

From: [Simon Stafford](#)
To: [Sunnica Energy Farm](#)
Subject: RE: Sunnica Consultation; Unique Reference: 20030889; Dr Simon Stafford 3 Lily Close, Red Lodge, IP28 8WR
Date: 11 September 2023 11:39:40

Opposition to the Application by Sunnica Ltd for an Order Granting Development Consent for the Sunnica Energy Farm
Planning Act 2008 (as amended)

Unique Reference: 20030889

Dear NI Members,

Please find below my additional comments as requested. I am a scientist, my entire life is based on facts, looking at details, scrutinising the details and coming to a justifiable rationale and/or conclusion. I have to be honest, the Sunnica Solar Farm proposal worries me. It does not rely on facts and evidence but is based on assumptions, opinions, misleading statements, no real planning, random planning, no structure and definitely no science and definitely no health and safety. The following details why I have stated the above and oppose the planning application for the Sunnica Solar Energy Farm.

1. To date, no-one from Sunnica has provided evidence that the planned Solar Farm meets the specification of a National Infrastructure Project. It has been accepted it will be by non-scientific statements from Sunnica. One video they fluctuate between 1 and 1.5 million solar panels. Quite a difference but just demonstrates they have no clue. My concern is no one has fact checked and Sunnica have not proved this 'minor' detail which seems to have been forgotten about.
2. There has still been no science, no plans, no details provided on such a huge under taking. These critical missing details include:
 - a. Type of solar panels.
 - b. Battery types.
 - c. Number of solar panels.
 - d. Health and Safety.
 - e. BESS emergency planning – fires.
 - f. Quality Assurance.
 - g. Quality Control.
 - h. Risk Assessments.
 - i. Fire risk assessment (UKFRS) - Grid scale Battery Energy Storage Systems (BESS).
 - j. Battery manufacture.
 - k. Solar panel manufacture.
 - l. Solar panel replacement and recycling.
 - m. Battery storage replacement and recycling.
 - n. Risk to villages surrounding.
 - o. Evacuation plans.
 - p. Toxic chemical health and safety measures.
 - q. Remediation of pollution.
 - r. Venting of BESS containers.
 - s. Venting of such massive BESS containers.
 - t. Distances between each battery container in BESS.
 - u. Recycling of BESS sites.
 - v. BESS site layout plans.
 - w. Battery management system (BMS) plans.
 - x. Emergency water supply locations and are they sufficient to run for required amount of time

should there be a fire.

3. BESS batteries. When the batteries catch fire they supply their own source of fuel so burn vigorously. By products of such fires include heavy metals which cause cancer and hydrofluoric acid (turns bone to jelly and burns through/dissolves metal – think the scenes in Aliens films): Lithium batteries fires can release a large amount of hydrogen fluoride:
<https://www.nature.com/articles/s41598-017-09784-z>;
<https://www.tandfonline.com/doi/abs/10.1080/10937404.2019.1601815?journalCode=uteb20>;
<https://pubmed.ncbi.nlm.nih.gov/30977440/>;
<https://www.sciencedirect.com/science/article/pii/S1877705817363452>.
4. The proposed size of the battery containers for the BESS means there can be no effective venting so in case of catastrophic fire, explosions will follow.
5. One proposed BESS site (E18) is less than 500m from houses in Red Lodge. A radius of 800m includes a significant area of Red Lodge, houses and a school. Sunnica do not care.
6. With such close proximity to residential houses there will be inevitable noise pollution yet this has not been detailed anywhere.
7. The main energy needs for the UK occur during winter time when there is less daylight. Wind power or other alternatives have not been considered. Winter time is usually windy.
8. Solar panels on roof tops of all buildings and/or mini wind turbines for all residents in planned affected areas. A possible alternative.
9. Solar panels on top of car parks so use land which is not valuable arable land and gives a dual use of the same piece of land. An excellent example is the MetroCentre car park in the North East:
<https://www.thenorthernecho.co.uk/news/20674962.next-stage-solar-panel-project-metrocentre/>;
<https://www.retaildestination.co.uk/news/metrocentres-solar-panel-project-continues/>;
<https://themetrocentre.co.uk/news/solar-project>.
10. Major concerns about where the components for the BESS batteries will come from. Sunnica have not provided type nor manufacturer nor source. An example of exploitation is Shebaras mine in the DRC: <https://www.npr.org/sections/goatsandsoda/2023/02/01/1152893248/red-cobalt-congo-drc-mining-siddharth-kara>
11. Battery components are finite resources. Already there are worries about shortages. Just shifting to another energy dependency? Please see: <https://www.nature.com/articles/s41467-022-29022-z#:~:text=We%20show%20that%20cobalt%2Dfree,the%20most%20technologically%20optimistic%20scenario>.
12. I still do not understand why its placed 16 miles for nearest hub. Maybe Sunnica are relying on fact there are already a couple of solar farms near and around Red Lodge and they are randomly looking to join them up. For optimal capacity and placement of a BESS, it should be close by a hub where it would provide a higher reduction in losses without altering voltage profiles. 16 miles does not enable this which further demonstrates Sunnica are not qualified for such a huge project and the project should not have even got to this stage of planning as scarcely detailed.
13. It really is about biggest BESS possible. Why? Because it is nothing to do with solar power. Sunnica are using solar power as smokescreen to mislead NI. Sunnica Solar Energy Farm is a deliberately misleading name. The proposed solar farm would not fill up the huge propose BESS. Sunnica have not provided number of solar panels nor calculations as this would demonstrate the solar farm is an add on to the huge BESS.
14. No fire risk assessment provided to date either: <https://www.ukfrs.com/sites/default/files/2023-04/Grid%20Scale%20Battery%20Energy%20Storage%20System%20Planning%20Guidance%20for%20FRS.pdf>.
15. Absolutely no safety plans which should be first thing provided. Very easy to find out what is required: <https://www.power-and-beyond.com/considerations-for-ensuring-battery-energy-storage-systems-safety-a-7b89180daa277d9747c88ffe91c7768b/>.
16. An excellent review and recommendations provided for a BESS in Medway but Sunnica have not provided anything:

https://www.townofmedway.org/sites/g/files/vyhlif8006/f/uploads/bess_siting_and_safety_best_practices_-_exeter_associates_pnl.pdf_-_adobe_acrobat_pro.pdf.

17. Still no sight risk assessment has been independently done. Lots of aircraft will be flying over this area and its easy for pilots to be blinded by reflections from so many solar panels.
18. I really find it reprehensible when someone can come along, just claim NI project to compulsory purchase high quality arable land and get round local planning rules. The real intention is to then get planning permission by misleading everyone and then selling on to some entity which will actually build the solar farm but at a price massive inflated compared to compulsory purchase price. Using NI project planning to do this is appalling and if it happens the reasonable thing to do would be to give all profits to the original landowners rather than representatives of Sunnica.
19. Sunnica Energy Farm is a shell company to divert any possible future liability from its directors. Once complete it will disappear when the actual project has been sold on. If any accidents happen then the people involved with Sunnica will have their excuses ready made.
20. Why were the local authorities circumvented by this proposal as it comes under the Town and Country Planning Act for projects over 50MW in England (law change in December 2020 for the Infrastructure Planning (Electricity Storage Facilities) Order 2020). The reason is Sunnica wanted to avoid local planning opposition if it were BESS alone, could not justify such a large BESS 16 miles from a hub, use solar power proposal excuse to involve NI on a NSIP 'proposal' to get round these local issues. I think this is an appalling abuse of energy planning laws and a huge waste of tax payers money and time.

Apologies for such an extensive list but the Sunnica Energy Farm proposal is so massive and they have provided so little detail, facts, figures, evidence and science that I have had to go through and provide such a list. I thank you for your time in considering my opposition and the reasons I have provided. Your time is very much appreciated.

Kind regards, Dr Simon Stafford (PhD Scientist).
P.S. This is in addition to my email of 2022-11