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Jane Curley
Staffordshire Moorlands Planning

BY EMAIL ONLY

33637/A5/KC

05 April 2023

Dear Jane

**SMD/2022/0076 – Land off Bemersley Road – Proposed Battery Energy Storage System
Further information to support the location in the Green Belt**

We write to reconfirm our position on why the proposed development requires this Green Belt location.

Green Belt Site Selection

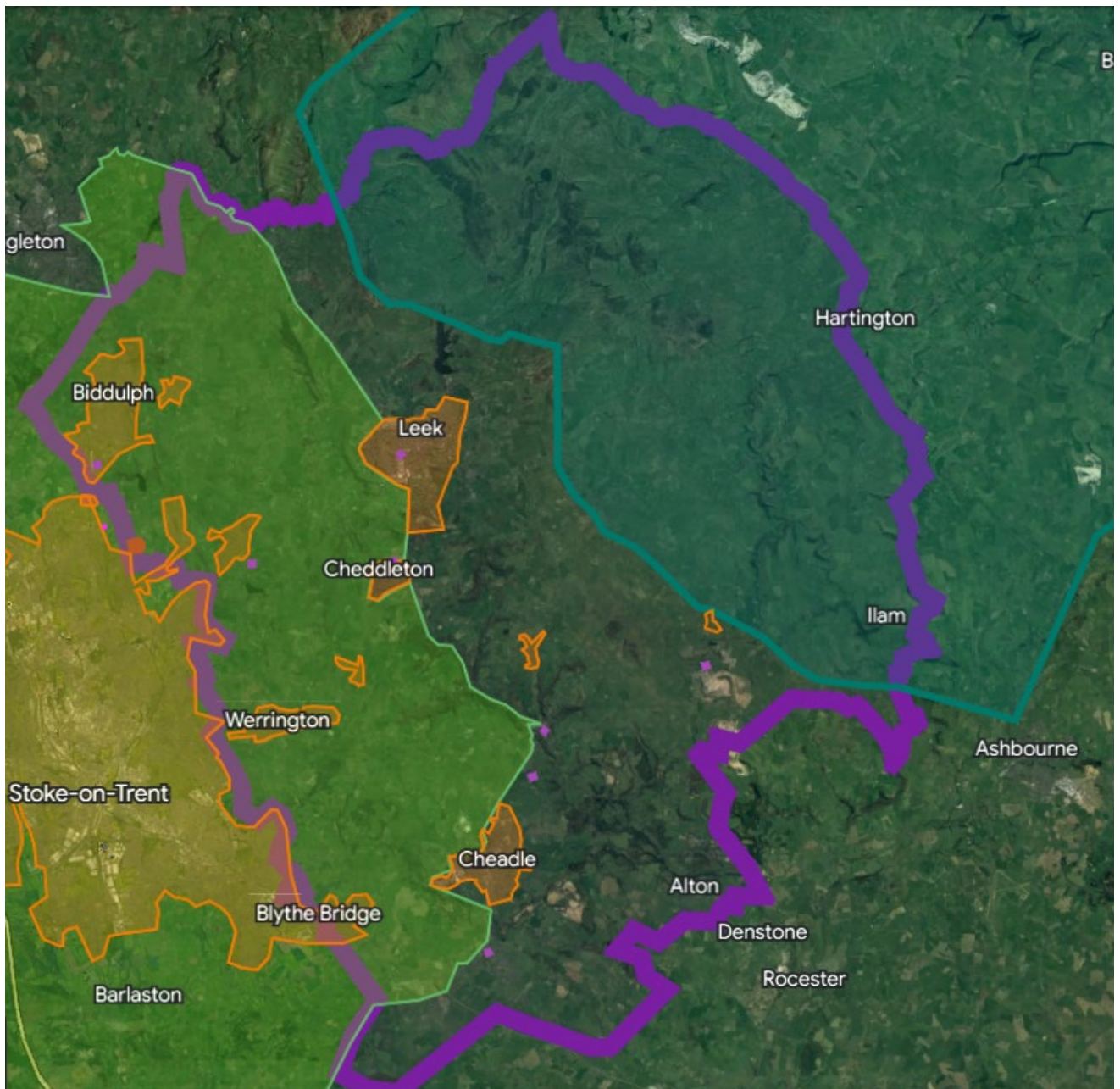
We have previously advised on the locational requirements that are necessary to ensure that BESS can be deployed and operated effectively. These are outlined again below:

- They must be located within close proximity to a viable point of connection to the grid network. There are several factors which constitute a viable connection including, ability for existing cables to carry the additional capacity, little or no reinforcement requirements and the extent of wayleaves required and associated costs. Due to the nature of BESS which import as well as export energy from the grid (solar and wind energy only export to the grid for example), the extent of such viability criteria become even more critical. This several restricts the potential locations such a development can be deployed.
- To be able to develop a BESS, this can only be done where there is a willing landowner who will either sell or lease the land.
- Such projects must also be in areas where there are no construction hazards. Factors such as topography, flood risk and access can all contribute to this and thus locations are selected very carefully to ensure there are little to no risks during both construction and ongoing maintenance of the project.
- There is also a preference to locate such projects outside of designations such as AONB's, National Parks and SSSIs.

Given the above, BESS cannot be located "anywhere", and when seeking to find suitable sites, the grid connection is pivotal and is generally how such projects commence the development stages. As noted above, there needs to be sufficient capacity in the grid network to allow for both imported and exported capacity, and such locations are very limited within the UK, Staffordshire Moorlands being no exception. Indeed, when locations with designations such as AONBS, National Parks and SSSIs are also excluded, the suitable points of connection become even more limited.

Map 1 below shows the constraints within Staffordshire Moorlands between the Green Belt, the Peak District National Park and existing urban areas. The Map identifies that there are only 4 substations outside of the National Park and Green Belt within Staffordshire Moorlands; Teen, Froghall, Kingsley Holt, Cauldon). These are identified by the purple dots and lie mostly in the south of the district.

Our agreed connection point doesn't lie within Staffordshire Moorlands District but in the adjacent District Newcastle-under-Lyme. The site was however chosen due to its proximity to a point of connection which has sufficient import and export capacity. In addition, Newcastle-under-Lyme is heavily constrained by Green Belt and Urban development making it an unsuitable location for the proposed development.



(Map 1 Constraints Plan of Staffordshire Moorlands)

Given the locational requirements the key driver is finding a site as close as possible to a viable point of connection with sufficient import and export capacity. Having established that the point of

connection (Whitfield substation) was suitable via discussions with the DNO, we sought to find a site which had limited technical constraints and a willing landowner.

The other matters that have to be factored in is that BESS are not compatible uses within built up residential areas. An acoustic barrier would be required to provide the appropriate mitigation and clearly placing such infrastructure in residential areas would not be appropriate.

There is an assumption that BESS could be located within industrial areas (if they are near a grid connection), however, this is not the case because such estates and the associated uses are very intensive in terms of energy consumption, which creates capacity issues at the point of connection.

As such, BESS systems require open countryside locations. The land-use and policy designations in Staffordshire Moorlands are made of a high amount of Green Belt, predominantly built-up areas or land within the Peak District National Park (Map 1). The percentage of the total land areas of the District which is open countryside is relatively small, and the majority of this is Green Belt or National Park.

When considering alternatives, proximity to the point of connection is key and the further away that BESS are located, the more inefficient they become due to losses in the cabling, to a point where they become unfeasible and unviable. Therefore, a site as close as possible that was not constrained from a technical perspective, and which was not within a residential area was sought. The proposed site met all requirements.

The site could not be located any closer to the Point of Connection due to Heritage assets (Chatterley Whitfield Colliery Scheduled Monument including several Listed Buildings) adjacent to the agreed Point of connection and the Whitfield Valley Local Nature Reserve. The site is an appropriate distance from the built-up areas and located away from the National Park.

As such this is the best and most suitable location for the BESS and is within the closest proximity of the point of connection. There are no brownfield sites within proximity of the connection which would provide a viable alternative option. PPG states: *There are no hard and fast rules about how suitable areas for renewable energy should be identified, but in considering location, local planning authorities will need to ensure they take into account the requirements of the technology and critically, the potential impacts on the local environment including from cumulative impacts*".

Within the site itself the BESS has been located in a comparatively low-lying area of the field and will be enclosed by existing and proposed landscape screening. Whilst the proposed development covers an area of 1.85ha the proposal would result in only a negligible adverse visual impact due to existing topography and proposed screening.

Staffordshire Moorlands Climate Change Emergency

Staffordshire Moorlands declared a Climate Change Emergency in July 2019 with a target to becoming net zero District by 2030. The Council have prepared a Towards Carbon Neutrality 2030 Climate Change Plan Part 1 and Aiming Low: The Way to Net Zero (Part 2) which includes the visions and commitment to net zero carbon.

These scheme together with other previously approved developments will help to decarbonise the electricity grid and energy systems. Battery storage helps to improve the reliability and resilience to integrating low carbon generation sources, to ensure a more flexible and robust power grid that can better accommodate unplanned outages and integrate more distributed renewable energy resources.

The Councils own Climate Change Plan Part 2 states that they **want to be ambitious but also realistic**. Their Vision states: *Staffordshire Moorlands will become carbon neutral by 2030, taking into account emissions from both production and consumption*.

With their Part 2 Plan Mission Statement noting: *Encouraging people, businesses and other organisations to do what they can to reduce their carbon footprint and making it easier, where we can, for those changes to happen.*

The Council's Part 2 Plan identifies and includes: 7 Ways to Net Zero, this is a list of 7 key actions required to be carbon neutral by 2030. Action 4 is MAKE ENERGY. This is expanded further to promoting the use of renewable energy through a review of the Local Plan.

4	What will we do?	How will we do it	When will we do it	How will we know it's working?	What else needs to happen? What could stop us from making it happen?	Who will make sure that it happens?
Direct Control						
4.1	We will investigate options for generating green energy for Council buildings	We will Commission expert advice to review the Council's estate and develop an action plan	April 2022	Options reported to Council after review completed		Head of Assets
Place shaping						
4.2	We will promote the use of renewable energy	Review the Local Plan and consider measures such as: Identifying areas suitable for renewable energy and produce guidance, Investigate options for community and district heat networks.	Review policies by September 2025	Revised local plan approved outlining approach to renewable energy		Head of Development Services

The Local Plan Review isn't proposed until 2025. Nevertheless, the targets proposed are to increase the amount of renewable energy available to the District to 100MW by 2025 and 318MW by 2030.

This BESS will deliver an additional 49.95MW of energy storage, which offers support to Way 5 LOOK AFTER OUR ENVIRONMENT. The scheme proposes additional planting to deliver a Biodiversity Net Gain protecting and extending the existing green infrastructure.

The Council's Overview & Scrutiny Panel in January 2023 proposes the focus of 2023/24 to be on domestic energy, nature initiative and engaging young people. The focus on domestic energy provides opportunities to support work taking place to respond to the cost-of-living crisis which has, in part been fuelled by the volatility in the energy markets. BESS such as that proposed would help to support this volatility and the transition to 'home-grown' energy from renewable sources. This focus on domestic energy also has the ancillary benefits of helping fuel poverty, health and cost of living for local residents helping to create safer and healthier environments for communities to live and work.

Conclusion

The proposed development will deliver very significant benefits on a local, regional and national level which individually and cumulatively meet a range of key Governmental policies in respect of zero-carbon ambitions, renewable energy generation, ensuring energy resilience and minimising the effects of climate change.

The proposed development will help support the council's Vision to be carbon neutral by 2030. Importantly the scheme delivers on Key Action 4: Make Energy and Action 5: Look After Our Environment. The proposed scheme will offer an additional 49.95MW of battery storage capacity helping to tackling the existing volatility in the energy markets and thus helping to respond to the cost-of-living crisis.

There are few areas within Staffordshire Moorlands which are not constrained by Green Belt, built up areas or the Peak District National Park. Furthermore, there are even less areas in close proximity to a suitable connection point outside of these areas which have both the necessary import and export capacity required. Therefore, this Green Belt location is the only suitable location for the proposed development. We acknowledge this scheme will be inappropriate development in the Green Belt however, we have previously set out that there are significant 'Very Special Circumstances' to justify this development in this location.

Lastly of the two already approved BESS, one was approved within the Green Belt (Cellarhead ref: SMD/2022/0444) whilst the other was located on the edge of the Green Belt (Upper Newton Farm ref: SMD/2022/0160). Whilst we appreciate that each application should be based on its own merits, there should also be some consistency in decision making within the Council.

We welcome officer's consideration of these matters and hope that these address some of your concerns in approving the scheme.

Yours sincerely



Kat Crisp MRTPI
Senior Planner