

Goodrest Farm Battery Energy Storage System

This document has been prepared to set out the response of Greenergy Renewables UK ('the Applicant') to submissions made to Bromsgrove District Council with regards to the Goodrest Farm Battery Energy Storage System (BESS) project ('the Project'), application reference: 24/00960/FUL.

The Applicant has only responded to key points made by consultees or matters that are material planning consideration where it believes it would be helpful to Bromsgrove District Council. The absence of commentary on a submission should not be taken as implication that the Applicant supports its content.

Fire safety and pollution/health

Whilst the likelihood of a fire event within a Battery Energy Storage System (BESS) is very small, with only a single recorded event in UK history, fire safety has come to the forefront of attention on developments for BESS facilities due to the presence of lithium-ion batteries within a confined space. There is often a misunderstanding about the safety of BESS sites which are designed and constructed with a number of features to detect and prevent fires as dictated by national guidance and in line with latest technology. These include various monitors and sensors for smoke and heat, systems to control battery temperatures and ventilation and gaseous systems to extinguish fires. Each battery is stored within its own container and monitored via a battery management system in order to reduce the risk of overheating and subsequent fire.

The National Fire Chiefs Council has provided guidance to BESS developers around designing and managing sites and, as such, the Applicant has sought to design the site in accordance with this, incorporating features into the design including multiple points of entry, onsite water supply and appropriate separation distances to prevent the spread of fire in the event of an emergency, as demonstrated in the submitted Fire Strategy Plan.

The Applicant has also engaged proactively with the Hereford & Worcester Fire and Rescue Service (HWFRS) prior to submission to explain the design process and assumed safety features, who provided positive feedback on the proposal. The Applicant will continue to engage with HWFRS throughout the development, construction and operation of the BESS, including consulting with them on and agreeing a Risk Management Plan and an Emergency Response Plan, to ensure that an emergency event can be dealt with effectively and the HWFRS know the correct measures to follow in the unlikely event of a fire.

The management of potentially contaminated firewater runoff is covered in a comprehensive Firewater Management Plan that has been submitted as part of the full application, and provides details of how, in the event of water being used in a thermal event, any runoff will be held in contained attenuation basins. This water will be removed via a waste disposal service and not allowed to flow into the local fluvial system.

Green Belt development

Renewable energy projects located within the Green Belt, such as this, are generally considered inappropriate development and require developers to demonstrate 'very special circumstances'.

The Green Belt's primary function is to prevent urban sprawl, which occurs when cities expand into the countryside and valuable green space is lost. However, when deciding whether to grant permission for renewable energy projects, the wider environmental benefits should also be considered. It is also worth noting that, once constructed, associated impacts in terms of traffic movements and resource uses will be negligible as detailed in our Transport Statement.

The degree of harm by reason of inappropriateness, has been assessed as medium impact with moderate adverse effects. In time these would reduce to low impact with minor adverse effects following the growth of the extensive landscape mitigation measures. These harm levels are substantially outweighed by the following material benefits of the project such that they amount to very special circumstances which justify the approval of this development within the Green Belt.

- The stringent locational constraints which this development is subject to.
 - Further details of these locational constraints and site selection process can be found with the supporting Alternative Site Assessment document, which highlights that there were no other feasible locations outside of the Green Belt designation (or on Brownfield land) considering our Point of Connection.
- The benefits associated with energy storage in terms of energy security.
- Increasing the efficiency of renewable energy utilisation.
- The associated wider environmental benefits resulting from CO2 reductions.

Environment and wildlife

We understand the concerns raised about the potential impact on the local wildlife and loss of habitats and vegetation, particularly trees on-site.

The proposed site will utilise approximately 1.2 hectares of grassland habitat, however this is deemed to be of limited ecological value due to current grazing activity. All existing trees, hedgerows and shrubs on-site will be retained.

An extensive Landscape Mitigation Plan has been proposed including new wildflower meadow seeding, native thicket, native hedgerows and native tree species. **This will result in a habitat Biodiversity Net Gain (BNG) of 46.6%**, creating a significant positive impact to local species and wildlife.

Prior to construction, pre-commencement checks for certain species will be conducted and any vegetation clearance will take place outside of breeding/hibernation seasons, where possible. During construction, stringent Precautionary Working methods will be adhered to for all works on-site to ensure impacts to wildlife are limited.

Furthermore, the proposal is temporary in nature; with an expected lifetime of 35 years, after which the site will be decommissioned, and land restored to its original condition.

Natural England has commented on and has **no objection** to the proposal.

Noise

A full Noise Impact Assessment was submitted in support of the application, which assessed the acoustic impact of the proposed development in relation to noise sensitive receptors in close proximity to the site.

The noise assessment assumes equipment and batteries are running at 100% capacity for 24 hours a day, which is an unrealistic 'worst-case' scenario, therefore actual noise levels are predicted to be significantly below those modelled.

The assessment determined that noise levels, during both daytime and nighttime intervals, would not be considered significant and would be acceptable, as such no further mitigation measures are required.

Visual

A Landscape and Visual Appraisal (LVA) was submitted in support of the application which assesses the impact of the proposals on landscape character and visual amenity. The LVA notes that physical effects are contained within the site boundary with many elements of existing landscape being retained.

Visual and perceptual effects on landscape character, diminish with increasing distance from the site. In terms of landscape effects on all the identified landscape receptors, these ranged between Negligible Adverse and Moderate Adverse, which is deemed acceptable. Extensive mitigation is proposed which reflects the local landscape character, including native thicket, hedgerow, and tree planting to minimise views from visual receptors. Full details of the proposed planting measures can be found on the submitted Landscape Plan.

Cumulative impact

Due to the nature of grid connection opportunities in the UK, with viable connections mainly available at Grid Supply Points at the 132kV voltage, it is often the case that multiple renewable energy development projects are located in 'clusters' around these Points of Connection.

The Applicants' selected site is over 500m from the nearest proposed BESS development. Therefore, from a landscape and visual impact perspective, the Goodrest Farm BESS is not expected to result in any cumulative effects from existing or other proposed BESS infrastructure.

Considering the relatively short construction period (which is not expected to coincide with the other proposed BESS development), and limited number of associated traffic movements once operational, no cumulative impacts are expected from a Highways perspective.

Agricultural land use

Where possible, sites are selected on land that is considered to be non-Best and Most Versatile (BMV- Subgrade 3b or below). This is not always possible when considering other stringent locational constraints (further details of which are outlined in the Planning Statement and supporting Alternative Site Assessment), however the development is currently comprised of 40% subgrade 3b, and the remainder subgrade 3a- which is the lowest value of BMV land.

Best efforts have also been made to maintain as much land as possible for current agricultural use of sheep-grazing, which will continue on the surrounding fields.

Therefore, considering the relatively minimal land take of the development, the impact to domestic food security will be negligible, while the improvements to domestic energy security would be significant.

It is important to note that the approval being sought is for temporary planning permission for the project lifespan of 35 years, after which (subject to approval) the development must be reversed, and land reinstated to its original condition - so would be returned to agricultural use. Whilst it is questionable whether the loss of the portion of land subject to this proposal will impact on the landowners ability to graze sheep on the rest of his land at all, the impact would be temporary.

Furthermore, the updated National Planning Policy Framework (NPPF) has removed the availability of agricultural land for food production as an explicit consideration in determining if sites are appropriate for development.

Lighting

There will be limited lighting at the site, installed in spaced intervals for security, safety and maintenance purposes.

All lighting will be motion sensitive with the timers programmed for short interval illumination, and the facility will only ever be attended and maintained during daytime hours, unless in case of emergency. All lighting will be 'bat sensitive'; downward facing and at an appropriate luminaire level so as to not disturb local wildlife.

Any lighting installed is designed not to trigger for small mammals or commuting wildlife.

Heritage interests

A Heritage Statement has been submitted with the application which assesses the predicted impacts of the construction and operation of the proposed development on cultural heritage interests. The site does not contain any designated heritage assets, and no designated heritage assets will be physically affected by the proposed development.

Monarch's Way long distance footpath was raised in consultation comments, which does not run through, or adjacent the site and will not be impacted by the proposed development. At its nearest point, Monarch's Way is over 250m from the proposed site, with no direct views expected.

Construction traffic

A Transport Statement submitted with the application assesses the impact of the proposed development on the local and wider highway network and the safety and suitability of site access arrangements. Vehicular access will be in accordance with the arrangements presented in the Transport Statement and follow the Construction Traffic Management Plan to minimise the impact of construction traffic at site. Measures include implementation of a suitable signing strategy, provision of a banksman, adequate parking and passing places, and car sharing amongst staff.

The number of movements stated during the construction and operational phases of the project are a maximum number of anticipated trips and these number are likely to lower once the construction programme and supply chain has been confirmed. In addition, the total construction period is expected to last for only nine months,



with vast majority of deliveries expected on-site within the first four months. The applicant appreciates that, during this period, there will be some impact with additional traffic on roads, however delivery vehicle trips during the weekday AM and PM peak hours will be avoided where possible, so they do not coincide with the busiest periods on the local highway network.

Noting the current concerns raised by Worcester County Council, additional Highways surveys and reports are currently underway to address these points.

Flood risk

A full Flood Risk and Drainage Assessment has been submitted with the application, outlining the relevant drainage measures proposed and expected impacts to potential flooding. The proposed development is sited in Flood Zone 1 and is deemed to have a low risk of flooding from rivers. Therefore, the proposed drainage strategy is considered suitable for this site; ensuring that the development would not increase the risk of flooding and utilises sustainable drainage techniques.