

Longfield Solar Farm Consultation - July 2021
Comments from CPRE - Essex Branch

Q1. Do you have any comments on our proposals for the solar energy elements of the scheme?

Despite some reduction in its original size, the site is planned to be one of the largest in the UK, involving some 459ha of open countryside. Fields containing continuous rows of metal and glass will bring a dramatic industrial scar to the rural environment which is further damaged by perimeter security fencing, floodlighting, CCTV towers and a range of buildings housing all of the associated apparatus including the battery storage units.

All the land affected is good quality agricultural land, the majority being Grade 2. National planning guidance indicates a strong presumption against solar farm development on the 'best and most versatile farmland' (classified as Grades 1,2 and 3A). Similarly, the BRE 'Planning Guidance for the Development of Large Scale Ground Mounted Solar PV Systems' also underlines the fact that national planning policy would not support development on higher grade agricultural land and specifically states that 'the best quality land should be used for agricultural purposes'.

With quality agricultural land such as this under threat and with the potential for this site to be one of the largest in the UK, CPREssex objects to such a large area of higher quality agricultural land being lost in a single location.

Q2. Do you have any comments on our proposals for the battery storage element of the scheme?

Lithium-ion batteries are a relatively new untested and potentially very hazardous technology - as evidenced by the fires and explosions ("thermal runaway") reported in the media. That the Longfield Solar Farm proposes to install two battery compounds using this new technology on a scale that has as yet never been done before is therefore somewhat disconcerting. This concern is compounded by the lack of a comprehensive risk assessment to handle a potential fire or explosion and the danger this might pose to local residents.

Q3. Do you have any comments on our proposals for connecting to the national electricity system, including laying cables underground and extending Bulls Lodge National Grid Substation?

Obviously, underground cabling is preferred and extending the existing Bulls Lodge substation would appear to be the most appropriate option.

Q4. Do you have any comments on the potential environmental impacts and our proposals for mitigation and enhancements during:

a) The construction of Longfield Solar Farm?

For a scheme of this size and density (432ha of development within a total site area of 459ha), the adverse environmental impacts during construction are likely to be dramatic. The 3 year construction phase will generate a significant amount of construction traffic

Longfield Solar Farm Consultation - July 2021
Comments from CPRE - Essex Branch

using the local (inadequate) road network. Within the whole site, temporary infrastructure - such as internal roads, construction and welfare compounds - together with noise from percussive groundworks will seriously affect the amenity and tranquility of the area and its biodiversity. All visual mitigations appear to be based on screening the development with hedgerow planting/reinforcement rather than addressing the main issue that is simply the overwhelming size of the scheme. It is, therefore, difficult to envisage how the proposed mitigation and enhancement measures can prevent long-term damage.

b) The operation of Longfield Solar Farm?

The consultation website, virtual exhibition and booklet provide very little or no insight into how to deliver successful biodiversity net gain. Data which shows that a scheme of this size will not have a negative impact on biodiversity is entirely lacking. The full EIA will be key and needs to include assessments of the noise levels and the impact of security lighting expected during the construction phase on the surrounding areas.

c) The decommissioning of the scheme?

It is difficult to comment on what may or may not happen in 40 years' time. However, it is highly likely that the PV panels will, one way or another, become redundant before the expiry of the 40 year lease term and quite possible that more efficient sources of electricity will have been found, thereby rendering the panels obsolete. Energy companies usually accept a reinstatement clause in the lease because they rarely have to worry about a liability so far into the future.

The operating company has stated in public it may seek to sell its leasehold interest at some time. Assurance that the costs and obligations of future reinstatement as may be conditioned in any planning permission are guaranteed or bonded is therefore crucial. However, experience elsewhere shows that many such agreements have proved worthless. There is, therefore, huge uncertainty as to whether these sites will ever be returned to agriculture or to a natural state. If PV panels have become obsolete it is quite likely that the operating company will have ceased to exist, so in that case and/or where any bond is worthless or inadequate, there will be uncertainty whether the landowner will undertake any reinstatement. In addition, the cost of de-commissioning and re-cycling is likely to considerably outweigh the value of what is created, leaving an abandoned and derelict site. There is then a possibility that the site could be classified as 'brownfield' and there could then be pressure to redevelop for housing despite its unsuitable location.

Q5. Do you have any comments on the contribution that the scheme will make to the local community?

Although there may be some opportunity for some temporary jobs for local residents during the construction phase of the project, the fact that only 8 permanent posts will be required to manage and maintain the operation means that overall impact on employment will be slight and is overplayed.

Indirect or induced employment benefits resulting from the scheme are quantified at 188 new jobs - however, in reality these will be mostly limited to local food, accommodation

Longfield Solar Farm Consultation - July 2021
Comments from CPRE - Essex Branch

and service providers ie generally low skilled and low wage sectors. Employment in higher value sectors associated with the manufacture and supply of the technical requirements and infrastructure will - as acknowledged in the consultation material - provide little benefit as components are mostly sourced from overseas.

Rather than contributing to the local community, the proposals are more likely to negatively affect local residents by, inter alia, a reduction in their access and enjoyment of the area blighted by swathes of solar panels and fencing. The proposals will fundamentally change the nature of the landscape for both residents and visitors who enjoy the open countryside with its extensive network of public rights of way both within and adjacent to the site as well as the quiet lanes for recreational purposes.

Q6. Do you have any comments on the potential biodiversity enhancements set out in the Consultation Booklet?

There appears to be some aspects of mitigation and enhancement that might be positive - such as to water courses crossing the site - but these appear to be fairly minimal. Rather, a solar farm on this huge scale will certainly damage traditional habitats through the dense development of industrial plant and infrastructure. Security fencing surrounding large areas of land will remove traditional pathways for transitory animals and bird deaths are likely to be a common occurrence as large areas of glazing are mistaken for water.

No information is given on how existing habitats will be managed. Despite the proposed introduction of sheep grazing between the panels, grass will still have to be mown and chemicals used to control weeds and pests. The land will be essentially changed from rural to industrial with a consequential impact on local wildlife. Some of the proposed mitigation areas seem minimal in scale and concept. Also, new woodland creation will take a considerable time to mature, so any of the stated visual/habitat benefits would take years to become established.

A further concern is the potential impact on the quality of the soil. Large arrays of solar panels will change the way rainwater falls on the ground, air currents will change and large areas will be permanently shaded from sunlight. It is unknown what impact these environmental changes will have on the ability of the soil to store carbon and could potentially be counter-productive in the stated objective to reverse climate change.

Q7. Do you have any further comments?

As yet there has been no evidence given that other sites have been considered, with this site being favoured by the convenience of having a single landowner - despite the scale of the project being totally inappropriate to the area. Fundamentally, a single scheme of this size in this location should not be promoted when a number of dispersed smaller sites would be much more appropriate and acceptable.

The potential loss of so much BMV agricultural land is extremely concerning as food production loss would be significant. The National Planning Policy Framework generally aims to protect agricultural land of this calibre. Owing to the scale of this proposed project

Longfield Solar Farm Consultation - July 2021
Comments from CPRE - Essex Branch

there is a danger of setting a precedent which could have a major negative impact on food security in the future.

As a result, CPREssex would expect to see a significant reduction in the scale of the proposals before they are submitted to the Planning Inspectorate and that consideration will be given to further mitigation and enhancement measures to protect and improve the local environment.