From: <u>Catherine Judkins</u>
To: <u>Sunnica Energy Farm</u>

Subject: Sunnica energy farm comments **Date:** 11 September 2023 23:59:17

Dear Case Team,

Please find below my comments on the latest submissions by Sunnica Ltd and other parties. Many thanks

Dr Catherine Judkins URN 20031441

Dear Mr Wheadon.

Thank you for the invitation to comment on the latest submissions by the Applicant, Sunnica Ltd., in connection with their NSIP application for the Sunnica Energy Farm.

As I have said in my previous submissions, I strongly oppose this scheme. I am a supporter of renewable energy in the right place and at the right scale and am a particular fan of the use of rooftop and car park spaces of which there is an abundance in the UK that is, as yet, unutilised.

As I have explained in my previous submissions, this scheme would have a hugely detrimental impact on me and my family. We chose to live in a rural location because we enjoy the countryside, the nature and the produce that it provides. To have this removed from us on such a huge scale would make me want to move away from this area which we have grown to love very much and which we consider to be home.

Section 2 of Sunnica's response, submitted via Pinsent Mason's letter dated 10th August 2023, provides an overview of their position on Hazardous Substances Consent (HSC). It is interesting to read in this letter that Sunnica made the decision not to keep responding to submissions during the examination on this matter, despite knowing that battery safety concerns remain a huge local issue, and is a reflection of the way the Applicant handled the battery safety issues both before the examination commenced (refusing to engage and not responding to the many questions asked about the battery plans, as outlined in my previous submissions) and during examination (presenting inadequate and incomplete safety appraisals, an outline battery fire safety management plan that was assessed by experts as being unfit for purpose, and offering little to reassure Interested Parties or the broader public as to the safety of their colossal proposed installation).

I dispute the claim that Sunnica do not yet know whether HSC would be required. When I spoke to them at a meeting in Red Lodge, held by the Parish Council in March 2022, Luke Murray (Sunnica Ltd director) told me and the hundred or so other attendees that they had indicative plans and layouts for the battery energy storage compounds and therefore had at that time an indication of the likely size and scale. I asked if we could see these plans but was denied on several occasions. I asked again during the changes to the Grid connection consultation held in June/July 2022 and was denied. It was only months later, during the examination process, that Sunnica divulged the intended likely size of the battery storage and confirmed our worst fears - that it would be amongst the world's largest at around 2400 MWh. This means that Interested Parties, local people and other consultees, etc. were not made aware of this prior to the examination and were not allowed to properly evaluate their plans.

I fully support the evidence of the Say No to Sunnica Action Group (SNTS) and the evidence about the need for HSC put forward by Dr Edmund Fordham, which I note is also supported by the host local authorities. It is not necessary, as is claimed in section 2.2.1, for the final design of the installation to be in place to determine the likelihood of HSC being required. There are many literature studies looking at different battery energy storage types, different cell chemistries, etc. which list the emissions from thermal runaway events, approximate quantities, etc. A number of these studies were submitted into the examination by the Applicant. As a scientist, I consider that it would be a relatively straightforward exercise to review the available literature and calculate the likely hazardous substances and approximate quantities that could evolve during thermal runaway. This might be more difficult to pinpoint for smaller scale BESS applications, but for a huge installation exceeding 2000 MWh it is very possible gauge whether any thresholds would likely be breached. Examples of such

calculations have been clearly presented in the literature and by Dr Edmund Fordham during the examination. They were not done by the Applicant.

I don't believe that this important issue can be left open and that the DCO could be permitted with a view to obtaining the necessary consents afterwards. The BESS scale is huge and is located around 50m from people's homes in places (e.g. Elms Rd). There is too strong a likelihood that HSC would not be granted, which would create unnecessary conflict. I

t is well known in the lithium ion battery industry that the likelihood of cell failure is high. This point was made in SNTS representation REP2-240m. Professor Christensen, a world-renowned lithium ion battery expert, indicates that for grid scale BESS, somewhere between 1 in 72 and 1 in 282 containers will have a failure (excluding failures due to poor design, human error, poor maintenance etc). Given the likely hundreds of BESS containers proposed by Sunnica there is a clear likelihood that at any time over the project lifetime, one or more containers will have a thermal runaway event. My family and I do not feel safe living somewhere so close to these installations that haven't had their safety properly assessed or necessary consents granted.

In section 2.5 Sunnica comment on consultation with relevant bodies including the health and safety executive. However, consultation before examination would have been absent details of the likely size of the BESS, hence would not have enabled a proper assessment to be undertaken.

Also in section 2.5 Sunnica appear to claim that the health and safety executive concurs with their position that they are unsure whether HSC is required in the HSE letter dated 1 March 2023 (REP7-112). This is not the way that I interpret HSE's comments; the HSE simply state:

"Many areas of Health and Safety law do not require consents depending on the detail of the design and operation and therefore consents may not be required. HSE would expect compliance with all aspects of Health and Safety legislation at the stage it becomes applicable."

This cannot be interpreted to indicate support for the Applicant's position. The Applicant had sufficient detail prior to the examination to know the likelihood of consents being required. Instead of considering this, the Applicant stated that the HSC consideration was "a generic comment and not considered to be relevant to this project as no hazardous materials are expected" (Sunnica Ltd REP2-025 Ch 16 Other Environmental Topics). The HSE is quite right to expect compliance at the appropriate stages and, to my mind, this would be considered to be before the application since they directed the Applicant to look into this in their scoping opinion.

I also note that Sunnica have sought to draw parallels between their proposal and two other recently consented schemes, Longfield and Cleve Hill. These are all very different schemes and I would expect each proposal to be judged on its own merits. In addition, more and more thermal runaway incidents have been reported since e.g. the Cleve Hill scheme was consented back in May 2020. The huge size and the location of the Sunnica BESS being so close to residents means that this requires considerable scrutiny.

I was pleased to hear that the government last week has officially recognised the hazards of grid scale lithium-ion battery energy storage systems and the need for these to be more suitably located to avoid impacts on communities.

Ref. Section 3 on the Isleham plane crash site, I have made multiple representations on this issue which I won't repeat again here. I strongly object to development of the crash site and I know how much this means to the villagers of Isleham having spoken to many local residents who remember the tragedy so well. I gather that the JCCC's remit when considering licence applications is focused on the preservation of military remains. They do not take into account local community views or the heritage significance, landscape impacts or the moral and ethical considerations about development of what local people here consider to be a war grave. This site needs to be preserved for our future generations to observe and remember and it reinforces the connection between the villages here and the local air bases with whom we have a strong relationship. I would respectfully ask that the Secretary of State does not take the JCCC's granting of a time limited licence as being an indication that they somehow support development of this important historical site. I, and others, consider Sunnica's proposal for this site to be disrespectful to the brave crew who sacrificed their lives.

Section 5.3 relates to glint and glare impact on footpaths and bridleways. I'm not an expert on this

subject so I am not able to comment on the assessments put forward by Sunnica but I have emphasised in my previous representations the negative impact that the industrialisation of our local area will have on our enjoyment of the footpaths and bridleways here. These offer a lifeline to many people who enjoy the outside space for their mental and physical health and well-being. As a family we use the local footpaths and routes around the villages here on a regular basis. We would not do this if these footpaths were surrounded by industrial equipment with noise, glint and glare, security fencing, pollution etc.

In Section 7 Sunnica refer to the many submissions that have been made throughout the course of the examination on agricultural matters and particularly the assessments that Sunnica have put forward of the soil quality in this area. We moved to this area, as have many settlers before us, because it has a strong rural character and a vibrant agricultural and racing heritage. I worked in a laboratory associated with the racing industry and a number of my friends and neighbours here are linked with agriculture. To choose to develop in an area that is renowned for its high quality soil, it's potato and other food crop production, it's sugar beet industry and to try to claim that the land here is "poor quality" is irrational. I see high value crops growing in the fields around our village on a routine basis; these would not grow if the soil quality was poor. My neighbour (Mrs Jenny Flat) is a farmer who farmed the land just across the road from parcel E05, near the Ark, Sheldricks Rd and Beck Rd in Isleham. She corroborates the high quality of the soil in that area and considers it "good land." She knew the previous owners of parcel E05, and they also grew high value crops on this high quality land.

Aside from what we know to be true, SNTS have also requested an assessment of the quality of the soil by four independent soil experts. Each of these separately came to the conclusion that Sunnica's soil assessments were inaccurate and also in conflict with the data held by Natural England. Bizarrely, and without explanation, Natural England seem to have adopted Sunnica's position on this matter. I remain deeply disappointed that Natural England would not listen to other sides of the argument or properly assess the case presented by SNTS or it's experts, instead coming to a conclusion that lacks impartiality. I would hope that the significant discrepancy between the soil assessments are noted by the Secretary of State and that the views of NE on this matter are not considered. An increasing number of solar energy farms are being placed on productive farmland which poses a risk to the UK's food security. I was pleased to hear that the government only last week restated its preference for solar development on brownfield sites.

The other letter that I wish to make a comment on is the response provided by Natural England in relation to stone curlew. As a scientist I find it quite shocking that a body is allowed to take a position that there is no functional linkage between the stone curlew that nest on the Sunnica site and the stone curlew that nest in the neighbouring Breckland SPA but without any supporting evidence. I am not an expert on stone curlew but I have seen expert evidence provided by SNTS and have also had conversations with a number of other bird enthusiasts and it would seem more likely than not that there is a functional linkage. If Natural England wishes to take a different stance on this it must be prepared to present the data and evidence to support this.

Many thanks for your consideration.

Yours sincerely

Dr Catherine Judkins