Spoken presentation at the Inquiry held at Rushcliffe Arena, March 2026

Reference number: 3375110

Safety concerns related to the installation and operation of the proposed BESS system by Exagen

Dr Glenys Jones, Resident of Wysall (Scotland Hill Farm, Costock Road, Wysall)

Thank you for inviting me to speak at this inquiry. I want to talk about my concerns relating to the safety of the proposed BESS installation by Exagen – in particular, about the potential danger to local residents and the pollution of Kingston Brook.

The reports submitted to date by Exagen – both their recent report in October 2025 and their original Battery Safety Management Plan (BSMP) in December 2023 appear to downplay or fail to mention the potential danger to residents and the nature and effects of the pollution released into Kingston Brook and beyond, and how these will be mitigated if a fire or thermal runaway occurs.

Whilst Exagen state in their plan (BSMP) that they will follow the relevant and current guidance at the time of construction, what guarantees will residents have that this will be done - and given its relative infancy as a technology – what do we not yet know of the risks of BESS? Given that both national and local advice is often only at the level of guidance and not compulsory, there is a danger that expensive or difficult options will not be taken by Exagen. Historically, there have been many other products once deemed safe to use in public spaces and buildings (eg asbestos, RAAC; cladding) but that are now considered unsafe and dangerous to life. Furthermore, the report by ARC (Abbott Risk Consulting) in August 2025 produced for Exagen on the NFCCs planning guidance for BESS systems also makes several assumptions about the site and leaves many aspects of the installation to be decided when construction takes place.

To date, there have been 3 BESS fires in the UK – the most serious one in Liverpool in September 2020, where a fire burned for nearly three days. There was a fire in a unit in Thurrock in 2025 when the BESS was under construction; and a third fire in Cirencester, in a container after just 2 and a half years of operation. As the number of BESS systems installed increases, there is likely to be an increase in the number of such fires. Just as with lithium-ion batteries in e-bikes and e-scooters, the number of incidents and deaths has increased as the number of users has grown. In fact, it was these e-bike and scooter incidents that led the NFCC to tighten up and demand stricter rules for large scale BESS systems such as the one proposed. For example, the NFCC now demands a 6 metre separation distance for each container as well as automated school alerts for BESS systems, although I have not seen these measures mentioned in the reports submitted by Exagen.

What is some of the current guidance and requirements on the developers and installers of BESS systems?

Exagen has taken note of the recent guidance on water storage tanks and since their original report in December 2023, which made no mention of these, they now propose the siting of two water tanks at different points adjacent to the BESS system and also plan to design and implement a means of containing any water used to control fires or over-heating. However, I have not seen mention of other measures, such as plume testing which is designed to ascertain the prevailing wind direction and the average speed of travel. When there is thermal runaway or a battery fire, toxic fumes of corrosive hydrofluoric acid are released which are harmful, even at low concentrations. Current guidance (2026) from the National Fire Chiefs Council (NFCC) states that for any site within 500m to 1km of a dwelling, developers are expected to conduct Atmospheric Dispersion Modelling. This will predict where the toxic smoke will go, how fast it will get there and what the concentration of toxins will be when it arrives. Designing the site so that toxic fumes travel away from communities, roads, and work areas is now regarded as standard practice. Given that the BESS installation is sited close to a road and to the village of Wysall, it is very hard to see how this standard can be met on the site proposed.

The ARC report of August 2025, for example, has a diagram of a wind rose on page 3, that illustrates that the predominant wind direction on the site is from the south west or westerly direction, but it gives no other data on the likely wind speed and where toxic fumes would travel. In the event of a fire in the BESS system on Wysall Road, a prevailing South Westerly wind travelling at a moderate speed of 10 to 15 mph is likely to carry smoke and toxins towards Wysall and possibly to the outskirts of Keyworth. These fumes would adversely affect the residents, and the users of the Wysall Village Hall and the Plough Inn public house. If the wind was in an Easterly direction, the health of residents in properties along Costock Road, in Costock village and the pupils and staff at Costock primary school could potentially be damaged. There is reference in Exagen's current reports on safety measures to be taken for the workforce but not for residents or users of nearby public places. Current guidance from the National Fire Chiefs Council (NFCC) states that an automated alert system should be set up in all places used by the public. I have not yet seen mention of this in Exagen's plans or the documents submitted.

Access points proposed for fire engines and construction vehicles

Two access points are recommended in recent guidance for fire engines and other vehicles to take account of the prevailing wind during the time of an incident. Exagen plans to access the BESS site off the public highway on Wysall Road and then north over Kingston Brook. The ARC report (August 2025) states that '*whilst access to the site falls within Flood Zones 2 and 3, the depth of water is such that it is unlikely to prevent access to the site. The BESS compound is unaffected*'. I am not confident about this assertion. As recent local, national and international climate events have shown, it has become much harder to predict the weather and all the signs are that it is becoming more extreme – ie much wetter and much

drier than previous records have shown. Using historical data to predict flooding is therefore very unreliable. In the last 14 years known to me, there has been torrential rain and flash floods which have overwhelmed Kingston Brook and on several occasions flooded Costock and Wysall Road and the land on which Exagen plans to access and site the BESS system. Many thousands of litres of water from ditches in the fields above Costock and Wysall Road drain through culverts under the road and into Kingston Brook. Videos taken in November 2024 and most recently, only two weeks ago (28th February 2026), show that the proposed access area and surrounding land were entirely under water. Any heavy vehicles trying to get to the BESS containers on the route proposed are likely to have got stuck. Flooding is not only confined to the Winter months either. In July 2012, floodwater came into my own house located on the opposite side of Costock Road. Flash floods meant that Kingston Brook was not able to drain the surrounding land fast enough – there was nowhere for the water to go, so it backed up and the depth of water on the planned BESS site was at least a metre. – see the videos and photos and news cutting from the Loughborough Echo (6th. July 2012)

Now turning to the adverse effects of water pollution in Kingston Brook and beyond

The implications of toxic water run off into Kingston Brook are serious due to the type of chemical components entering the water and the ecological sensitivity along the brook. Hydrofluoric acid is highly toxic and all aquatic life in the brook would be killed instantly as oxygen levels plummet. The water would also carry high levels of cobalt, manganese and copper which do not breakdown and these would settle in the sediment of Kingston Brook and remain toxic for decades. Recent guidance states that developers should create a system to hold such contaminated water to prevent ingress into surrounding water courses – such as a concrete bund. It is not very clear, as yet, how Exagen would plan to take measures to prevent such water pollution and it is not only water in the local area around the site that would be affected. ....

For Kingston Brook flows from the proposed site through Costock and then through Meadow Park in East Leake, with a population of over 9000. Meadow Park was designated as a **Local Wildlife Site** in 2024 and is used by many adults and children throughout the week. Contamination in this area is a direct threat to children, adults and dogs who paddle and swim in the Brook which runs adjacent to the children's play area and Skateboard park. Contamination would devastate protected species such as otters and water voles. Kingston Brook ultimately feeds into the River Soar and then into the Trent and so these waterways too would be adversely affected.

In addition, recent fire tests (2024-2026) show that PFAS chemicals – known as Forever Chemicals are released from the bindings, gaskets and plastics used in the manufacture of Lithium-ion battery modules. Other groups of chemicals related to these have now been banned as they are deemed too toxic to use or dispose of. Only last month, in February 2026, the Government's new PFAS plan stated that these chemicals pose a long-term challenge to our ecosystems. On the proposed Exagen site, the PFAS chemicals would travel into and

pollute Kingston Brook and the surrounding air. Once in the water, they are almost impossible to remove and can contaminate drinking water miles downstream.

Installing BESS and solar panels on this particular site next to the village of Wysall, through which Kingston Brook flows, together with the knowledge of how materials for the batteries and containers are generally sourced and constructed and then removed and disposed of (using fossil fuel technologies and landfill sites), serve to severely weaken the argument that the development proposed by Exagen near Wysall supports the Government's Green agenda.

Closing remarks

To conclude, it is clear that risk assessments for BESS technology and guidance for planners and fire services are still in their infancy. This is of great concern as many more lessons are likely to be learned in the future– but at what human and ecological cost along the way? There are parallels with other technologies and materials over the years which were once deemed safe, but have since been rendered harmful and dangerous to life.

Surely, when this current application is so very close to a residential area (Wysall village) and also sits on a water course (Kingston Brook) which is prone to flooding, this site should be regarded as extremely vulnerable – and very serious consideration needs to be given to the potential costs to the area and its residents, both now and in the future. For these reasons alone and others cited above, we are wholeheartedly opposed to the installation of this BESS system on this site.

Thank you.