7000 Acres

7000 Acres Response to the Gate Burton Energy Park Ltd Application on the subject of:

Wildlife and Habitat

Deadline 2 Submission – 8 August 2023

Wildlife And Habitat

Credit must be given to the farm management of much of the farmland in this area. The varied tapestry of crops, small fields (for a modern agricultural setting), wide field margins, set aside, and areas of spring sowing means that the habitats are both diverse as well as productive.

Spilled grain and seeds provide supplemental food in the Autumn, and Winter stubbles along with the set aside provide vital habitat and food for farmland bird species and Wintering birds of prey. The many mixed woodland areas, small ponds and water courses make the habitat diverse and quite rare for 21st century farmland.

With a farmland bird count of over 130 species, I class this as an important and biodiverse environment with a diverse range of Flora and Fauna:

- 5 species of deer have been identified, with roe deer being the dominant species.
- Brown hare numbers are extremely high for this declining UK species; the area is an important UK stronghold.
- 3 species of newt
- 24 species of dragonfly and damselflies have been identified in recent years.
- Wide verges and field headlands are particularly important during the spring and summer when a huge range of wildflowers and grasses provide a rich habitat for wildlife including insects, butterflies, spiders, snails, and small mammals.

“Red listed” birds and species of significant importance, seen on and around the land parcels proposed for this solar development. Compiled by three local ornithologists.

- Little Egret – Steady increase of numbers
- Great white Egret – Increasing sightings.
- Water rail – Scarce and secretive species.
- Grey partridge - Breeding stronghold.
- Quail – Recent upturn in breeding numbers.
- Hen harrier - Winter visitor, hunting over open bare fields.
- Marsh harrier – Mainly Spring and Autumn visitor
- Lapwing – Breeding stronghold.
- Ringed plover – Visitor.
- Curlew – Visitor.
- Woodcock – Breeding, increasing winter numbers.
- Turtle dove – Nationally declining Summer visitor.
- Cuckoo – Nationally declining Summer visitor.
- Barn owl – Breeding stronghold.
- Tawny owl – Breeding stronghold.
- Little owl – Moderate, breeding species.
- Long eared owl – Breeding species, increasing Winter numbers.
- Short eared owl – Frequent Winter visitor.
- Merlin – Regular Winter visitor.
- Hobby – Healthy numbers, Summer visitor.
- Red Kite – Healthy population
- Skylark – Breeding stronghold.

- Starling – Healthy population, impressive Winter murmurations.
- Fieldfare – Winter stronghold.
- Redwing – Winter stronghold.
- Mistle thrush – Healthy population.
- Spotted flycatcher – Nationally declining species, stable breeding numbers.
- Redstart – Summer migrant, occasionally seen during breeding season.
- House sparrow – Breeding stronghold.
- Tree sparrow - Breeding stronghold.
- Greenfinch – Recovering numbers.
- Yellow wagtail – Summer visitor, breeding stronghold.
- Linnet – Breeding stronghold.
- Lesser redpoll – Good numbers, mainly Winter.
- Yellowhammer – Breeding stronghold.
- Corn bunting – Uncommon, breeding species.

Impact on wildlife by large scale solar developments:

There is little evidence in support of ecological improvements made by large scale solar developments on temperate agricultural land.

Developments of this scale tend mainly to be situated in countries such as India, China, Egypt and Australia. With much higher solar gains and greater land mass than the UK, often in barren or semi desert landscapes, away from habitation. This land usually has little value or specific alternative purpose.

Ecological impact on these far-flung landscapes would have little in common with the effects of giant solar developments on the UK's important and fertile land. UK farmland is under constant competition for projects that cannot be realised elsewhere. Land must be given over to other such developments. Solar does not require to be land mounted and is commonly a rooftop installation giving the roof an important secondary function.

With 4 giant solar developments proposed in this area of Lincolnshire. Wildlife will inevitably suffer. The considerable construction period of these massive solar developments with the impact spanning many years, would be an intolerable disturbance to wildlife. With thousands of transient workers and the transportation of millions of solar panels etc. Heavy machinery operating 12 hrs a day, all year round, would decimate fragile breeding habitats and destroy soil balance and structure. Removing hedgerows would be catastrophic and should not even be considered. Habitat and ecosystems cannot be created overnight with token planting schemes.

Security fencing is now an insurance necessity on solar sites. The standard deer fencing as shown in the plans would not now be permitted.

The many miles of steel fencing required would exclude important mammal species from thousands of acres of their habitat, channelling deer, hare and rabbits to existing and newly planted hedgerows, which would be destroyed or seriously damaged in a very short period of time. Biodiversity net gain targets would disturbingly never be achieved.

Mitigation measures fall woefully short, expecting farmland birds to move to isolated fields, when they have been maintaining healthy strongholds selecting their natural breeding sites from choice.

The Developer's inexperience of large-scale solar deployment in the UK and their naivety is clearly demonstrated here.

Glint and Glare from these vast solar schemes are a concern for its effect on birds as well as humans. Panel collisions have regularly been reported. With vast swathes of important open countryside lost to these installations, this would inevitably lead to the decline of our protected raptor species.

Loss of vital insect numbers due to panel attraction, is also a documented concern. With literally a sea of solar panels in one area. The attraction to this false water could be of huge ecological consequence.

Artificial microclimate formations around the arrays and in the locality alter ambient temperatures by several degrees, combined with constant shading of much of the soil below is worthy of consideration especially on long term soil health and invertebrate habitat.

Cumulative effect.

There is no evidence of wildlife benefit from large ground mounted solar schemes in the UK, as there are none of this scale.

On a human note, many people get much pleasure from their immediate surroundings and the wildlife it contains. Indeed, many live in the countryside for this reason alone. To lose this on such an immense scale could be catastrophic not just for the spirit of the communities involved but for residents continued mental wellbeing and good health.

I can see much harm coming from this unparalleled amount of industrial development, and the associated loss of our natural and semi-natural landscape.

The impact of this scheme on the natural world has not been addressed thoroughly by the Developer. We must not sugarcoat the reality that each scheme is an industrial project on a scale that dwarfs every other type of past development. Token planting and the mere hope of mitigation success is too much of a gamble to take, with no evidence backing the effects of land use change of this magnitude.

The issues highlighted in this report and a worst-case scenario of 10,000 acres of development in one area, would mean a compound level of disturbance and impact, with an outcome that no one can be sure of.

REFERENCES:

EUROPEAN COMMISSION - POTENTIAL IMPACTS OF SOLAR, GEOTHERMAL AND OCEAN ENERGY ON HABITATS AND SPECIES PROTECTED UNDER THE BIRDS AND HABITATS DIRECTIVES

RSPB

BTO

Wildlife Trust

Hare Preservation Trust

British Deer Society