# Concerns over safety and environment stall NatPower’s lithium battery facility plans in North Yorkshire



A proposed lithium battery storage facility near Northallerton in North Yorkshire has ignited significant opposition among local residents, raising concerns over safety, environmental impacts, and infrastructure. The project, spearheaded by NatPower, aims to establish the facility in the village of East Rounton. As the UK transitions towards its Net Zero target by 2050, the role of Battery Energy Storage Systems (BESS) is becoming increasingly critical. By January 2024, a total of 105 BESS units were operational across the UK, underscoring the government’s commitment to renewable energy storage as a means to enhance grid reliability.

Despite the push for such infrastructure, local sentiments are overwhelmingly negative, with 283 people voicing objections to NatPower's plans and only three supporting the project. A predominant concern among residents, particularly highlighted by Andrew Sheldon-Thomson—who initiated a Facebook group opposing the project that has now attracted over 450 members—is the significant fire risk associated with large-scale battery facilities. This apprehension has been exacerbated by recent incidents involving BESS; in 2025 alone, four fires were reported globally, three of which occurred in the UK at sites in Aberdeenshire, Cirencester, and East Tilbury, alongside a catastrophic fire at the Moss Landing facility in California.

The Moss Landing incident involved a large-scale fire that consumed 40% of the structure, prompting evacuation orders in surrounding areas due to the release of toxic fumes, including hydrogen fluoride. Such cases underline the potential hazards associated with conventional lithium-ion batteries, which are prone to thermal runaway—a phenomenon where batteries overheat and can catch fire. The Electric Power Institute has estimated that large BESS facilities can pose an annual fire risk of up to 27% at 1GW sites, a statistic that is alarming to residents in North Yorkshire, who fear the repercussive dangers highlighted by incidents at Moss Landing.

Local resident Venetia Bell voiced her concerns regarding the broader impact on nearby villages. She noted that the sole access road through East Rounton could be jeopardised by increased traffic from heavy goods vehicles (HGVs) and development staff. This could adversely affect local businesses and exacerbate noise levels, adding another layer of objection to the proposed facility.

Amidst these concerns, alternatives to traditional grid-scale energy storage are being explored. Jon Williams, CEO of Viridi, advocates for a shift towards distributed battery systems designed to mitigate fire risks. These state-of-the-art systems, which rely on fail-safe technology, aim to prevent the kind of catastrophic failures seen in larger BESS installations. Williams notes that conventional lithium-ion batteries have a notable risk of defects, with approximately one in ten million cells susceptible to creating dangerous conditions. His company’s solution seeks to manage the energy trapped in a failing cell, thus avoiding the uncontrolled release characteristic of traditional batteries.

Further exploring the efficacy and safety of distributed systems, Williams argues that connecting smaller battery units directly to consumers' energy meters could revolutionise energy consumption and grid resilience, offering a more stable solution. By harnessing smart technology, these systems can optimise energy flows and provide reliability during outages—a significant enhancement over current large-scale sites, like the one proposed by NatPower.

The environmentally sensitive nature of the area exacerbates public opposition. Kevin Hollinrake, MP for Thirsk and Malton, has acknowledged the local community's concerns, particularly regarding the potential loss of productive farmland, as well as environmental degradation associated with large infrastructure projects.

As public scrutiny intensifies and the conversation around energy storage evolves, it is clear that community concerns must be carefully evaluated against the backdrop of national energy goals. The balance between advancing renewable energy infrastructure and ensuring public safety remains a contentious issue, requiring a thoughtful approach to modern energy needs in North Yorkshire and beyond.

Ultimately, the challenges posed by large-scale BESS projects exemplify the complexities of transitioning to sustainable energy solutions, as residents and authorities engage in crucial debates over safety standards, environmental stewardship, and innovative alternatives to conventional energy storage methods.

### Reference Map

1. [Lead article content and primary concerns about the North Yorkshire battery project]
2. [Details regarding recent fires at battery storage facilities, particularly Moss Landing]
3. [Overview of the safety incidents, including evacuation responses following fires]
4. [Environmental impacts and tests revealing toxic levels after relevant incidents]
5. [Context on infrastructure and emergency responses related to battery fires]
6. [Call for stricter safety standards following incidents at battery facilities]
7. [Discussion on the feasibility of distributed BESS versus large-scale installations]

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

* <https://www.thecanary.co/global/world-analysis/2025/05/11/north-yorkshire-battery-site/> - Please view link - unable to able to access data
* <https://www.reuters.com/world/us/vistras-battery-storage-facility-goes-up-flames-spurs-evacuation-orders-2025-01-17/> - A massive fire erupted at Vistra Corp's 3,000-megawatt Moss Landing energy storage facility near San Francisco on January 16, 2025. The blaze consumed about 40% of the building, leading officials to allow it to burn due to the release of toxic fumes, prompting evacuation orders in the vicinity. All personnel were safely evacuated with no reported injuries. The cause of the fire remains under investigation. This incident has raised concerns about the impact on the energy storage sector and supply chains. ([reuters.com](https://www.reuters.com/world/us/vistras-battery-storage-facility-goes-up-flames-spurs-evacuation-orders-2025-01-17/?utm_source=openai))
* <https://apnews.com/article/e5957a710670930ca23c4b2d2e3ed75f> - A fire broke out at the Vistra Energy battery plant in Moss Landing, one of the world's largest battery facilities, causing mass evacuations and highway closures. The incident highlights the growing reliance on large-scale battery storage to bolster power reliability in California and Texas, driven by the need to address electricity shortages and blackouts exacerbated by extreme weather linked to climate change. Lithium batteries, despite their safety and importance in reducing carbon emissions, have raised concerns among nearby residents due to the potential impact of such fires. ([apnews.com](https://apnews.com/article/e5957a710670930ca23c4b2d2e3ed75f?utm_source=openai))
* <https://apnews.com/article/7c561fed096f410ddecfb04722a8b1f8> - A fire broke out at the Vistra Energy lithium battery plant in Moss Landing, California, causing significant smoke emissions and leading to the evacuation of about 1,500 residents. The incident raised concerns about air quality, with the release of potential hazardous gases such as hydrogen fluoride. Authorities decided to let the fire burn out since lithium-ion fires are difficult to extinguish due to their high temperatures. Although no injuries were reported and evacuation orders were lifted later, residents were advised to keep windows closed and air conditioning off. The Environmental Protection Agency and air consultants were monitoring pollution levels. Experts emphasized the risks associated with lithium batteries despite their importance in enhancing grid stability and reducing carbon emissions. The incident has prompted calls for safer battery technologies and better fire prevention measures. ([apnews.com](https://apnews.com/article/7c561fed096f410ddecfb04722a8b1f8?utm_source=openai))
* <https://localnewsmatters.org/2025/02/13/environmental-tests-reveal-elevated-levels-of-toxic-metals-since-moss-landing-battery-fire/> - Following the January 16, 2025, fire at Vistra's Moss Landing battery energy storage facility, community members organized a grassroots group called Never Again Moss Landing. They conducted independent testing, collecting 124 surface wipe samples throughout the Monterey Bay area. Analysis revealed that samples taken within 20 miles of the facility had nickel and cobalt concentrations approximately 34 times higher than those collected further away. Some samples close to the facility showed elevated levels more than 180 times higher than the average levels more than 20 miles away. Manganese concentrations within the 20-mile radius were more than 12 times higher than outside, and lithium levels were three times higher. These findings suggest a connection between the fire and higher heavy metal concentrations in the surrounding areas. ([localnewsmatters.org](https://localnewsmatters.org/2025/02/13/environmental-tests-reveal-elevated-levels-of-toxic-metals-since-moss-landing-battery-fire/?utm_source=openai))
* <https://localnewsmatters.org/2025/01/22/monterey-county-proclaims-state-of-emergency-due-to-moss-landing-battery-facility-fire/> - In response to the fire at Vistra's Moss Landing Energy Storage Facility, the Monterey County Board of Supervisors unanimously approved a resolution to proclaim a local state of emergency. The fire, which began on January 16, 2025, led to evacuation orders for about 1,200 people and the closure of nearby state Highway 1. County health officials advised residents to stay indoors, keep windows and doors closed, limit outdoor exposure, and turn off ventilation systems due to potential hazardous fumes from the fire. The cause of the fire remains under investigation. ([localnewsmatters.org](https://localnewsmatters.org/2025/01/22/monterey-county-proclaims-state-of-emergency-due-to-moss-landing-battery-facility-fire/?utm_source=openai))
* <https://www.batterytechonline.com/stationary-batteries/moss-landing-battery-fire-fallout-repercussions> - The Moss Landing facility, operated by Vistra Energy, was originally constructed in a repurposed 1950s-era power plant building, which lacked modern compartmentalization and fire suppression measures. Unlike newer battery storage facilities that use modular, containerized systems designed to isolate and contain fires within individual units, Moss Landing’s design placed large numbers of high-energy battery racks in a single enclosed space. This design flaw contributed to the rapid spread of flames and made it difficult for emergency responders to suppress the fire. Additionally, the facility relied on nickel-manganese-cobalt (NMC) lithium-ion cells, a high-energy-density chemistry known for its susceptibility to thermal runaway. Many newer grid-scale battery storage systems now use lithium iron phosphate (LFP) batteries, which have a significantly lower risk of overheating and combustion. The incident has prompted discussions about the need for stricter safety standards and regulations for battery energy storage systems. ([batterytechonline.com](https://www.batterytechonline.com/stationary-batteries/moss-landing-battery-fire-fallout-repercussions?utm_source=openai))