My comments focus on three key issues:

- **the performance of large-scale solar generation in the UK,**
- **the impacts of construction traffic on our rural road network, and**
- **the inefficient use of prime agricultural land.**

First, on solar performance.

Evidence from modelling of grid-scale solar generation in Great Britain highlights a key limitation: solar performs relatively poorly in our climate, particularly during the periods when electricity demand is highest.

Average solar capacity factors in the UK are typically around 9.5 to 11 percent, meaning that solar panels operate at only a small fraction of their theoretical output over the year.

More importantly, solar generation peaks during the summer months, when electricity demand is generally lower, while output is lowest during the winter, when demand is highest.

Modelling suggests that even if the UK reaches the government's 2030 target of around 45 gigawatts of solar capacity, solar would supply only about 14.6 percent of national electricity demand, rising to roughly 16 percent with battery storage.

Even if solar capacity reached the government's vast target of 75 gigawatts by 2035, against rising demand the contribution could fall to around 12.9 percent, again only increasing very modestly with storage.

This highlights a significant seasonal mismatch between when solar produces electricity and when electricity is most needed, raising legitimate questions about the efficiency of deploying very large ground-mounted solar schemes on good agricultural land, and the role of battery energy storage in this scenario.

One acre of moderate agricultural land produces similar revenue to one acre of solar panels, without the high up front costs. This land is classed much better than moderate. The upfront investment to build solar panels is between £150,000 and £200,000 per acre. How can this make fiscal sense? It is only affordable by hitting the consumer and subsidies.

Second, I would like to address construction traffic.

According to the developer's Construction Traffic Management Plan, the construction phase would involve 5,278 HGV deliveries, equivalent to 10,556 two-way heavy goods vehicle movements, along with 790 light goods vehicle

deliveries, creating another 1,580 two-way movements over the construction period.

In addition, during the 18-month peak construction phase, there would be at least 700 to 854 daily two-way staff vehicle trips associated with the workforce.

Even taking these figures at face value, this represents many thousands of additional vehicle movements on rural roads that were never designed to accommodate sustained heavy construction traffic.

Local roads such as the B645, B660 and B661 are narrow rural routes used daily by residents, cyclists, equestrians, agricultural vehicles and school buses.

In addition to the narrow road network, there are also concerns regarding local bridges. Bridges in Great Staughton, for example, were not designed for the weight and volume of heavy construction traffic associated with a project of this scale. Although the proposal suggests construction vehicles should avoid certain bridges, there are no robust or enforceable measures to guarantee this, and over such a long construction period it is inevitable that HGVs and other construction traffic will use these routes.

Taken together, these issues highlight serious concerns.

This proposal combines a development whose energy contribution would be limited by the realities of the UK climate, with a construction phase that would place significant pressure on a rural road network and infrastructure that were never designed to accommodate it. On top of the inevitable disruption, it would impose genuine safety issues on our community – one stretch of the construction traffic route is known locally to be literally fatal.

Finally on this proposal as an inefficient use of valuable agricultural land

To place panels on good agricultural land in a country that already has to import 40% of its food defies logic. There are so many better places to site solar panels such as rooftops, warehouses, data centres, car parks and brownfield sites. There will be a high cost of bringing the land back into food production and the developers must be compelled to place sufficient advance funds on deposit with the Treasury to fund these future costs to guard against placing the burden on the UK taxpayer.

For these reasons, I ask the Examining Authority to carefully consider whether this location is appropriate for development on this scale.