

Planning Application for 200MW Battery Storage Facility, Astwood Lane

Times are changing; global warming is heating up, energy prices are soaring, and we must look after our planet. Feckenham needs to assist. The government has set ambitious targets for the UK to reach Net-Zero by 2050, which includes stopping the production of petrol and diesel cars by 2030 in favour of electric vehicles. Central heating systems will soon need to employ heat exchangers, which are exclusively electric-powered. Power generation will be from renewable energy sources such as wind and solar, backed up by Battery Storage (BESS) facilities to ensure continuity of supplies. These measures are inevitable and in everyone's interests. However, we need to plan CAREFULLY for the future and make the right choices to achieve these goals. Above all, we need to think before acting and check that initiatives are backed by evidence that guarantees those goals. This is where Feckenham Parish Council (FPC) comes in; our role is to represent our lovely village's residents. We are currently responding to a recent planning application by a small energy company called Immersa for a gigantic 200 Mega Watt (MW) BESS facility covering 13 acres of historic Green Belt pastureland north of Astwood Lane, opposite the entrance to the National Grid's substation. This would be the second BESS facility for Feckenham; Statkraft, an established multinational utility company, already has planning consent for a five-acre 50MW BESS east of the substation and is due to commence construction in the next 18 months.

We all know the electricity station on Astwood Lane, which is supplied by a spider's web of pylons and cables. Most people don't know that National Grid has to offer grid connections to anyone who requests one. There has been an avalanche of recent speculative applications by companies keen to profit from the expanding energy market with BESS and solar farm projects. FPC has met with senior technical staff at National Grid, who have shown us the "pipeline" of agreed connections in Feckenham – containing a staggering list of 2,200MW of electrical hardware. Were all these to come to fruition (which we sincerely hope won't be the case), we have calculated that it will cover 11,500 acres of agricultural land with solar panels and BESS containers, all of which will need to be located within a few miles of Feckenham substation. This prospect is unconscionable and cannot possibly be allowed. FPC says that Feckenham's contribution to the inevitable green energy revolution should be limited to the consented scheme for a 50MW BESS facility by Statkraft. When this has been built, we think we have done our bit for green energy locally. Anything more risks destroying our precious countryside in favour of a grim industrial wilderness that would wreck our surroundings.

So, what is Immersa proposing, and what is wrong with it?

1. Planning application 23/00417/FUL changes a 13-acre parcel of historic pastureland into an industrial site with 240 lorry containers housing Lithium-ion batteries. It contains transformers, inverters, control rooms, CCTV and a tall communication tower, all surrounded by high-security fencing. Confusingly, Immersa's planning statement says on page 6 that a large rectangle of land in the southwest corner will be empty, whereas, on page 9, it appears full of electrical hardware. They go on to supply "expert reports" on conservation and landscape matters on the assumption that this area is free from development. Yet, we have checked with National Grid, who say emphatically that the BESS facility cannot function without this connection hardware – which is up to 10m tall. This means that their expert reports are misleading, and

indeed the Council's Conservation Officer has based her assessment on the assumption that the corner of the plot is empty. In truth, the industrial nature of this facility will be glaringly apparent from Astwood Lane and appear completely incongruous. It will also harm the setting of Grade II Mutton Hall Farm and distant views from the Grade II* Listed Village Church and Conservation Area.

2. Immersa has supplied a Transport Report, claiming their gigantic project can be built with 3 HGV deliveries a day over 40 weeks, whilst Statkraft, in their original application, said that their project, which is a quarter of the size, will take up to 58 HGV's daily over 78 weeks. Immersa has omitted to say that the only access roads to this land (Astwood Lane & Rockhill Lane) both have 7.5-ton weight restrictions – and each BESS container weighs 19 tons. The Council's Highways Officer seems to have been taken in by Immersa's transport claims – which we think are wholly inaccurate.
3. Immersa fails to mention that the BESS containers have a limited lifespan and will need to be replaced five times during the forty-year lifetime of this project. This will create 22,800 tons of heavy-duty industrial waste containing at least 5,000 tons of highly toxic Lithium.
4. Immersa has submitted a woefully inadequate "Battery Safety Management Plan", which does not include a single fire hydrant for the entire facility. There have been around 100 serious fire incidents at BESS facilities worldwide, where catastrophic thermal runaway causes explosions, fireballs, and the release of intense heat with the highly toxic gas clouds containing hydrofluoric acid and hydrogen cyanide. Firefighting experience shows that these fires are difficult to extinguish and require vast volumes of water over prolonged periods – all of which needs to be recovered and decontaminated. A fire in two Tesla-designed BESS containers in Victoria, Australia, in 2021 required 900,000 litres over six hours – which would fill half an Olympic swimming pool – and remember that was for two containers – Immersa's facility has 240 containers. FPC has compared Immersa's Safety Management Plan with the latest BESS planning guideline produced by the National Fire Chief's Council; it fails to meet almost all of its essential recommendations. In short, without proper fire and safety precautions, FPC thinks that this BESS facility will pose a significant risk to the locality – including Feckenham Primary School (which is only 600m distant), and the electrical substation (which is only 100m distant).
5. Lastly, while we agree that more BESS facilities are needed nationally, we do not accept that Feckenham is the correct location. Joule's Law – which is the Physics Law which calculates the energy losses in electricity cables, shows conclusively that stand-alone BESS facilities should be located near the SOURCES of renewable energy (and not at distant sites like Feckenham). These sources are predominately the wind farms on the east coast of England and in Scotland, and this is the optimal site for a stand-alone BESS, when considering energy conservation. Immersa's BESS is entirely dependent on distant energy sources and is NOT connected to any local renewable sources. Thus, locating this BESS in Feckenham will inevitably cause unnecessary energy wastage in transmission cables, which is certainly NOT in the national interest. This simple scientific fact, completely invalidates Immersa's claim that their BESS project

represents a "Very Special Circumstance", justifying breaching local and national planning policies protecting Green Belt Land from development.

Feckenham Parish Council detailed objection to Redditch Planning Authority, can be seen on the Parish Council website: look for the section on Astwood Lane Battery Storage (bottom left-hand corner of the page):

<https://www.feckenham-parishcouncil.gov.uk/>

If you wish to comment to the Planning Dept on the application, here is the web link; press "Make a Comment". We suggest using the headings listed above if you wish to object.

<https://publicaccess.bromsgroveandredditch.gov.uk/online-applications/applicationDetails.do?keyVal=RSDQJ3SEFPF00&activeTab=summary>

Alternatively, you can email the Planning Officer directly, stating your name and address and the application number 23/00417/FUL

paul.lester@bromsgroveandredditch.gov.uk