**Peat Dykes Energy Storage - FAQs**

**​Q. What is the purpose of a Battery Energy Storage System (BESS)?**

**​A.** Battery Energy Storage Systems store energy from the grid at times of lower demand and release it back to the grid when it is needed most. It will make an essential contribution to ensuring reliable, secure and affordable electricity for the country as it moves away from using coal and gas for electricity generation.

Peat Dykes Energy Storage will support the use of renewable energy technologies, such as wind and solar power, by reducing supply issues associated with their intermittency. It will store electricity generated when the sun is shining and the wind is blowing and release it later when consumers need it.

National Grid states that BESSs are: *“essential to speeding up the replacement of fossil fuels with renewable energy.”*

**​**Peat Dykes Energy Storage would provide a flexible back-up power source to the electricity transmission network (or National Grid), responding rapidly to variations that result from local and national energy demand and reactive power services.

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These services will be increasingly vital to the NG as the transmission network becomes more constrained as future renewable energy schemes connect into the system.

​Accordingly, the BESS would contribute towards ensuring that there is a reliable and constant supply of electricity across the National Grid in a cleaner and more cost-effective manner.

**​Q**. **How can BESS technology reduce the burden of curtailment payments to windfarm operators, which currently lead to higher electricity bills?**

**​A.** Currently, electricity producers are paid to stop generating when there is an oversupply – these are called curtailment payments. Battery storage could help reduce these costs by 80%.

Between 2015 and 2019, curtailment costs rose in line with wind output from £90 to £145 million per year. This cost doubled in 2020 as the National Energy System Operator (NESO) faced a bill of £282 million linked to reduced demand associated with the pandemic (around £10 per household). Put another way, curtailment costs added £4 to each MW hour of wind energy generated.

​This is important as electricity generated from wind increased to more than a quarter on the UK’s electricity in 2023, and renewable generation represented a record share of 47.3 %. Clearly, if curtailment costs can be reduced and more ‘green’ energy can be harnessed there are significant sustainable benefits.

**​Q. How will Peat Dykes Energy Storage System connect to the National Grid?**

**​A.** The grid connection from the proposed development would be to the Bradford West Substation. The connection will be established via a buried cable between the Bradford West Substation and the Parkway BESS onsite substation

**​Q. How long will construction take?**

**​A.** Construction is anticipated to take up to 14 months, with 5.5 construction days per week. Construction hours are anticipated to be between 08:00 – 18:00 weekdays and 08:00 – 13:00 on Saturday. No construction activities would take place on a Sunday or Bank Holiday. However, it is requested that a degree of flexibility is applied should it be necessary to transport a piece of infrastructure to the site outside of this time.

**Q. When will the application for planning permission be submitted?**

**A.** The planning application for Peat Dykes Energy Storage was submitted to Bradford Council in June 2025. It is anticipated that a decision will be made in early 2026.

**​Q. What impact will there be will on local roads?**

**​A.** A Transport Statement has been submitted with the planning application. This will consider the vehicle movements associated with the construction and operation of the BESS and ensure that there is no potential highway capacity or safety issue. Peak construction activity (in terms of vehicle numbers) would occur during enabling works phase. HGV traffic would not be maintained over any lengthy period of time. During the operational phase, the Proposed Development would be operated remotely, and it would only be necessary for an operative to undertake a site visit on a monthly basis. This would be undertaken using a small van, pickup or equivalent vehicle.

​The construction phase is anticipated to be controlled through a Construction Environmental Management Plan (CEMP), via a suitably worded planning condition to any forthcoming planning permission. This would ensure that there would be no potential for pollution and / or nuisance to the surrounding environment or residential properties.

**​Q. How big will the Peat Dykes BESS site be?**

**​A.** The BESS compound would occupy an area of circa of 1.8 hectares, including a 0.73-hectare battery storage compound.  The additional area is required for drainage, access and biodiversity enhancement.

**​Q. What will the visual and landscape impact of the site be?**

**​A.** A Landscape and Visual Assessment has been submitted with the planning application and is publicly available. This includes a Zone of Theoretical Visibility showing where the Proposed Development could potentially be seen. The assessment concludes that, as the site is already influenced by existing energy infrastructure and human activity, its impact on the wider landscape would be limited.

The Proposed Development would have a minor adverse effect on a small part of the local landscape, with negligible effects on most views, as the site is visually contained by existing trees, landform, and surrounding infrastructure. Proposed planting would further integrate the development and provide long-term landscape benefits.

**​Q. What will the noise impact of the site be?**

**​A.** A Noise Assessment has been submitted with the planning application and is publicly available. It shows that, with built-in mitigation, the development will operate in compliance with all relevant noise standards and guidance

**​Q. Will there be any impact on heritage or archaeological assets?**

**A.** A Heritage Assessment has been submitted with the planning application and is publicly available. It confirms that the BESS would not impact surrounding heritage assets and indicates that the potential for buried archaeology is low.

**​Q. Could this land be used for agricultural purposes?**

**​A.** The proposed scheme is located on Grade 4 agricultural land, representing poor quality land with severe limitations that restrict the types of crops that can be grown and/or the yields that can be achieved. This classification plays a key role in the site selection process, ensuring compliance with the Joint Local Development Policy which seeks to protect the best and most versatile land.

**​Q. How long will the Peat Dykes Energy Storage site be in place?**

**​A.** Permission is being sought on a temporary basis of 40 years. Following this timeframe, and the cessation of energy operations, the infrastructure would be removed, and the site restored to its present condition.

**​Q. Will the BESS be safe?**

**​A.** Battery Energy Storage Systems use well-established technology found in everyday devices like phones and electric vehicles. Modern designs incorporate multiple safety layers, including fire suppression systems, self-contained units, and sustainable drainage systems, reducing fire and contamination risks to extremely low levels.

The project has been developed in line with national and local regulations, referencing National Fire Chiefs Council guidance and the Health and Safety in Grid Scale Electrical Energy Storage Systems guidance. We also work closely with fire safety experts, local authorities, and emergency services through site visits, risk assessments, and training exercises.

**Q: Why are you not using a brownfield site?**

**A:** Brownfield sites are better suited to permanent development, such as new homes, whereas the proposed development would be returned to its current state after 40 years of operation. The chosen site on land south of Wilsden was selected to minimise the impact on local people and make the best use of the available land. The proximity to the grid connection is a key consideration. Much of the suitable land in the area is grade 4, representing poor quality land with severe limitations that restrict the types of crops that can be grown and/or the yields that can be achieved.

**Q: How have you engaged with the public on your proposals for Peat Dykes Energy storage?**

**A:** Public engagement on the proposals for Peat Dykes Energy Storage was launched on Friday 4th April 2025. Letters were sent to nearby residents and businesses inviting them to attend a webinar on Thursday 10 April 2025 and provide feedback on the proposals. Local political representatives were also contacted with details of the proposed development. Subsequent meetings were held between the project team, local ward councillors, and members of the community. Information can be found project website: https://www.brockwellenergy.com/projects/peat-dykes-bess/

**Q:** **Given the area surrounding Bradford West Substation has already been chosen for several BESS developments, why choose it for yet another one?**

**A:** Capacity for electricity grid connections through existing substations is a factor in site selection by renewable energy and BESS developers. The cumulative impact of other renewable energy developments in the area will be a consideration during the planning, development and operation of Peat Dykes Energy Storage, with steps taken to mitigate any potential negative impact.

The chosen site on fields southwest of Bradford West substation was selected to minimise the impact on local people and make the best use of the available land. The proximity to the grid and distance from residential areas were key factors. The site is located on Grade 4 agricultural land, meaning it is poor quality land with significant limitations that restrict crop choices and yields.

**Q: Is there potentially a flood risk on the site, given existing issues with flooding in the area?**

A. The site lies within Flood Zone 1 (low risk) and has not historically flooded. A Flood Risk and Drainage Assessment has been prepared, considering all potential flood risks and demonstrating a drainage design where surface water runoff from the site would not exceed natural greenfield rates.

**Q:** **What will you do to compensate the local environment?**

**A:** An Ecological Assessment has been submitted as part of the planning application and is publicly available. This involves a record search and 'walk over' survey of the site to determine the habitats and potential presence of species. A biodiversity net gain assessment has also been carried out to demonstrate the BESS would result in enhancements to the site.

**Q:** **Are you going to share a risk assessment for fire/noise/etc?**

**A:** Yes, a number of expert studies, including noise and fire risk assessments have been submitted as part of the planning application and are publicly available.

**Q:** **In case of fire, what precautions will be taken to reduce the spread of fire between battery units?**

**A:** Battery Energy Storage Systems use well-established technology found in everyday devices like phones and electric vehicles.   Modern designs incorporate multiple safety layers, including fire suppression systems, self-contained units, and sustainable drainage systems, reducing fire and contamination risks to extremely low levels.

The project has been developed in line with national and local regulations, referencing National Fire Chiefs Council guidance and the Health and Safety in Grid Scale Electrical Energy Storage Systems guidance. We also work closely with fire safety experts, local authorities, and emergency services through site visits, risk assessments, and training exercises.

**Q:** **Batteries tend to have a lifespan of 10-15 years so these will need to be changed several times during the lifespan, so surely that will be virtually a construction phase all over again with more large loads on the roads and so on, is this not the case?**

**A:** The proposed development would be operational for 40 years and it is anticipated that the batteries would be replaced twice during that period. Battery replacement will not require the same level of work as construction.

**Q:** **How will you ensure that long-term jobs will go to the local workforce?**

**A:** While there are limited opportunities for long-term employment due to the nature of Battery Energy Storage System operation, we welcome expressions of interest from local contractors who may be able to work on behalf of Brockwell Energy during the construction phase.

**Q:** **Where is the power coming from that would be stored in the proposed BESS site?**

**A:** The proposed development would store excess electricity available from the National Grid, including renewable energy, and release it for use at times when there is a requirement.

**Q: Will there be a community benefit fund to support projects in the local community?**

**A:** Yes. Brockwell Energy is committed to supporting local communities by establishing a Community Benefit Fund for the Peat Dykes Energy Storage BESS project. The fund will be set up in line with industry guidelines, with a strong focus on early engagement with the community to ensure that local funds are allocated by local people.​

We welcome input from the local community on potential projects and beneficiaries.​

Brockwell Energy has a proven track record of delivering meaningful community support throughout the lifespan of its projects.