

Staffordshire Moorlands Local Plan Policy	Commentary
Policy SS1: Development Principles *"The Council will expect the development and use of land to contribute positively to the social, economic and environmental improvement of the Staffordshire Moorlands in terms of delivering, in partnership with other agencies and services:* • *a mix of types and tenures of quality, affordable homes, to meet the needs and aspirations of the existing and future communities quality local services, including provision for education, healthcare, leisure, community, cultural and tourist facilities in response to anticipated population change and visitor numbers;* • *easy access to jobs, shops and transport services by all sections of the community;* • *increased economic prosperity and opportunities for employment and greater local capacity with an educated, skilled and flexible workforce;* • *a healthy, safe, attractive, active, well-designed and well-maintained environment;* • *development which maintains the locally distinctive character of the Staffordshire Moorlands, its individual towns and villages and their settings; development that is undertaken in a way that protects and enhances the natural and historic environment*	The proposed development will generate temporary jobs for local people during the construction phase. In creating opportunities for employment this will increase local economic prosperity. The proposal would support growth and prosperity in the energy sector. The proposed development has been designed with safety in mind. Appropriate separation distances are to be maintained between the containers on site and soft landscaping is to be introduced to assist in screening the proposal and to enhance the biodiversity value of the site. The natural and historic environment has been assessed and the proposal has been designed with these matters in mind. The proposed development is of a high quality. It will contribute to tackling climate change and reduced carbon emissions. It will contribute to allowing the nation to progress towards a decarbonised energy grid by 2035 in line with the Net Zero Strategy with a greater emphasis on renewable energy, and ensure that the variable nature of solar and wind power does not harm grid parity and security. It will improve energy security by diversifying the area's energy supply mix and

of the District and its surrounding areas, including the Peak District National Park, both now and for future generations. • *support development which secures high quality, sustainable environments, efficient and effective use of resources and contributes effectively to tackling climate change and reduced carbon emissions.* *All proposals for development will be considered in the context of the District-wide Spatial Strategy and with regard to both its direct and indirect cumulative impact over the longer term. New development will make effective use of land and the best use of previously developed land and buildings."*	help to protect the local communities from potential black outs. As a result, the proposal is considered to be compliant with Policy SS1.
Policy SS10: Other Rural Areas Strategy The other rural areas comprise the countryside and the green belt outside of the development boundaries of the towns and larger villages and the open countryside surrounding the smaller villages. These areas will provide only for development which has an essential need to be located in the countryside, supports the rural diversification and sustainability of the rural areas, promotes sustainable tourism or enhances the countryside. The Council and its partners will achieve this through the following actions: 1. Meet housing requirements and specific needs by: • Restricting new build housing development in the countryside to that which has an essential need to be located in the countryside in accordance with Policy H 1; • Allowing the conversion or replacement of an existing rural building in accordance with Policy H 1; • Allowing extensions or additional domestic outbuildings to existing dwellings provided they are appropriate in scale and design and do not have a detrimental impact on the existing dwelling and the character of the rural area. The Council will assess schemes having regard to the original dwelling, in cases where cumulative change has occurred; • Allowing suitable development which would secure the future conservation of a heritage asset in accordance with Policy DC 2; • Allowing rural exceptions housing (in accordance with Policies H 1 and H 3); • Allowing community facilities where that need cannot be met in a settlement within the hierarchy. In such cases the development should be in a sustainable location close to an existing serviced settlement. 2. Sustain the rural economy by: • Enabling the limited expansion or development of business for employment uses where a rural location can be justified	Through discussion with National Grid it has been established that there is capacity at the substation to the west of the site (Cellarhead Substation) to accommodate the proposed development. It is vital for a battery energy storage system to be located within proximity to a viable grid connection and the availability of suitable substations to connect battery storage is so limited that many of the remaining sites are located within the Green Belt. Given the limited availability of grid connection points for developments of this nature and the function of the proposed development in delivering the de-carbonisation of the electricity grid, supporting the deployment of renewable energy technologies and ensuring grid stability, it is considered that this development constitutes one which has an essential need to be located in the open countryside. The proposed development would support the diversification of the existing farm enterprise, providing a guaranteed income to the landowner for 40 years. The application is accompanied by a landscape and visual impact assessment. This demonstrates that the proposal respects and responds sensitively to the surrounding landscape. The proposal would not generate a substantial number of regular trips following completion of construction works. It is anticipated that the site would be visited once a month to allow for maintenance and repair works. The proposal is of an appropriate scale, type and location. The maximum height of structures proposed on site is 3m above ground level (aside from the acoustic fence which is 4m). The location is primarily dictated by the presence of the adjacent substation, into which it will connect. Whilst the proximity of the point of connection with capacity to accommodate the proposal is a major driver behind the application, relevant

• Supporting the diversification of existing farm enterprises; • Supporting the development of appropriate ICT and new means of communications to enable homeworking and small businesses reliant on e-technology. 3. Enhance and conserve the quality of the countryside by: • Giving priority to the need to protect the quality and character of the area and requiring all development proposals to respect and respond sensitively to the distinctive qualities of the surrounding landscape; • Limiting uses which generate a substantial number of regular trips in areas that are not well served by public transport; • Ensuring renewable energy schemes are of an appropriate scale, type and location; • Recognising and conserving the special quality of the landscape in the Peak District National Park (in accordance with Policy DC 3); • Encouraging measures which protect and enhance the biodiversity, geological resources and heritage of the District. 4. Regenerate underused major developed areas in the countryside including: • Bolton Copperworks, Froghall and Anzio Camp, Blackshaw Moor (in accordance with policies DSR 5 and DSR 6). • Development of these areas shall be complementary to and not undermine the role of the towns and larger villages nor shall it undermine wider strategic objectives. It shall also avoid or minimise environmental impacts and congestion and safeguard and enhance natural and cultural assets. • Facilitating the appropriate redevelopment of other major developed areas where the proposed development brings positive benefits to the area and any resultant environmental or highways concerns could be adequately addressed and minimised. Such proposals will be expected to provide supporting information that demonstrates clearly that the redevelopment will complement the overall development strategy for the District. 5. Enhance tourist opportunities by: • Supporting sustainable tourism developments and measures in the Churnet Valley in accordance with Policy SS 11 and the Churnet Valley Masterplan SPD;	planning and environmental constraints have been assessed and the proposal is considered to be appropriate when these are taken into account (as demonstrated in this Planning, Design and Access Statement and accompanying technical reports). The case for 'very special circumstances' is further explained in section 5.4 below. There are many examples of battery energy storage facilities being granted planning consent in the Green Belt. In line with national policy, very special circumstances are set out within this Statement. Given the above, the proposal is considered to be compliant with Policy SS10.

• Allowing for small-scale tourism developments in other areas (in accordance with policy E 4); • Establishing strong linkages between recreational and tourist resources; • Recognising and developing the close linkages to the Peak District National Park. 6. Maintain the Green Belt within Staffordshire Moorlands. Strict control will continue to be exercised over inappropriate development within the Green Belt allowing only for exceptions as defined by Government policy Any development proposal that might have the potential to affect a European or Ramsar Site must itself be subject to appropriate assessment.	
Policy DC1: Design Considerations All development shall be well designed and reinforce local distinctiveness by positively contributing to and complementing the special character and heritage of the area in line with the Council's Design Guide SPD. In particular, new development should: 1. be of a high quality and add value to the local area, incorporating creativity, detailing and materials appropriate to the character of the area; 2. be designed to respect the site and its surroundings and promote a positive sense of place and identity through its scale, height, density, layout, siting, landscaping, character and appearance; 3. create, where appropriate, attractive, active, functional, accessible and safe public and private environments which incorporate public spaces, green infrastructure including making provision for networks of multi-functional new and existing green space (both public and private), landscaping, public art, 'designing out crime' initiatives and the principles of Active Design; 4. incorporate sustainable construction techniques and design concepts for buildings and their layouts to reduce the impact of the development; 5. protect the amenity of the area, including creation of healthy active environments and residential amenity, in terms of satisfactory daylight, visual impact, sunlight, outlook, privacy, soft landscaping as well as noise, odour and light pollution; 6. promote the maintenance, enhancement, restoration and re-creation of biodiversity and geological heritage, where appropriate; 7. provide for safe and satisfactory access and make a contribution to meeting the parking requirement arising from necessary car use; 8. require new developments to be well integrated for car, pedestrian and cycle use as well as other sustainable transport links;	The appearance and layout of the facility is influenced by the on-site constraints and the purpose which It Is to serve. The scale of the proposed facility reflects a number of factors including the capacity of the facility and the location of the existing substation directly to the west of the proposed site and of sensitive receptors. The height of the containers are dictated by the equipment which is to be contained within them and the density of the scheme reflects the capacity requirements balanced against the safety aspects which dictate minimum separation distances. An appropriate soft landscaping scheme is proposed. The proposed landscaping scheme will serve two purposes; it will assist in screening the site from distant heritage assets whilst also delivering ecological enhancements. The proposal will deliver a net biodiversity gain through an extensive landscaping scheme which will include tree and hedgerow planting and re-seeding areas of land. A 19.85% net gain in habitat units will be achieved and a 58.13% net gain in hedgerow units will be achieved. This represents a significant benefit to the scheme and is substantially higher than the minimum 10% net gain which is being progressed under the proposed Environment Bill. In addition, a range of additional enhancement measures is to be introduced including bat and bird boxes and native species planting. Safe and satisfactory access Is achievable via the existing substation access road to the south of the site. A construction compound Is to be provided within the site, meaning that no construction vehicles associated with the proposed development will need to park on the public highway.

9. ensure that existing drainage, waste water and sewerage infrastructure capacity is available, and where necessary enhanced, to enable the development to proceed; 10. ensure, where appropriate, equality of access and use for all sections of the community; 11. be served by high speed broadband (>30mbps) unless it can be demonstrated through consultation with Next Generation Access Network providers that this would not be possible, practical or economically viable. In all circumstances during construction of the site sufficient and suitable ducting should be provided within the site and to the property to facilitate ease of installation at a future date.	Given the above, the proposal is considered to be compliant with Policy DC1.
Policy SD2: Renewable/Low-Carbon Energy *The Council will strive to meet part of the District's future energy demand through renewable or low-carbon energy sources (which could be through a variety of technologies, for example solar energy, biomass etc), in line with current evidence which identifies the feasibility of these forms of energy across the District. The Council will assess wind turbine schemes in line with the Government's specific policy on wind turbines. For all other forms of renewable energy the Council will support small- and large- scale stand alone renewable or low-carbon energy schemes subject to the following considerations:* • *the degree to which the scale and nature of a proposal impacts on the landscape, particularly having regard to relevant Landscape Character evidence and impact on the Peak District National Park (taking into account both individual and cumulative effects of similar proposals);* • *the degree to which the developer has demonstrated any environmental/economic/social benefits of a scheme, as well as how any environmental or social impacts have been minimised (e.g. visual, noise or smell);* • *the impact on designated sites of European (or successor), national and local biodiversity and geological importance in accordance with policy NE 1;* • *the impact on the amenity of residents and other interests of acknowledged importance, including the historic environment;* • *the degree to which individual proposals reflect current local evidence regarding the feasibility of different types of renewable or low-carbon energy at different locations across the District* • *in the case of solar energy proposals that are not affixed to buildings or structures,*	The proposed site will have an export capacity of 280MVA and will provide balancing requirements essential to support the grid as UK electricity generation shifts to more intermittent renewable energy sources such as wind and solar. The development has the capacity to store and supply up to 408,800,000 kWh of electricity per year as an enabling technology for renewable generation and a replacement for gas fired power generation in providing rapid response power to satisfy peak demand. In performing these roles the development has the ability to reduce carbon dioxide emissions by up to 115,000 metric tonnes annually whilst also providing electricity storage equivalent to supplying up to 116,800 homes. In addition, the batteries will have zero emissions to atmosphere are quieter than other energy storage facilities and require minimal traffic movements to site once constructed. This Planning Statement outlines the findings of the various environmental assessments that accompany the application. The conclusions of which demonstrate that subject to mitigation there will be no significant adverse impact to identified receptors or the environment. A 19.85% net gain in habitat units will be achieved and a 58.13% net gain in hedgerow units will be achieved. This represents a significant benefit to the scheme and is substantially higher than the minimum 10% net gain which is being progressed under the proposed Environment Bill. Given the above, the proposal is considered to be compliant with Policy SD2.

applicants will be expected to demonstrate that they have examined whether previously developed land is available before greenfield land. Where agricultural land is proposed, poorer quality land should be utilised before higher quality agricultural land.	
Policy SD4: Pollution and Water Quality The Council will protect people and the environment from unsafe, unhealthy and polluted environments by ensuring proposals avoid potential adverse effects; and only permitting proposals that are deemed (individually or cumulatively) to result in pollution (including air/ water/ noise/ vibration/ light/ ground contamination) if after mitigation, potential adverse effects are deemed acceptable. This may be achieved by the imposition of planning conditions or through a planning obligation. September 2020 79 Staffordshire Moorlands Local Plan - Adopted When considering planning applications, the Council will require developers to have regard to the actions and objectives of all relevant River Basin Management Plans and related Plans affecting the District in striving to protect and improve the quality and capacity of water bodies in or adjacent to the District. Planning permission shall only be granted where the proposal makes provision for the protection (and where feasible, enhancement) of water quality and waterside habitat, and water resources where applicable. In the case of development within Groundwater Source Protection Zones (SPZs) applicants should demonstrate how site layout has sought to mitigate potential pollution to public water supply. A quantitative and qualitative risk assessment and groundwater protection mitigation strategy may be required subject to consultation with relevant bodies.	The proposed battery energy storage system will not result in air, water, noise, vibration or light pollution, nor will it contaminate the ground. The Outline Construction Environmental Management Plan (CEMP) has taken into account the possible impacts that may arise during the construction phase, e.g. dust, noise and potential traffic issues. The CEMP confirms that all possible impacts will be minimalised with mitigation put into place. The construction route to and from the site from the A52 passes few residential properties. Following construction works, and once the site is operational, the site will be visited once a month by a single vehicle for repair and maintenance works. The limited number of vehicle movements is unlikely to result in unacceptable impact on air quality. There are no watercourses in proximity of the site which would be impacted by the proposed development. A Noise Impact Assessment accompanies the planning application. Following completion of baseline survey work and an assessment of the proposed layout, the Assessment concludes that following mitigation (which includes an acoustic fence) there will be no adverse noise impact on the identified nearby receptors. Due to the nature of the proposed development it is unlikely to create vibrations. Whilst the proposal involves the creation of bases for the containers to sit on, and the creation of Internal access roads, given the existing and previous use of the site i.e agricultural it Is unlikely that the site Is contaminated. The proposed use Is not susceptible to ground contamination. The construction works would be managed in a sensible manner in accordance with best practice so as to avoid any potential for ground contamination. Given the above, the proposal is considered to be compliant with Policy SD4.
Policy SD5: Flood Risk The Council will follow a sequential approach to the management of flood risk. New development will be guided to the areas with the lowest risk of current and	A review of the Environment Agency's Flood Zones indicates that the application site is located within Flood Zone 1 and therefore has a 'low probability' of flooding.

future flooding where this is viable and compatible with other polices aimed at achieving a sustainable pattern of development. The development of sites within areas at greater risk of flooding will only be considered where they are deemed acceptable due to national or other policies or material considerations. All applicable development must be subject to a site-specific flood risk assessment which demonstrates that the development has been designed to be flood resilient and resistant and safe for its users for the lifetime of the development; in accordance with NPPF Policy. In addition, schemes in flood risk areas should demonstrate how the sequential approach has been used to locate the most vulnerable parts of the development in the areas of lowest flood risk. Where development sites are located in flood risk areas and/or affected by the presence of watercourses, the Council expects developers to undertake early discussions with the EA and the LLFA. Where a watercourse is present on a development site, applicants will be expected to take opportunities to undertake river restoration and enhance natural river corridors where appropriate, in line with the Water Framework Directive, and to make space for water. The culverting of any watercourse will not normally be permitted and development should, wherever possible, open up any culverted watercourses to increase flood water storage and create a green corridor. More generally the Council will support the identification and implementation of natural flood management measures that will contribute towards delivering a reduction in local and catchment-wide flood risk and impacts of climate change and other multiple benefits. All applicable developments should incorporate sustainable drainage measures (SuDS) to reduce the risk of flooding from surface water runoff and contribute to on-site flood alleviation, as well as contributing to wider Council objectives such as its emerging Green infrastructure Network; to enhancing biodiversity and recreation opportunities; landscape character etc. Developers should undertake early discussions with the LLFA to ensure that SuDs can be fully integrated into the final development layout. Where appropriate suitable measures to deal with surface water arising from development proposals will be required to minimise the impact to and from new development. In such cases the Council will expect applicants to demonstrate how their proposals manage surface water run-off sustainably with discharge to the public sewer only being considered as a last resort, where, clear evidence must be demonstrated why alternative options are not available. On greenfield sites developers should aim to not increase surface water runoff rates. On brownfield sites developers should aim to reduce surface water runoff to the greenfield rate wherever practical. Approved development proposals will be expected to be supplemented by appropriate maintenance and management regimes for surface water drainage. On larger sites involving phased	As part of the planning application a Flood Risk Assessment (FRA) was conducted to assess the potential flood risks occurring from the proposed development. The FRA demonstrates that the proposed development would be operated with minimal risk from flooding, would not increase flood risk elsewhere and is compliant with the requirements of the NPPF. An appropriate drainage strategy is to be implemented based on the results of soakaway tests. The drainage strategy involves the creation of an infiltration basin in the north western corner of the site adjacent to the proposed substation compound area, and drainage ditches/swales adjacent to the site access. Permeable crushed stone internal access tracks are to be used. The battery containers are to be supported on concrete pillars at either end, which are to sit on permeable crushed stone bases. The drainage strategy proposed is deemed to be appropriate and commensurate with the scale of development proposed. Further detail is provided in the accompanying Flood Risk Assessment and Drainage Strategy. Given the above, the proposal is considered to be compliant with Policy SD5.

development and/or involving multiple landowners the Council will where appropriate encourage applicants to engage in early discussion with utility providers and LLFA for the achievement of coordinated, holistic drainage strategies across the whole site over time. When considering planning applications, the Council will have regard to all relevant Catchment Flood Management Plans affecting the District. In all cases the Council will work with developers, stakeholders and landowners to encourage and promote implementation of natural flood risk management measures which will contribute towards flood risk reduction as well as achieve wider environmental benefits.	
Policy DC2: Historic Environment 1. The Council will conserve and where possible enhance heritage assets, including their setting in a manner appropriate to their significance. This will take into account the desirability of maintaining and enhancing their significance and will ensure that development proposals contribute positively to the character of the built and historic environment. 2. Protection will be given to designated heritage assets and their settings and non-designated heritage assets as set out in the NPPF. 3. All applications likely to affect heritage assets will require the submission of a heritage statement, including a qualitative visual assessment where appropriate. 4. Where development is likely to affect archaeology, both designated and undesignated, the Council requires the submission of a desk based assessment, and where appropriate, field surveys and trench evaluation by a qualified professional. 5. Where the loss of significance is unavoidable, recording should take place and this should be added to the Historic Environment Record as a minimum, held by Staffordshire County Council. 6. The Council will continue its proactive approach to heritage assets at risk and welcomes development proposals which would result in the sympathetic reuse of these assets in line with NPPF policy. 7. The Council will promote development which sustains, respects or enhances buildings and features which contribute to the character or heritage of an area and those interests of acknowledged importance through the use of Conservation Area Appraisals, Design Guidance and Statements, Archaeological Assessments, Characterisation Studies and Masterplanning.	An Archaeological Desk Based Assessment and Historic Impact Assessment has been undertaken. The assessments conclude that no Historic Landscapes or Scheduled Ancient Monuments (SAM) fall within the application site, and neither will be visually impacted by the proposed BESS. Furthermore, no Listed Buildings are located within the proposed development area. 6no. heritage assets have been identified within the 3km study area. This Includes 5 Grade II listed buildings and a non-designated asset. The potential for surviving sub-surface archaeological remains on site Is considered to be low. It Is concluded within the Archaeological Desk Based Assessment and Historic Impact Assessment that no adverse Impact on the heritage assets is predicted. The proposed soft landscaping Is considered to lessen any potential impact and improve the setting of the heritage assets in relation to the impact from the existing Cellarhead Substation. Given the above, the proposal is considered to be compliant with Policy DC2.
Policy DC3: Landscape and Settlement Setting The Council will protect and, where possible, enhance local landscape and the setting of settlements in the Staffordshire Moorlands by: 1. Resisting development which would lead to prominent intrusion into the countryside or have a	The applicant has adopted a landscape and ecological led approach to respond positively to the landscape setting of the site and wider area and enhance biodiversity at the site. The Landscape and Visual Assessment, submitted as part of this application, demonstrates that the

significant adverse impact on the character or the setting of a settlement or important views into and out of the settlement as identified in the Landscape and Settlement Character evidence; 2. Supporting development which respects and enhances local landscape character and which reinforces and enhances the setting of the settlement as identified in the Landscape and Settlement Character evidence; 3. Supporting developments which conserve or enhance the biodiversity qualities of any natural or man-made features within the landscape, such as trees, woodlands, hedgerows, walls, watercourses or ponds; 4. Supporting opportunities to positively manage the landscape and use sustainable building techniques and materials which are sympathetic to the landscape; 5. Ensuring that development does not adversely affect the wider setting of the Peak District National Park.	proposed development will not have an unacceptable effect on local landscape character and can be successfully integrated into the surrounding landscape without causing substantial and wide scale harm to the landscape character, and without long term adverse impacts to visual amenity in the local area. Given the above, the proposal is considered to be compliant with Policy DC3.
Policy NE1: Biodiversity and Geological Resources The biodiversity and geological resources of the District and neighbouring areas will be conserved and enhanced by positive management and strict control of development (and having regard to relevant ecological evidence) by: 1. By ensuring all development schemes have regard to the surveys and actions recommended by the Council's Extended Phase 1 Habitat Surveys and Local Wildlife Assessment, and include measures for protection and enhancement of site biodiversity and protection of any geodiversity as appropriate. 2. Resisting any proposed development that could have an adverse effect on the integrity of an International site (or successor designation) alone or in combination with other plans or projects unless it can be demonstrated that the legislative provisions to protect such sites can be fully met. Any development with a potential to adversely affect a European site/s through construction activities should ensure that Ciria construction guidelines are followed including environmental good practice on control of dust and water pollution. 3. The Council will not normally permit any development proposal which would directly or indirectly (either individually or in combination with other developments) have an adverse effect on a Site of Special Scientific Interest. Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of Sites of Special Scientific Interest. 4. Conserving, and enhancing regional and locally designated sites. The Council will not permit any development proposal which would directly or indirectly	The majority of the application site comprises cultivated and fallow arable land of low species diversity and low ecological value. The perimeter of the application site provides the opportunity for enhancement through tree and hedgerow planting creating significant benefits to local biodiversity. A Biodiversity Net Gain assessment has been completed for the site and adjacent off-site areas using the DEFRA Biodiversity Metric 3.0. Results of the assessment demonstrate that the proposed development will deliver a measurable net gain to biodiversity, in accordance with the NPPF specifically a 19.85% gain in habitat units and 58.13% gain in hedgerow units. Given the above, the proposal is considered to be compliant with Policy NE1.

result in significant harm to geological and biodiversity conservation interests, unless it can be demonstrated that: a) there is no appropriate alternative site available; and b) all statutory and regulatory requirements relating to any such proposal have been satisfied; and c) appropriate conservation and mitigation measures are provided; or if it is demonstrated that this is not possible d) the need for, and benefit of, the development is demonstrated to clearly outweigh the need to safeguard the intrinsic nature conservation value of the site and compensatory measures are implemented. 5. Expecting all development where possible seeks to deliver a net gain in biodiversity proportionate to the size and scale of the development. In circumstances where adverse impacts are demonstrated to be unavoidable, developers will be required to ensure that impacts are appropriately mitigated, with suitable compensation measures towards loss of habitat used only as a last resort where there is no alternative. Where any mitigation and compensation measures are required, they should be appropriately scheduled and managed according to the nature, size and scale of the development so as to minimise impacts that may disturb protected or important habitats and species. 6. Supporting opportunities to improve site management and increase public access to wildlife sites including supporting the objectives of the Staffordshire County Council Rights of Way Improvement Plan. 7. Ensuring development promotes the appropriate maintenance, enhancement, restoration and/or re-creation of biodiversity through its proposed nature, scale, location and design. The Staffordshire Moorlands Biodiversity Opportunity Map, in conjunction with the Staffordshire Biodiversity Action Plan, will be used to guide biodiversity enhancement measures to be included in development proposals as appropriate to the nature and scale of development proposed and other environmental interest, in particular supporting opportunities to increase grassland and heathland habitats including supporting targets in the UK and Staffordshire Biodiversity Action Plan. 8. Protecting and enhancing habitats and species of principal importance for the conservation of biodiversity as identified in legislation, and recognising and implementing appropriate measures, including landscape-scale conservation management, to take account of the fact that the distribution of habitats and species will be affected by climate change. 9. Recognising the value of the natural environment for sport and leisure activities and the need to manage such activities to ensure there is no conflict. 10. Ensuring the provision and protection of green infrastructure networks in line with Policy C 3.	

Policy NE2: Trees, Woodland and Hedgerows The Council will protect existing trees, woodlands and hedgerows, in particular, ancient woodland, veteran trees and ancient or species-rich hedgerows from loss or deterioration. This will be achieved by: • Requiring that existing woodlands, healthy trees and hedgerows are retained and integrated within a proposed development unless the need for, and benefits of, the development clearly outweigh their loss; • Requiring new developments to provide tree cover that secures a good level of sustainability through tree retention, planting and soft landscaping, including where possible the on site replacement of any trees that are removed with sufficient tree planting to replace or increase the canopy cover on-site as appropriate. Landscaping schemes will also be required to mitigate against negative landscape impact and complement the design of new development and make provision for future maintenance. Where it is not possible to secure this new or replacement tree planting within the site, the Council will work with applicants to ascertain if a suitable site(s) can be found off-site for replacement planting in the locality; • Resisting development that would directly or indirectly damage existing ancient woodland, veteran trees and ancient or species-rich hedgerows. The Council will refer to its adopted Tree Strategy in the consideration of proposals; and will in general seek to retain as many trees and as much hedgerow on site as possible.	As part of this application, an Arboricultural Assessment was undertaken to assess the potential impact of the proposal on the existing trees, hedgerows and other vegetation within the site or within close proximity to it. The tree survey work led to the design being refined so as to avoid root protection areas wherever possible. The assessment concluded that the proposal will not lead to the loss of any existing mature trees, hedgerows, ponds or watercourses and therefore will have minimal detrimental impact on existing natural habitats. Given the above, the proposal is considered to be compliant with Policy NE2.
Policy T1: Development and Sustainable Transport The Council will promote and support development which reduces reliance on the private car for travel journeys, reduces the need to travel generally and accommodates residual development traffic in line with the Integrated Transport Strategy. This will be achieved by: 1. Ensuring that all new development is located where the highway network can satisfactorily accommodate traffic generated by the development or can be improved as part of the development. 2. Ensuring that major development is located in areas that are accessible by sustainable travel modes or can be made accessible as part of the proposal. 3. Considering appropriate parking provision on a case by case basis with recourse to the parking guidance set out in Appendix 2.	A Transport Statement and Outline Construction Environmental Management Plan (CEMP) has been prepared as part of the planning application. The site selection and ocation of the proposed development has been determined following an assessment of various criteria in particular the availability of electrical grid capacity and the ability to utilise existing highway network and access road into the existing National Grid and WPD sub-station.. Once operational the proposal will only result in circa one visit per month for maintenance and repair reasons. The DNO will utilise the second access to the north of the site, which will allow direct access into the substation compound.

4. Where appropriate all new development shall facilitate walking and cycling within neighbourhoods and town centres, and link with or extend identified walking or cycling routes. In addition applicants should also consider how their schemes can enhance the existing path network in line with the Staffordshire County Council Rights of Way Improvement Plan and also give consideration to the protection of non-definitive public footpath routes in addition to definitive routes. Development which generates significant demand for travel or is likely to have significant transport implications (as identified within a Transport Assessment) will, where appropriate: • Contribute to improved public transport provision. • Contribute to junction improvements, traffic management and highway infrastructure • Provide proactive facilities and measures to support sustainable transport modes including on-site features to encourage sustainable travel methods e.g. cycle path links, cycle storage facilities, bus stops etc. • Provide and actively promote travel plans.	

5.3 MATERIAL CONSIDERATIONS

National Planning Policy Framework

5.3.1 The UK government published the revised National Planning Policy Framework (NPPF) in July 2021 which sets out the Government's planning policies for England and how these should be applied. It recognises the contribution the planning system makes to the achievement of sustainable development, identifying that sustainable development consists of economic, social and environmental roles.

5.3.2 Paragraph 10 is the single most important paragraph in the NPPF, which provides for "a presumption in favour of sustainable development".

5.3.3 Paragraph 82 advises that planning policies should (inter alia) seek to address potential barriers to investment, such as inadequate infrastructure.

5.3.4 NPPF makes specific reference to renewable energy generation and climate change in paragraph 152:

"It [the planning system] should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure."

5.3.5 Section 13 relates to Green Belt land. Paragraph 147 notes that:

"inappropriate development, is by definition, harmful to the Green Belt and should not be approved except in very special circumstances."

5.3.6 Paragraph 138 notes that the Green Belt serves five purposes:

a) to check the unrestricted sprawl of large built-up areas;
b) to prevent neighbouring towns merging into one another;
c) to assist in safeguarding the countryside from encroachment:

d) to preserve the setting and special character of historic towns; and
e) to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

5.3.7 Paragraph 148 of the NPPF notes that:

"local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal, is clearly outweighed by other considerations."

5.3.8 Paragraph 151 states that:

"when located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources"

5.3.9 The proposals comprise a form of renewable energy generation and so paragraph 51 is therefore engaged.

5.3.10 Paragraph 158 of NPPF states:

"When determining planning applications for renewable and low carbon development, local planning authorities should:

a) not require applicants to demonstrate the overall need for renewable or low carbon energy, … and

b) approve the application if its impacts are (or can be made) acceptable. …"

5.3.11 In accordance with the Chief Planner Planning Update Newsletter of 21 December 2017[1], the proposed development comprises a form of renewable energy generating station. Paragraph 158 of the NPPF is therefore engaged and its provisions apply to the proposed development.

5.4 ASSESSMENT OF THE PROPOSAL AGAINST THE FIVE PURPOSES OF THE GREEN BELT

5.4.1 The site is located in the Green Belt. National planning policy sets out the key policies relating to development proposals In the Green Belt. Policy SS10 of the Staffordshire Moorlands Local Plan requires non-exempt development in the countryside to demonstrate an essential need for its proposed location.

5.4.2 The proposal does not relate to any of the exceptions to inappropriate development in the Green Belt which are noted in the NPPF and therefore constitutes inappropriate development in the Green Belt. Consequently, there is a requirement to demonstrate 'very special circumstances.'

5.4.3 It Is necessary to consider the level of harm against which the very special circumstances must be assessed. For this, reason, the proposal is firstly assessed against the five purposes of the Green Belt which are set out under paragraph 51 of the NPPF and noted below.

1. To check the unrestricted sprawl of large built-up areas

5.4.4 The proposal site does not connect with an existing built up area and so the development of it would not result in 'sprawl'. The proposal in effect represents an extension to the existing Cellarhead substation which is located immediately to the west. The proposed landscape screening would significantly reduce the wider landscape effects. The proposal is not considered to be in conflict with this purpose.

1 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/670593/Chief_Planner_Newsletter_-_December_2017.pdf

2. To prevent neighbouring towns merging into one another;

5.4.5 The proposal site does not have a relationship with any towns. The proposal would not be in conflict with this purpose.

3. To assist in safeguarding the countryside from encroachment:

5.4.6 In effect the proposal represents the expansion of the Cellarhead substation. It lies Immediately to the east of the substation and the rural nature of the site Is diluted by the proximity of the substation and the pylons which cross through It. Furthermore, extensive landscape screening will be delivered to further limit the impact of the proposal on the surrounding countryside. The LVIA concludes that the impact of the proposal on the surrounding landscape Is acceptable.

5.4.7 The Council's Green Belt Review Study notes that the area makes a 'contribution', rather than a 'strong contribution' to safeguarding the countryside from encroachment.

5.4.8 The proposed use is temporary and reversible, given that the site will return to its current use following the 40 year operational period. The proposal is therefore not deemed to be in conflict with this purpose.

4. To preserve the setting and special character of historic towns;

5.4.9 The proposed development would not impact on the setting and special character of any historic towns. The proposal would therefore not conflict with this purpose.

5. To assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

5.4.10 There is an essential requirement for the proposal to be sited in this location. This is because it needs to be sited close to a connection point with available grid capacity. There is no opportunity for the proposed development to be sited on derelict or urban land.

5.5 THE EXTENT OF HARM TO THE GREEN BELT

5.5.1 The effects of the proposed development on the landscape are considered to be limited in extent, largely due to the adjacent substation, vegetation and buildings.

5.5.2 The proposal is considered to be reflective of the existing landscape context, and once established, the proposed planting will assimilate the development into the surrounding green infrastructure and restore elements which are currently deteriorating in terms of the native hedgerows, trees and grassland.

5.5.3 Proposed landscape improvements including native woodland, hedgerow and tree planting with enhancements to the currently low value grassland will also provide visual softening of existing obtrusive elements, including the existing pylons and substation infrastructure.

5.5.4 The proposed development is not anticipated to limit the capacity of the land parcel in its contribution to the purposes of Green Belt policy.

5.5.5 Overall it is anticipated that the site could be developed in accordance with the landscape and visual guidance for the area, and that the proposed mitigation measures could effectively integrate the scheme into the existing landscape.

5.6 THE DEGREE OF HARM TO BE WEIGHED AGAINST THE VERY SPECIAL CIRCUMSTANCES

5.6.1 It is demonstrated in the assessment at section 5.4 above that the proposed development would not result In any significant conflicts with the purposes of including land within the Green Belt. Whilst the proposal would result In a minor degree of encroachment into the countryside, this Is mitigated through the fact that the proposed development is temporary in nature, with a limited operational period.

5.6.2 The proposal Is set against within the context of the neighbouring Cellarhead Substation, and its design

is to be functional in appearance. Views across the site are limited. Landscaping will help to integrate the proposal into the surrounding landscape.

5.6.3 The proposed landscape planting will remain following the operational period, resulting in a long term positive impact on the Green Belt.

5.6.4 It Is demonstrated through the results of the accompanying survey work that the proposed development would not result in any significant adverse impacts.

5.6.5 Given the above, it is considered that whilst the proposal would encroach into the countryside, the impact of doing so would be significantly reduced following the proposed landscaping works, reducing the overall impact to minor in the medium term and throughout the life of the development. The proposed landscaping will make a positive long-term contribution and is to remain following decommissioning works.

5.7 VERY SPECIAL CIRCUMSTANCES

5.7.1 It is noted in Paragraph 151 of the NPPF that elements of many renewable energy projects will comprise inappropriate development in the Green Belt. In such cases, special circumstances need to be demonstrated.

5.7.2 Whilst it Is acknowledged that Committee members have previously determined that Very Special Circumstances can be demonstrated In this particular instance (when considering the previous application for a BESS on this site), we set out reasons why we also believe this to be the case too.

5.7.3 Paragraph 148 states that when considering any planning application, Local Planning Authorities should ensure that substantial weight is given to any harm to the Green Belt. 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal, is clearly outweighed by other considerations.

5.7.4 We set out below why we consider the proposal is able to demonstrate very special circumstances.

The Essential Need for the Proposed Location

5.7.5 For proposals such as this, it is important that there is a viable grid connection nearby. In this instance it has been identified through discussions with National Grid and Western Power Distribution that there is capacity at the substation to the west of the site to accommodate the proposal. The required grid capacity of 280MVA import and export has been secured by the applicant in the form of a legally binding grid connection agreement with Western Power Distribution. The availability of a grid connection is critical when undertaking a site search for proposals such as this.

5.7.6 The availability of suitable substations to connect battery storage is so limited that many of the remaining opportunities are located within the Green Belt. These sites must be utilised if the UK is to secure sufficient battery storage to maintain an effective electricity grid in the coming decades. Without a storage facility at Cellarhead, the region will be at increasing risk of localised grid failure which could not be effectively mitigated by storage facilities in other parts of the country due to the effect of power losses when electricity is transmitted over long distances.

The Essential Need for the Development

5.7.7 Development which improves the resilience of the nation's energy infrastructure is supported by the government.

5.7.8 Climate change is generally considered to be the greatest existential threat to the environment, our way of living and humanity in general. Addressing this huge challenge requires a sea change in how we live our lives in the future and the decisions we make.

5.7.9 In order to address this challenge, the UK Govt have set a target to decarbonise the power grid and ensure all cars are zero emissions capable by 2035 thus moving away from fossil fuels and replacing this

capacity with renewable energy.

5.7.10 In addition to this, recent months have brought into stark focus the need for the UK to improve its energy security to ensure both continuity of supply, reduced costs to the consumer and avoid future price spikes causes by geo-political events. In response to this additional challenge the UK government has published The British Energy Security Strategy which commits to developing a low-cost net zero consistent electricity system, supported by large scale long duration electricity storage.

5.7.11 This transition is predicted to result in an increase in electricity demand by 40%-60% all of which must be met from renewable energy sources, enabled and supported by battery energy storage systems like the one proposed in this planning application.

5.7.12 As highlighted during the recent COP26 event in Glasgow:

"We cannot afford to wait to act against the threat of climate change. We must work together to protect our planet and people and ensure a greener, more resilient future for us all."

5.7.13 In October 2021, the UK Government has launched its Net Zero Strategy: Build Back Greener which includes the target for decarbonizing the electricity grid by 2035. To deliver the strategy overall electricity demand is expected to increase 40-60% by 2035, all met from low carbon sources.

5.7.14 The strategy sets out the objective of transforming the UKs power system so that it will consist of abundant, cheap British renewables, "underpinned by flexibility including storage", and ensure reliable power is always there at the flick of a switch"

5.7.15 A key stated Policy in the Net Zero Strategy is the "deployment of new flexibility measures including storage to help smooth out future price spikes".

5.7.16 There is a real emphasis on the importance of decarbonizing the electricity grid by central government and schemes such as this help to support the rollout of renewable energy.

5.7.17 It is noted by the former Minister for Energy and Clean Growth (Kwasi Karteng) now Chancellor of the Exchequer:

"the key to capturing the full value of renewables is in ensuring homes and businesses can still be powered by green energy even when the sun is not shining or the wind has stopped blowing Removing barriers in the planning system will help us build bigger and more powerful batteries, creating more green-collar jobs and a smarter electricity network".

"Flexible technologies like batteries will form part of the UK's smarter electricity grid, supporting the integration of more low-carbon power, heat and transport technologies, which it is estimated could save the UK energy system up to £40 billion by 2050."

5.7.18 As we move forward and aim to achieve a carbon neutral economy and mitigate the risks and effects of climate change, cleaner and more sustainable methods of power generation are being brought online which are intermittent in character (e.g wind and solar PV) and place certain demands on the electricity grid due to fluctuations in power generation and demand.

5.7.19 The National Grid operates a balancing service to balance supply and demand and to ensure the security and quality of the electricity supply across its transmission system.

5.7.20 The BESS will assist towards controlling the balancing service by providing the National Grid with access to extra power which is stored 'off grid' in batteries when demand outstrips supply.

5.7.21 When levels of electricity on the grid are below that of demand the electricity stored in the batteries can be fed back (discharged) onto the network to meet the demand so that there is no loss of power to end users. Smooth grid operation relies on the provision of rapid reactive power services either by generation or dedicated facilities to enable frequency stabilisation. BESS provides sub-second response

times, so offer a reliable solution to a number of the Grid's balancing issues thus supporting the development and deployment of low carbon intermittent energy technologies upon which society must increasingly rely on to satisfy its energy requirements.

5.7.22 Delivering a secure energy supply is a priority for the Government and this is duly reflected in the NPPF whereby local authorities must coordinate with providers to meet the demand. In this instance, the energy balancing requirements have been identified by the applicant and the power will be stored during times of over supply and released (supplied) when demand outweighs supply.

5.7.23 The development has the capacity to store and supply up to 408,800,000 kWh of electricity per year as an enabling technology for renewable generation and a replacement for gas fired power generation in providing rapid response power to satisfy peak demand. In performing these roles the development has the ability to reduce carbon dioxide emissions by up to 115,000 metric tonnes annually whilst also providing electricity storage equivalent to supplying up to 116,800 homes.

5.7.24 The proposed BESS can therefore be considered as development which would support the operation of existing and development of proposed renewable energy projects, essential to delivering the Net Zero Strategy of decarbonising the electricity grid by 2035 and meeting the nations carbon reduction targets. The proposal will consequently contribute to moving electricity to a low carbon future, thereby contributing to the objectives set out in the NPPF and meeting with the NPPF definition of very special circumstances which may include the wider environmental benefits associated with increased production of energy from renewable sources

5.7.25 Based on the above, it is clear that there is an identified and urgent need for developments such as this as clearly outlined in the Government's energy strategy and in national planning policy. The proposal will contribute to meeting this requirement and this should carry significant weight, representing very special circumstances.

5.7.26 On 14th July 2020 the Government announced that planning legislation is to be relaxed to make it easier to construct large battery schemes to store renewable energy.[2]".

5.7.27 In addition to the above, the scheme will deliver economic[3], social and environmental benefits. It is considered that in combination, the economic, social and environmental benefits of the proposal constitute very special circumstances which justify the location of the proposed development in the Green Belt. The economic, social and environmental benefits are considered below.

Economic Benefits

5.7.28 The development will provide employment opportunities during the logistical, construction and post construction phases (maintenance). Where possible, local businesses will be used for relevant components.

5.7.29 The wider 'knock on' effects can in turn support the supply chain of other activities such as the retail and accommodation providers.

5.7.30 In addition, in providing increased resilience to local power outages this will improve the energy security of local businesses which in turn will improve their trading resilience/productivity.

Social Benefits

5.7.31 As noted previously, the proposal will contribute to meeting the Net Zero Strategy target of decarbonising the electricity grid by 2035 by ensuring that the essential expansion of intermittent solar

[2] https://www.gov.uk/government/news/battery-storage-boost-to-power-greener-electricity-grid
[3] Appeal Decision APP/T2350/A/13/2193882 dated August 2013. The Inspector noted that supporting economic growth in rural areas in order to create jobs and prosperity amounts to very special circumstances for a renewable energy scheme in the Green Belt.

and wind power generation does not harm grid parity and security. The proposal would support growth and prosperity in the energy sector and improve energy security by diversifying the area's energy supply mix and help to protect the local communities from potential black outs.

5.7.32 The overall agricultural unit which is farmed by the landowner comprises over 38 hectares (95 acres) of land, which is used for the growing of grass, and the grazing of sheep and cattle. The proposal will support long term rural jobs relating to the maintenance and operation of the site and help to diversify the agricultural unit by providing an alternative income stream to support the continuation of farming practices.

Environmental Benefits

5.7.33 The site is dominated improved grassland which is considered to be of no more than local importance.

5.7.34 The proposal will deliver a net biodiversity gain through an extensive landscaping scheme which will include tree and hedgerow planting and re-seeding areas of land.

5.7.35 A 19.85% net gain in habitat units will be achieved and a 58.13% net gain in hedgerow units will be achieved. This represents a significant benefit to the scheme and is substantially higher than the minimum 10% net gain which is being progressed through the Environment Bill.

5.7.36 In addition, a range of additional enhancement measures are to be introduced including bat and bird boxes and native species planting.

Summary of Very Special Circumstances

5.7.37 The very special circumstances which have been demonstrated are very significant. There is substantial support from the UK Government for renewable energy generation schemes and associated projects.

5.7.38 It is demonstrated within this statement why the proposed development needs to be located on this particular site. The site is located immediately adjacent to an existing substation site which is where the point of connection is located.

5.7.39 It Is demonstrated that there are extensive environmental benefits associated with the proposal, both at a global level in relation to reducing the impact of carbon emissions on Climate Change, on a local level and at a wider district level, in addition to various economic and social benefits. It is also concluded from a technical perspective that the proposed development would not result in adverse impacts, particularly when enhancement and mitigation measures are taken into account.

5.7.40 The overall level of harm resulting from delivery of the proposed development is considered to be significantly outweighed by the benefits which will be delivered. Consequently, it is concluded that the proposal is able to demonstrate very special circumstances. These are summarised below:

- Due to the nature of the proposal, it needs to be located in close proximity to a point of connection to the grid, which itself is located in the Green Belt;
- The grid network has capacity for the proposed development;
- The scheme will support and enable the deployment of renewable energy generation and provide a direct replacement to gas fired power generation in meeting electricity demand at peak times thus making an essential contribution to addressing the impact of climate change.
- The existing landscape context means the site makes a limited contribution to the openness of the wider Green Belt;
- The design and siting combined with the proposed mitigation has been well considered and will minimise the perceived impact on the Green Belt;
- The proposal will deliver ecological and landscape improvements;
- The proposal is for a temporary period of 40 years, after which all equipment is to be removed and the site reinstated to its current use.

Relevant Planning Determinations for Comparison

5.7.41 To assist the Local Planning Authority in its determination of the current proposals, we would also draw

attention to the following example cases in which planning permission has been granted for battery storage development within the Green Belt.

Figure 5.1 – Planning Permissions for BESS's in the Green Belt

Planning Authority	Application Reference
Cheshire West and Chester Council	21/02404/FUL
Redditch Borough Council	21/00195/FUL
South Oxfordshire District Council	P19/S0623/FUL
Purbeck District Council	6/2019/0608
Bradford Metropolitan Borough Council	18/03894/OUT
Central Bedfordshire Council	CB/18/01795
London Borough of Havering Council	P0887/18
Welwyn Hatfield Borough Council	6/2017/2340/FUL
South Ribble Borough Council	07/2017/2821/FUL
Trafford Metropolitan Borough Council	92459/FUL/17
Rochford District Council	17/00939/FUL
Barnsley Metropolitan Council	2017/0624
Buckinghamshire Council	17/05825/FUL
Rotherham Metropolitan Borough Council	RB/2017/1132
North East Lincolnshire Council	DM/1016/17/FUL
South Staffordshire District Council	16/00747/FUL
North Hertfordshire Council	16/03171/1

5.7.42 In the majority of these cases, the definitional harm and harm to Green Belt openness has been greater than in the circumstances of the current proposals. The current application site is relatively unique in the extent of limitations to its contribution to the purposes of including land within the Green Belt and its existing degree of openness. Nevertheless, in each of these cases the determining authorities reached the conclusion that the Very Special Circumstances in support of battery storage development have clearly outweighed the identified harm in each case.

6. SUMMARY AND CONCLUSIONS

6.1 SUMMARY

6.1.1 This Planning, Design and Access Statement describes a proposal by Sirius Renewable Energy Ltd for the installation and operation of a battery energy storage system (BESS), at the existing Cellarhead Sub-station, Wetley Rocks.. The deployment site is located c. 1.5km to the west of Wetley Rocks, adjacent to Cellarhead Substation, on agricultural land wihin the Green Belt. The proposed point of connection is at the existing Cellarhead Substation to the west of the site. The proposed development will connect into the point of connection via underground cabling.

6.1.2 The proposed development will support the operation of existing and development of proposed renewable energy projects, essential to delivering the Net Zero Strategy objective of decarbonising the electricity grid by 2035 and meeting the nations carbon reduction targets. The proposal would support growth and prosperity in the energy sector and improve energy security by diversifying the area's energy supply mix and help to protect the local communities from potential black outs. The proposed development will support the operation and development of renewable energy power generation and will contribute towards reducing the causes of climate change by reducing CO2 emissions, thereby ensuring future generations have access to low carbon energy and a high quality environment.

6.1.3 The proposals have been considered in the context of national and local policies as well as material considerations for which there is support for proposals for renewable energy generation and necessary enabling infrastructure. The proposal is considered to be in accordance with the relevant planning policies and material considerations in the form of the NPPF and Staffordshire Moorlands Local Plan (2020) from which there is policy support for the proposal.

6.1.4 Paragraph 151 of the NPPF notes that when located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers are required to demonstrate very special circumstances. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources.

6.1.5 In this instance, we set out why we consider the proposal demonstrates very special circumstances.

6.1.6 The proposed development clearly accords with the 'presumption in favour of sustainable development' under the NPPF, as it secures environmental, economic and social betterment. The potential impacts (with mitigation) of the proposal have been demonstrated to be limited and are significantly outweighed by the renewable energy benefits.

6.1.7 A number of environmental considerations are considered in this statement and various supporting technical reports accompany this application as appendices. These consider the potential effects of the proposed development upon the application site and identified receptors within the receiving environment. Due to the iterative design process these assessments conclude that the proposal (alongside proposed mitigation) will not lead to adverse environmental effects either locally or upon the wider area.

6.1.8 The facility will deliver significant environmental benefits with the capacity to store and supply up to 408,800,000 kWh of electricity per year as an enabling technology for renewable generation and a replacement for gas fired power generation in providing rapid response power to satisfy peak demand. In performing these roles the development has the ability to reduce carbon dioxide emissions by up to 115,000 metric tonnes annually whilst also providing electricity storage equivalent to supplying up to 116,800 homes.

6.1.9 It is considered that potential impacts from the construction, operation and decommissioning of the proposal are not significant and, when balanced against the pressing need for renewable energy and that local and national government strategies support this, the identified potential impacts following mitigation are considered acceptable. It is therefore considered that the proposal accords with the

Development Plan and material considerations and should be granted planning permission.

6.1.10 The proposal will support long term rural jobs relating to the maintenance and operation of the site and help to diversify the landowners agricultural unit by providing an alternative income stream to support the continuation of farming practices across the landholding.

6.2 CONCLUSIONS

6.2.1 It has been demonstrated that the proposal accords the provisions of relevant planning policy and will not result in any unacceptable environmental impacts. It is concluded that no significant impacts are anticipated, and the proposal should be supported.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Renewable Energy


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Planning