2023/1070/FUL | Construction and operation of an energy storage facility, fencing, landscape planting, site access, drainage, infrastructure, lighting, CCTV equipment and underground cabling. | Land North of Styles Close Frome

Objection

Frome Town Council acknowledges the need for battery storage and other technologies in Frome, we know that there is not currently enough provision in the grid and that this is impacting new development as well as the supply to existing users.

The proximity of this development to the properties on Styles Close will have a detrimental impact on the residential amenity of those properties and the wider area. Residential amenity has a significant and valuable impact on the way in which people use their homes, and we believe that in this instance, the health and well-being of residents will be directly affected.

The scale of the development will have an overbearing effect and would directly affect the outlook of the properties on Styles Close resulting in an oppressive outlook, particularly the 5-meter-high fencing. Development should secure high quality and healthy living conditions by ensuring an acceptable outlook, the fact that some residents of Styles Close already have an outlook over the existing Electricity Sub Station it is not considered a valid argument.

All development proposals should consider the effect on residential amenity of noise, air quality, odour, environmental effects, and light. In this instance, noise is a particular concern.

The response from Environment and Community Protection Officer, states -

The noise assessment recommends that a 5-metre-high acoustic fence is constructed around the facility, however no justification is provided to suggest that this is the correct height for the acoustic fence.

The assessment is also based on data provided to the consultant by the client, which would seem to be based on manufacturers data, however no reference is made to the source of the data in the report, nor is there any real-life noise data taken from other facilities that might be in use. Similarly, the report suggests that the proposed facility will not have any tonality associated with it, however there is no frequency data provided in the report to support this assumption.

The applicant has not demonstrated that the planning application will not have a detrimental impact on the amenity of nearby residential properties.

Whilst the applicant has stated that it does not operate continuously at full duty 24 hours a day over long periods of time and will instead operate on average four hours per day, with an absolute maximum running profile of 6 hours in case of high stress network events. They have not confirmed what the actual hours of operation will be. If the application is approved, acceptable hours of operation should be conditioned.

We also note that further information and proposed mitigation measures have been submitted to Environmental protection and will await a further response.

Despite assurances we are very concerned about the risk to public safety, not only the fire/thermal runaway but from the release of toxic gases both into the atmosphere or the nearby stream.

As Frome Town Council are not experts in this technology, we put a lot of store in the recommendations from the National Fire Chiefs Council. We appreciate that they are only recommendations, but we believe that they should be given full weight in the absence of any other UK legislation, or that no decision should be made until the Amendment to the Energy Bill, which will covers BESS sites is made.

Looking at the NFCC fire recommendations, there are a few areas where the Trina project doesn't appear to be following them. For example:

- While NFPA 855 only requires that units be 3m away from other buildings or public ways, NFCC guidelines suggest 25m prior to any mitigating factors. While the site is 50m from the nearest housing, it's not clear if prevailing wind directions have been factored into siting choice to minimise the impact of toxic fumes produced from lithium-ion battery fires.
- A standard minimum spacing between units of 6 metres is suggested unless suitable design features can be introduced to reduce that spacing. If reducing distances, a clear, evidence based case for the reduction should be shown. Trina is proposing 2.5m separation. We cannot see if any additional firewalls are present in the plans to justify this closer siting.
- Whilst gaseous suppression systems have been proposed previously, current research indicates the installation of water-based suppression systems for fires involving cell modules is more effective. Trina proposes a gaseous suppression system.
- Recommends at least 2 separate access points to the site to account for opposite wind conditions/direction. - the Trina project currently only includes a single access point .

To date there has been no response from the local Fire Service, having an adequate emergency response plan is key should something go wrong. It should be investigated to what extent the fire service has been consulted on design/emergency response planning decisions for the project.

For reference please see the safety management plan for another similar but unrelated BESS system, which goes into some detail about their engagement and recommendations from the Lincolnshire Fire Service (which mirror those of the NFCC provided in the planning portal). We would want to see something similar to demonstrate Trina has at least consulted with the Somerset fire service.

It's worth noting how much more comprehensive that safety management plan is than the single page 'fire safety approach' and the generic 'fire suppression system outline' provided by Trina Solar. It should be noted that, Frome Fire Station is a retained station, so this should be factored into any safety management plan. A Health and Safety Risk Assessment for the site should also be made available for inspection.

As we have stated, Frome Town Council do not have any expertise in this new technology and would want to see the consultation responses from all the outstanding Statutory Consultees, together with the additional information outlined above. At which point we may wish to comment further.

We would however welcome the opportunity to work with Trina Solar in bringing forward an appropriate site elsewhere in Frome or the surrounding area.