

Application Reference No. HPK/2023/0193

Site Address: LAND at Marsh Lane, New Mills, Derbyshire.

Comment by: Christine Shaw-Thomson

From:

Beardwood Farm

Furness Vale

High Peak

SK23 7QF

Submission: OBJECTION

Dear Sir/Madam,

I strongly object to the planning proposal indicated above for the following reasons:

1. Inappropriate industrial development in the Greenbelt - No 'very special circumstances' have been demonstrated. The attempt to designate the development as 'temporary' is spurious and misleading. Collins dictionary interprets the word 'temporary' as 'implies an arrangement with no thought of continuance but with the idea of being changed soon'. 30 years is not temporary.
2. The proposals do not fall within any of the categories of accepted development in rural areas as set out in Policy EQ3 of the High Peak Local Plan. It is extremely unlikely that the land will ever be returned to its original state. Natural environments cannot be reproduced overnight despite the promises of decommissioning bonds. Developers may be long gone the land would become a brown field site.
3. It is not a renewable energy project – as Novus states in their literature. The application is for an industrial battery storage facility which takes excess electricity from the national grid to utilise elsewhere (reportedly Altrincham!), and as such, is not linked to solar or wind energy generation. The battery facility will store electricity produced at a cheap time when there is low demand overnight, instead of at an expensive time. In other words, they increase electricity producers profits, but do not reduce the amount of electricity used even slightly. Electricity North West apparently has no shortfall of supply at the present time for local usage and is not interested in leasing their own land at Gowhole for the battery facility. In addition, any extra capacity available may be needed for our own locality in the future as more houses are built. The 'Derbyshire Spatial Energy Project' (2022) gives an indication of capacity needed up until 2040. According to Novus, the stored electricity will service up to 9,011 houses for up to two hours before the batteries need recharging. The time taken to recharge is uncertain as it will depend on how much excess electricity is available at the time. It seems an insignificant amount considering the potential local impact. There are also many concerns regarding the environmental and health impacts of lithium mining and other conflict minerals which is a major sustainability concern for the battery industry. The minerals used are finite resources. Lithium batteries are not recyclable and can end up in landfill and may be corrosive, flammable, or leach toxins into soil and water. This is not sustainable development in any respect.
4. Accessibility - Novus states there are no other areas within the High Peak suitable for their project but yet in 2017 a planning application was submitted for a battery storage facility at

Batham Gate, Buxton, attached to the Water Swallows substation which was subsequently refused. Novus also state that local industrial estates within a suitable distance to the Gowhole substation were investigated. However, at the consultation meeting I attended, the owner of a nearby industrial estate was present, as he had apparently not been contacted and attended the meeting to discover details about the proposed plan. Battery storage facilities do not need to be situated directly next to a substation as the connection is by underground cable which can be up to 1km away, so does not need to impact Greenbelt.

5. The lack of a Fire Safety Management Plan – Concerns are being raised over the rise of lithium-ion battery fires which are occurring with troubling frequency (spglobal.com). UK legislators have been urged to back draft legislative proposals to see lithium-ion battery storage units designated as hazardous and subject to tough regulation with new fire safety and planning controls (energystoragejournal.com Sept 2022), and a bill is presently passing through parliament. A recent explosion and fire took place at the Carnegie Rd 20MW BESS in Liverpool. Thermal runaway caused the destruction of one 5MW container which took 59 hours to extinguish, whilst creating toxic fumes and polluted water run-off. The alarming significant incident report by Merseyside Fire and Rescue Service is available online. There are a fair number of residences close to the proposed site and Marsh Lane is a relatively busy road that runs along the boundary of the site. Lithium batteries are extremely sensitive to high temperatures and are inherently flammable. These batteries can cause explosions, extremely toxic fumes and fires that quickly spread and are difficult to extinguish, endangering both local residents and fire service personnel. An academic study from leading physicists warned that BESS systems ‘are capable of strong electrochemical energy many hundreds of tons of TNT equivalent.’ They go on to say that, ‘Toxic gases produced in the event of failure are Hydrogen fluoride, hydrogen, methane, ethylene and carbon monoxide. These in turn may cause further explosions and fires upon ignition. The chemical energy then released can be up to 20 times the stored electrochemical energy.’ Legislation has not caught up with this relatively new industry yet and the scientists state, ‘BESS are presently regarded as ‘articles’ by the Health & Safety Executive (HSE), in defiance of the Control of Major Accident Hazards Regulations (COMAH) 2015, intended to safeguard public health, property and the environment.’ The report by Dr Edward Fordham of the Institute of Physics, Dr Wade Allison of Oxford University and Sir David Melville of the University of Kent warned that the government and the HSE must take the threat from grid scale battery storage systems more seriously. They believe that the present approach by the HSE is scientifically mistaken and legally incorrect. (Safety of Grid Scale Lithium-ion Battery Energy Storage Systems, Fordham, Wade & Melville. 2021). The site plan does not appear to consider access for emergency vehicles, the provision of the vast amounts of water required to fight battery fires, air pollution or the management of toxic run-off into the River Goyt. An emergency response plan to minimise the impact of an incident during construction, operation and decommissioning should be a prerequisite. The Environment Agencies Response is inadequate in this respect and should be re-evaluated.
6. Noise - Gowhole is a quiet rural backwater. The subsequent inclusion of noise barriers in the plan, indicates that this could be an issue for residential and visitor amenity. Battery energy storage systems can produce noise pollution that impacts the environment. The tonal buzzing and humming that result from these facilities can be distressing to residents and workers nearby. No consideration has been given to the effect of noise on wildlife which will be exposed to the loudest levels on the proposed site itself as well as in the surrounding area. A recent study published by the RSPB ‘Direct & indirect effects of noise pollution alter biological communities in and near noise exposed environments’ (Senzaki, Kadoya, Francis.

2020), concludes that substantial evidence exists that noise alters a variety of behaviour in birds, animals and insects such as acoustic communication, foraging, vigilance and movement. They also conclude, that some evidence has documented noise induced changes to animal physiology, fitness, population dynamics and ecosystem functioning. These effects produce reduced species richness and/or abundance and different community compositions in noise exposed areas relative to comparable quiet locations. Considerable evidence suggests that noise alters a variety of behaviour as noise reverberates through biological communities through indirect effects with no clear link to the acoustic realm, even in adjacent quiet environments. The results of this study suggest that the proposed biodiversity net gain may be significantly impacted at this site due to noise disruption, despite the various planting schemes suggested to increase ecological value.

7. Potential impact on National infrastructure - The Hope Valley Railway runs through a cutting adjoining the site boundary and concern has been raised due to alteration of ground levels above the cutting and the weight of the infrastructure to be installed. In addition, it is not so many years ago that the railway embankment at Gowhole sidings collapsed due to unstable ground conditions and urgent repair work had to be carried out. Should an emergency incident occur the Rail Network would be severely disrupted.
8. Visual – The rural area of settled valley pastures and riverside meadows is adjacent to enclosed and open moorland, and the Peak District National Park. There are open views with scattered trees on the perimeter of the site and a small wooded area/copse at the Southern end of the site. Distant views towards the National Park boundary from Marsh Lane are present and the site is visible from higher ground in the East. The Landscape and Visual Assessment commissioned by Novus states that the development would not effect the setting or purpose of the National Park. However, the National Park has not been listed as a consultee to allow them to comment on this assumption. Novus state that the site will be well screened along the boundary of the site but the unsightly industrial type fencing including infrared cameras will still be highly visible. The cameras would need to be able to view the site from the perimeter so any heavy screening may need to be modified to allow for this. The Derbyshire Spatial Energy Study (2022) 6.2.2 commissioned by Derbyshire County Council, states that ‘Within Derbyshire there is a high degree of landscape sensitivity, most notably in the north west, within and surrounding the Peak District National Park’.



Views towards the higher ground of the Peak District National Park boundary from site access.

9. Tourism/local economy – Gowhole is a popular walking and cycling thoroughfare. The Goyt Way and Midshires Way are close by and the National Cycle Trail runs adjacent to the site. The footpaths nearby are well used and link central High Peak towns and villages to the wider countryside and the Peak District National Park. The footpath from Gowhole opposite the proposed site leads to the Torrs and Millenium Walkway in New Mills and the footpath

from Ladypit Rd along the boundary of the site leads to Ollersett Moor, the Big Stone and Kinder Scout. This network of public rights of way act as an important gateway to the Goyt Valley and Kinder Scout. Encouraging visitors to High Peak and surrounding National Park is vital to the local economy and local services including local holiday accommodation may be impacted. The proposed battery facility and accompanying noise pollution would have a detrimental effect on the area. In addition, this would be a dormant facility offering no ongoing economic value as far as local employment is concerned. The proposal is totally at odds with the new High Peak Tourism Strategy (Feb 2023).

10. Transport/highways – Marsh Lane is not suitable for heavy traffic. It is a narrow road with dangerous sharp bends and the width of the road narrows in places causing various pinch points along the route allowing only single lane traffic. It is also used as a 'rat run' to avoid the A6 and speed restrictions are often ignored. The level crossing area is often congested which then ultimately results in a large volume of traffic negotiating the road at once. This is further compounded by two narrow bridges with tight blind bends, parked cars and a dangerous and difficult junction at either end. The industrial estates and the housing development are situated very close to either end of the lane and HGVs use the end nearest to their destination. Beyond this the road is totally unsuitable for large vehicles with much of the route having no pavement for pedestrians and blind bends due to the topography and vegetation. The proposed traffic measures at the New Mills junction with Marsh Lane are confusing and fraught with potential drawbacks due to possible lack of communication, staffing issues and timings. Where will the HGVs park if no one has arrived to direct the traffic? Will they attempt the junction anyway endangering pedestrians? Who would be accountable if this ill-conceived plan goes wrong? In addition, despite Novus's plan to avoid school times, the pedestrian crossing at the junction is used throughout the day by large groups of school children from St Georges Primary School and New Mills High School to access the playing fields off Hayfield Rd, and by the residents of Phoenix Lodge and Tarry Hill Care Home. The Highways report is wholly inadequate. There is no mention of the lack of pavements for pedestrians (including school children who walk this route to the aforementioned schools), or where pedestrians are supposed to go when confronted with an articulated lorry, as there are thick hedgerows and walls either side for most of the route. Neither is there any mention of visibility, road width, pinch points or parked vehicles between the site and Marsh Lane junction. The idea that damaging even more roadside vegetation and trees to allow road users slightly more visibility, and so prevent reducing the speed limit near the site access is inexplicable. In addition, this would remove screening from the ugly industrial fence line. This should be looked at again and a comprehensive risk assessment submitted to safeguard the public.



Photo shows site access directly to the left just before traffic lights. Parked wagon (not a larger articulated vehicle) with wheels over white line despite being tucked into verge. Visibility poor due to brow of hill heading towards Furness Vale. The road width is less than this in many places and an articulated lorry or low loader would render the road impassable to other traffic. A long queue from the level crossing would cause mayhem if confronted by one of these vehicles.

11. Environment, Ecology & Habitats – The special character of the landscape would be irrevocably and irreversibly damaged contrary to policy EQ2. Derbyshire County Councils Landscape Character Document SPD5 (2006) classifies the land as ‘settled valley pastures’ adjacent to ‘riverside meadows. This is surrounded by the ‘enclosed’ and ‘open moorland’ of the High Peak and Peak District National Park. COP 15 (Dec 2022) adopted the Global Diversity Framework (GDF), the first international agreement to acknowledge that all aspects of nature - animals, plants, rivers, mountains, soil, etc – have rights equal to human beings. Agricultural land can provide important feeding areas for birds animals and invertebrates. Species richness and diversity at the site would be diminished despite biodiversity net gain measures which may be negated by noise and habitat disruption resulting in the displacement of animals presently utilising the site. The Preliminary Ecological Appraisal (PEA) commissioned by Novus stipulates that the survey area extended within 50m of the site boundary and that a zone of influence was land on or immediately adjacent to the site. The survey states that no other pathways to effect designated sites in the area have been identified (4.2). The map produced for the survey by Derbyshire Biological Records Centre (Fig.3.1) encompasses part of the Peak District National Park to the East but only shows other designated sites within 2km of the site, thus narrowly omitting the 31,852 ha (123sq miles) of the Dark Peak SSSI, SAC & SPA. These are important National and International areas containing significant biotic communities, and particularly, globally threatened breeding birds. Notably, Curlew and Lapwing amongst many others. Given an incident at the facility and the prevailing wind direction, a toxic vapour plume over these important sites could be devastating for nature. The National Policy Framework (NPPF) 15. states that ‘In terms of biodiversity and habitats, the presumption in favour of sustainable development does not apply where there can be significant adverse effects on habitat sites. Critically, these birds do not stay contained within these areas but also use the surrounding countryside to breed and often travel long distances to feed. Records of protected species for the survey (PEA), were provided by Derbyshire Records Centre which relies on members of the public to report species they observe. However, the proposed site falls within both of the 1km squares surveyed three times annually for over 15 years by the British Trust for Ornithology. The surveyors are experienced birdwatchers who can identify birds by both sight and song and call. Species observed include 14 Red List species (highest and critical conservation priority and globally threatened), including Curlew and Lapwing, and 16 Amber List species (high conservation priority). The records are available on request from the BTO, who can also supply data reports providing rigorous scientific information to inform Environmental Impact Assessments in the UK. The plight of farmland and upland birds is worrying. Indeed, there are more species being added to the Red List than ever before. The Peak District and surrounding areas are an important stronghold for these species and should be protected. We presently have Curlews on our farmland and we are only just over 300m from the site. Since 1970, 8 species of breeding birds have been lost around the New Mills area (Birds on your doorstep. www.BTO.org). The ecological survey commissioned by Novus consisted of a desk study and a Phase 1 habitat survey. Phase 1 habitat surveys are superficial at best, observing a snapshot in time and can be prone to recorder bias and

seasonal anomalies. This means that protected species who use the site, particularly for feeding, may not be present at the time of visit. The biodiversity metric tool measures habitat units and relies on the qualitative skills of the ecological consultants who are employed by the developer. Habitats such as scrub, bramble and farmland score low on the metric despite being important niche habitats or feeding areas for some species. Crucially, metrics are only concerned with habitats and do not take protected species into consideration. According to Katherine Willis, Professor of Biodiversity, University of Oxford, 'The tool that has been developed to enable planners and local planning authorities to work out the current biodiversity of a site and biodiversity net gain, is simply not fit for purpose'. Willis also purports that the tool will only promote further loss and fragmentation of the UK's natural environment and even more critically, the important ecosystem service flows that emerge from the species, communities, and habitats on these fragments of land (Net biodiversity net gain: gain for whom? Willis. K. 2021). A meeting of the Environmental Audit Committee (committees.parliament.uk/publications/6498) recommends that the requirement for 'Biodiversity Net Gain' should be replaced with a quantitative tool and approaches to measure and ensure 'Net Environmental Gain' as soon as possible. The Landscape and Ecological Management Plan (LEMP) produced for Novus purports to protect the valuable features present and increase the value of the site for wildlife. However, there would be much disruption and the existing tree work specified could be interpreted as being particularly excessive considering the natural setting of the site, as opposed to parkland where public safety may be more of a concern. The management schedule (See 3.39) is not wildlife friendly. Trees in their natural state have a diversity of age structure, crossed branches and dead wood in their crowns. This produces greater biodiversity and shouldn't be removed! The crevices and cracks of dead and decaying wood is absolutely vital for fungus, foraging, roosting and nesting birds, bats, and mammals. In addition, the heavy maintenance schedule proposed would surely mean that traffic accessing the site would be in excess of the occasional visit specified by Novus. 'The Derbyshire Natural Capital Strategy' commissioned by Derbyshire County Council, in order to set out plans to ensure Derbyshire's Natural Capital assets remain in good order to positively impact on Derbyshire's economy and the lives of its residents, was according to the website, due for release in Summer 2022, but as yet unfortunately, does not appear to have been published, and may have been valuable in considering this planning proposal. According to the Wildlife Trusts we are one of the most nature depleted countries in the world, especially in the midlands, and in order to decarbonise our future we need to preserve our natural assets, especially biodiversity and carbon capturing land. A balance must be sought for siting storage facilities and renewables. The pathway to net zero carbon should not include destroying our precious greenbelt which in itself plays such a vital role in combating climate change.

12. Agriculture – Maintaining agricultural capacity to deliver significant levels of food production is critical. Adjusting the farming sector to a post Brexit model of subsidies should support the move away from damaging intensive practices, reconciling food production with better management for natural and cultural heritage, and for public access. Sustainable agricultural practices are particularly favourable for carbon sequestration. Soils are our main terrestrial store of carbon and should be protected from development and be preserved to combat climate change, particularly in protected areas such as Greenbelt. The NPPF states that: 'Planning policies and decisions should contribute to and enhance the natural and local environment' by 'recognising the intrinsic character and beauty of the countryside and the wider benefits from natural capital and ecosystem services'. The site where the batteries and associated infrastructure are to be placed is comprised of Agricultural Land Classification

(ALC) Grade 3b which is assessed as being moderately productive. It can provide high yields of grass which can be harvested and grazed for most of the year (Guide to assessing development proposals on agricultural land. Natural England, 2021). This is only one grade below the 'Best and Most Versatile' (BMV) land and as such, is not poor quality. This is actually good quality farmland for the High Peak and should not be lost! The land in the Southern section is classed at grade 4 because of its topography, and so can produce high yields of grass for grazing, but is not suitable for crops. There are many ways that farmers can diversify without sacrificing land to industrial development. The huge sums of money offered by energy companies to clinch these deals is despicable. As a nearby landowner myself, I have been bombarded with phone calls from so called renewable energy companies offering up to £70,000 acre per annum to lease land for battery storage.

13. Coal Measures – There are two known mine shafts opposite the site on the West side of Marsh Lane with the possibility of others. Sink holes in the area have been known to occur, with one recently opening up by Gowhole Farm during construction work in the builders yard. The risk of this occurring should be thoroughly investigated.
14. Consultees – Gowhole Farm was the only residential property consulted when there are numerous other properties in very close proximity to the site. The Fire and Rescue Service and the Peak District National Park should also be compulsory consultees.

In summary, the only conclusion is that this planning proposal should be rejected, as the adverse effects massively outweigh any benefits of the scheme. In addition, serious consideration should be given as to whether there is a case for an Environmental Impact Assessment (EIA) at this location due to:

1. The draft proposals presently passing through parliament to enforce strict planning policy changes for battery facilities and their hazardous materials. Possible remit for schedule change and compulsory consultees.
2. The potential for serious air and watercourse pollution in the event of a significant incident.
3. The potential for serious disruption to National Infrastructure – Rail Network.
4. High levels of landscape sensitivity in and around the National Park (Derbyshire Spatial Energy Study, 2022).
5. The nearby location of major International and Nationally designated sites. The Dark Peak Site of Specific Scientific Interest (SSSI), Special Area of Conservation (SAC) and Special Protection Area (SPA).

Christine Shaw-Thomson
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