

Registered Party Objection to Rosefield

I strongly object to the proposed Rosefield Solar Farm for the following reasons:

If this so-called farm is approved, it would destroy the beauty of the local countryside for future generations and would permanently remove good quality farmland from food production. Not only will the countryside be covered with ugly poly-glass panels, security fencing, lighting and grid conversion/connection infrastructure, it will also comprise battery electricity storage units (BESSs) which are, frankly, dangerous in that they are liable to catch fire or to explode, caused either through faulty manufacture or through sabotage by malicious individuals, with the resulting fumes affecting residents' health and with the water run-off from firefighting causing serious ground water pollution. Local crime will increase as the value of the panels themselves and the copper cables, will be a significant attraction to petty thieves.

This country also needs houses, particularly whilst the population continues to grow, and food, to reduce our dependence on foreign imports in an increasingly unstable world. In these competing demands for land, in a relatively tiny island such as ours, I can agree that building homes comes first. However, we are already building homes over thousands of acres of agricultural land in our area. It is, frankly, sickening to then see further hundreds of acres of farmland being proposed for solar panel and battery storage installations. Local farmers confirm that this is not unproductive land, in spite of its relatively low classification, and provides excellent yields of arable crops when properly managed. And I have been given no good reason, other than that it is cheaper, why the solar panels, if we must have them, cannot be installed on the roofs of those houses and warehouses, or on previously developed sites such as car parks.

There is also the particular issue of the risk to human health posed by the BESS in the Rosefield proposal. Modern Lithium-Ion batteries, especially high-density power packs, such as those proposed for this site and being used in power tools and electric vehicles, are notoriously dangerous and must be handled with extreme care. Examples of life-threatening fires caused during by charging or by physical damage to these batteries are reported regularly in the media. Batteries can fail by "thermal runaway" where overheating in a single faulty cell can propagate to neighbouring cells and the resulting fire requires no oxygen to propagate. Any such fire is therefore uncontrollable and involves emission of gases, such as the highly toxic Hydrogen Fluoride, and the inflammable gases including Hydrogen, Methane and Ethylene. These in turn may cause further explosions or fires upon ignition.

It has been established in academic reports that a 1MWh BESS has an explosive capacity of 0.86 tonnes of TNT. Assuming that the Rosefield BESS installation is at the (reduced) connection capacity of 335MW and assuming that the fully charged batteries can deliver this power for a typical 4 hours, this installation will have a stored energy of 1.34 GWh, equivalent to over 1 kilotonne of TNT. To put this power into context, I note that it is approximately equal to the power of the massive explosion that occurred in Beirut in August 2020, caused by the detonation of chemicals stored in a warehouse at the port. That explosion resulted in over 200 deaths, 7,500 injuries, and significant damage to the city.

And a serious fire in such a large-scale energy storage installation is highly probable - as confirmed by simply looking at the statistics. The record of global BESS failures is closely monitored by the energy research organisation EPRI and the actual recorded events confirm what the neutral academic researchers are saying. Based on the data for 2024, there were 8 fires/explosions recorded globally. Relating this to the installed capacity of BESS batteries equates to around 0.3 fires/explosions per GW of installed BESS capacity per year. Then apply this to the Rosefield proposal, of 0.335GW, we are

looking at the very high likelihood of one fire or explosion every ten years due to electrical failure alone, ignoring those that might be caused by accident or through a malicious act.

At the Bucks Council Strategic Sites Committee hearing on 19th December 2025, which reviewed another application for a large BESS installation adjacent to Rosefield site, the Applicant's representatives defended their fire safety record: they argued that they had had no fires in 8 years of BESS operations, that battery technology had improved considerably since, e.g. the fire at a BESS in Liverpool in 2020. However, just two months later, in February 2025, they experienced a fire in a far smaller BESS under construction in Thurrock, Essex, caused, apparently by a thermal runaway event. In addition, at the same hearing, the Applicant's fire expert stated that the chances of a failure of a modern Lithium-Ion battery cell are "millions to one against". Since the proposed Rosefield BESS at East Claydon is estimated to contain some one million cells, this argument is also not very re-assuring.

The potential consequences of such an incident can be deduced from the media and technical reports following these historical events around the world. They range from small, contained fires, to serious conflagrations, causing some injury and mass evacuation of residents due to the toxic fumes emitted, or to major explosions resulting in death or injury. In all cases, huge amounts of water are needed to minimise the spread of the fire, the run-off from which contains toxic chemicals which will seep into our natural water courses.

In summary, this is a massive energy store, with no on-site security and with a well-proven and documented high risk of fire and explosion. It is situated down a remote country lane with very poor access for emergency vehicles. It is a recipe for disaster.

Even ignoring the risk of electrical failure in these installations, the risk of a malicious act, by individuals or by rogue states, is rapidly increasing. Every week we are hearing about, what seem to be, state-sponsored attacks to our way of life. Examples include: cyber-attacks on key public and commercial organisations disrupting health provision, transport and supply chains, bombs being found in packages on incoming air freight, and internet data cables being cut. The recent blackouts in the Iberian Peninsular were likely to have been caused by the inherent instability of renewable energy grid, but, I understand, terrorist involvement has not been ruled out. Either way, the staggering effect of a near national loss of electricity to the functioning of everyday life of a nation has become blatantly clear as a result.

Here it is noted that all the Rosefield solar panels and batteries are likely to come from China. They will contain complex battery management systems that will be internet-connected for remote monitoring purposes. It is not scare-mongering to suggest a future scenario, when the UK is 80% dependent on these batteries in mid-winter, that someone in Beijing could simply throw a switch and cause mayhem, in this case, either fires/explosions or blackouts. Recent media reports are now increasingly arguing that this is a potential threat to the operation of electric vehicles, especially as Chinese-manufactured cars are gaining a strong foothold in Western markets. A historical example of what can be done in this globally-connected age is the recent simultaneous and devastating attack on a group's electronic pagers in Lebanon. One also recalls that Huawei's contracts for the 5G network roll-out in the UK were cancelled in 2020 due to the risks of interference, by China, in our national communications networks.

With this inherent risk to public health, safety and national security, no one should allow the development to go ahead - at this huge scale and in this rural location. And if they do, will they take full responsibility for the potentially devastating aftermath of any incident?