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Staffordshire Moorlands District Council  
Planning Department  
Moorlands House  
Stockwell Site  
Leek  
ST13 6HQ



4245 Park Approach  
Thorpe Park  
Leeds  
LS15 8GB  
Tel: 0113 264 9960

[www.thesiriusgroup.com](http://www.thesiriusgroup.com)

Dear Sir / Madam,

**REQUEST FOR A SCREENING OPINION– PROPOSED BATTERY ENERGY STORAGE FACILITY, LAND ADJACENT TO CELLARHEAD SUB-STATION, MILL LANE, WETLEY ROCKS**

I write to request a Screening Opinion under Regulation 5 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2017 (the EIA Regulations), to establish whether a planning application for the proposed development should be accompanied by an Environmental Statement.

The EIA Regulations state that requests for Screening Opinions shall be accompanied by a plan to identify the land, a brief description of the nature and purpose of the proposal and, if possible, potential effects on the environment. The following commentary provides a description of the proposals and a location plan is attached for reference purposes.

**Introduction**

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.

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 ramp up electricity generation as and when necessary to do so. Renewable installations are unable to do this, and so as the UK moves towards a more environmentally sustainable energy supply system, with an increase in renewable energy sources, Battery Energy Storage Systems (BESS) are essential in allowing for a move away from non-renewable forms of energy generation. This is because they allow for the storage of electricity which can be exported to the grid when renewable forms of energy generation such as solar are unable to generate electricity i.e during hours of darkness.

BESS do not emit Carbon Dioxide and provide a balancing mechanism drawing electricity (charging) when levels on the Network are above that of demand.

BESS represent an essential service needed to support the roll out of renewables.

BESS provide sub-second response times, so offer a 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.

Sirius Renewable Energy Limited seeks to enable the increase in renewable energy generation and the transition to a lower carbon energy supply system through developing a BESS on land adjacent to Cellarhead sub-station, accessed off the existing sub-station access road, which runs to the west of Mill Lane, Werrington

### **The Site**

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. There are two high voltage overhead electricity pylons located in the western half of the main body of the site.

The site is located approximately 2.8km north east of Werrington, 3.5km west of Wetley Rocks and 8km north east of Stoke-on-Trent. The National Grid Cellarhead Sub-station is located immediately to the west of the site. This is where the sites point of connection will be.

To the north of the site is a track which is separated from the site by a hedgerow and several trees. Beyond the track is agricultural land.

To the north east of the site is a collection of agricultural barns, beyond which is agricultural land.

To the east of the site is agricultural land.

To the south of the main body of the site is a hedgerow and a number of trees, beyond which is agricultural land. 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 Mill Lane to the east.

To the west of the site is a narrow belt of trees and the National Grid Cellarhead Sub-station.

Ordnance Survey maps show a public footpath which runs adjacent to the northern boundary of the site along the track as described above. An additional public footpath runs through the wooded area to the west of the site, and partially through the field to the south west of the main body of the site. The public footpath runs along the sub-station access road to the south of the site before connecting with Mill Lane to the east.

The overall context of the site is rural, with the surrounding area consisting mainly of agricultural land however the development site is dominated by the presence of the adjacent sub-station structures and the on-site electricity pylons.

### **The Proposal**

Our client, Sirius Renewable Energy Limited, is seeking to develop a battery storage compound across approximately 5.4Ha of land with a maximum export capacity of 280MVA.

The proposal will comprise the following:

- 56no. pairs of battery containers i.e 112 containers;
- 112 inverters and 56 transformers arranged in a 'U' formation located adjacent to each container;
- 132kv DNO sub-station;
- 8 containers containing switchgear/meter room (shown as white containers for illustration purposes) on supplied drawing;
- Perimeter fencing 2.4m high and inward facing infra-red CCTV;
- Screen planting; and
- Internal service road.

The proposed development is for the installation and operation of a BESS with capacity to store and export up to 280MVA of power to the local distribution network for up to 2 hours. The facility will provide balancing services to maintain the sufficient power on the 'grid' at times of high demand for electricity and to provide essential support for the continuing deployment of renewable energy.

The proposed development will consist of battery containers units which will have a similar appearance to shipping containers and measure typically 12m long by 3m wide and 3m high. Transformers, feed pillars, sub=stations and control cabins will be no higher than 3m. The exact container unit is yet to be determined.

As mentioned above, 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 energy storage developments. The batteries will have zero emissions to atmosphere, limited noise generation and once constructed, minimal traffic movements to site.

### **EIA criteria**

The EIA Regulations contain two development schedules (Schedule 1 development and Schedule 2 development). Schedule 1 contains a list of development where EIA is mandatory. The proposal does not fall within Schedule 1 development. Although battery storage developments are not specifically listed under either

Schedule 1 or Schedule 2 developments of the EIA Regulations, Schedule 2 refers to “Energy Industry” categories and it is considered that the proposal falls within the category of “*industrial installations for the production of electricity, steam and hot water (unless included in Schedule 1)*”. The applicable threshold for consideration of Schedule 3 criteria is if the site exceeds 0.5 hectares.

The selection criteria for screening Schedule 2 development are considered below.

### **Characteristics of development**

- a) The site of the proposal covers an area of irregularly shaped agricultural land, currently being utilised for grazing immediately adjacent to Cellarhead Sub-station with 2 existing electricity pylons and transmission infrastructure located within the site. The redline boundary shown on the accompanying plan extends along the existing access road to Cellarhead Sub-station before joining with Mill Lane, an adopted highway to the east.
- b) The limited height of the units (less than 3m above ground level), their non-intrusive structure and their benign, modular and ephemeral nature means that they will be well screened from the surrounding area and therefore not have a significant impact on the receiving environment. Additional planting will take place to the northern, eastern and southern boundaries as shown on the submitted plan by the areas shaded green;
- c) The construction and operational phases do not include any complex or hazardous works or operations and will not lead to any potential adverse environmental effects. Construction is anticipated to take 6 to 9 months;
- d) The site is rural in nature being surrounded by agricultural land and woodland. However the site is dominated by the proximity of the adjacent sub-station and there is potential for cumulative effects through noise generation although it should be noted that the site is located in excess of 250m away from the nearest property and no significant noise impacts are therefore anticipated. A detailed noise assessment, will be undertaken and if necessary attenuation measures can be put in place to ensure no significant adverse effects will be experienced;
- e) Visually, the site is dominated by the adjacent sub-station structures and on-site electricity transmission pylons located within one of the field boundaries. On the whole the site benefits from established vegetation (woodland and hedgerows) that screen views from public areas. Additional vegetation screening will be incorporated into the scheme to strengthen existing vegetation screening;
- f) The construction and operation of the proposed development requires limited maintenance, thus consuming limited resources;
- g) During the lifespan of the proposal, little or no waste will be generated. The site will be used as an energy storage facility which will provide ‘grid balancing services’ supporting zero emission energy generation;
- h) The development would not create pollution or nuisance given the benign nature of the battery units and proposal. Any noise generation can be appropriately attenuated to acceptable levels;
- i) The scale and nature of the proposal could not lead to major accident and / or disaster; and

- j) The modular and contained nature of the development would not involve the application of substances or technologies that would create a significant risk to human health.

### **Location of development**

- a) The proposed development footprint is an area of land currently used for agriculture and immediately adjacent to the Cellarhead grid supply point (sub-station) where connection capacity is located and has been secured by the applicant;
- b) No Public Rights of Way enter the site although there are Public Rights of Way which run to the north, west and south of the site. These will not be closed or diverted as a result of the proposed development;
- c) The site is rural in nature and is surrounded by farmland, woodland, agricultural buildings and the National Grid Sub-station site. The proposal will have a lifespan of 35 years, after which all equipment will be removed from the site and it will be returned to agriculture;
- d) The proposal site is located 2.8km north east of Werrington, 3.5km west of Wetley Rocks and 8km north east of Stoke-on-Trent. The nearest statutory ecological designation is Wetley Moor SSSI which is located approximately 1.5km to the south east. Berryhill Fields Local Nature Reserve is located 3.8km to the south east. Combes Valley SSSI is located 4km to the north east. Consall Local Nature Reserve and Churnett Valley SSSI is located 3.5km to the south east. Given the distance and intervening land uses, the proposal is unlikely to have a significant impact on these designations;
- e) The site is identified as a 'less favoured area' by DEFRA. This means it is an area where the natural characteristics make it difficult for farmers to compete. Less favoured areas are designated in Europe to provide special measures for farmers in the designated areas. They are mainly upland areas where the natural characteristics (geology, altitude, climate etc) make it difficult for farmers to compete;
- f) The site is within Flood Zone 1 and therefore has a low risk of flooding;
- g) The site is located in the Green Belt. This does not trigger the need for an EIA although the subsequent planning application would address the impact of the proposal on the Green Belt and would demonstrate 'special circumstances';
- h) The nearest Listed building is 0.35km 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 0.68km to the north 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. All of the listed buildings are also separated from the site by existing (non-Listed) buildings which means that it is unlikely that the proposal site is visible from the Listed Buildings.

### Types and characteristics of the potential impact

- a) The site measures c. 5.4 ha and is located approximately 2.8km north east of Werrington and 3.5km west of Wetley Rocks. The nearest residential property is located 0.3km to the east on Rownall Road in Rownall, a small hamlet. Additional vegetation screening is proposed to the eastern boundary;
- b) The diminutive scale of construction and benign nature of operation means the battery storage facility within the rural setting is unlikely to significantly affect an area of population;
- c) Due to the benign nature of the proposal impacts are not expected to be significant;
- d) The development site would not cross or impact upon local authority boundaries as impacts beyond the site boundary would be limited in extent;
- e) The magnitude or complexity of any impacts resulting from the proposal would not be significant due to the modular nature of the facility and that there are no emissions to atmosphere once operational;
- f) Technical and environmental assessments that will accompany planning application will demonstrate the probability of any potential impacts will be limited;
- g) Once the proposal has reached the end of the operational period, the site can be fully restored back to farmland reflecting the context of the surrounding area;
- h) We are aware that a Screening Request has been submitted (validated on 14<sup>th</sup> June 2021 with ref: SMD/2021/0352) for a proposed battery energy storage system development on land east of Cellarhead Battery site, Rownall Road, Wetley Rocks. The site is located to the north east of the proposal site away from the Cellarhead sub-station and closer to residential properties with a new access road being proposed off Rownall Road. The accompanying statement indicates that the proposed battery energy storage system would have a capacity of 300MW and cover an area of approximately 2.65ha. A Screening Opinion has yet to be issued and is due on the 1<sup>st</sup> July;
- i) We are also aware of a second application for a Screening Request (validated on 10<sup>th</sup> June 2021 with ref: SMD/2021/0382) for a proposed energy storage facility on land at Greenfields, Thorney Edge Road, Bagnall. The site is located circa 0.7km to the south west of the proposal site. The accompanying statement indicates that the energy storage facility will have a capacity of up to 57MW. The site covers an area of approximately 4.5ha. A Screening Opinion has yet to be issued, and is due on the 1<sup>st</sup> July;
- j) Should the two proposals referred to above be progressed to planning stage, an assessment of the cumulative effects will be included as part of the planning application;
- k) Technical and environmental assessments that will accompany planning application will demonstrate the potential impacts will be limited to the receiving environment.

It is therefore considered that the characteristics of the proposed development (as detailed in Schedule 3) are not likely to have the potential for 'significant' environmental effects beyond that already consented and thus would not constitute EIA Development. It has been demonstrated that an EIA is not required in connection with the above application.

Notwithstanding the above, the planning application submission documents will consist of the following key documents:

- Supporting Statement including the planning policy appraisal and Green Belt Assessment;
- Design and Access Statement;
- Drawings including:
  - site location plan;
  - general site layout;
  - application boundary plan;
  - infrastructure details (elevations of battery containers/transformers/feed pillars/sub-station cabins);
  - fencing and security arrangements; and
  - surface water drainage provisions.

Appropriate technical and environmental assessments will be provided to support the planning application:

- Landscape and Visual Appraisal including Green Belt Assessment;
- Cultural Heritage Assessment;
- Preliminary Ecological Appraisal and Hedgerows Assessment;
- Flood Risk Assessment & Drainage Management Strategy;
- Construction Traffic Method Statement;
- Noise Assessment;
- Agricultural Land Classification Assessment; and
- A Statement of Community Involvement describing stakeholder engagement will be provided.

In conclusion, with regards to all aforementioned factors, we respectfully request the Council's formal response on the nature of the development in the form of a Screening Opinion.

We look forward to receiving an acknowledgement of this request. If you would like to discuss any of the above matters, please contact the undersigned.

Yours faithfully,

Dan Elvin  
Senior Planner  
For and on behalf of Sirius Planning Ltd

ENC – SRE1138/01/01 – Site Location Plan  
- SRE1138/01/02 – Site Schematic Drawing