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22/501335/FULL Land North of Little Cheveney Farm, Sheephurst Lane, Marden, Kent

Response To Comments and Objections

Project: Sheephurst Solar Farm **Country:** UK

Project Code: SCUKX-SHEEP-000-1001

Responsible: Charlotte Healey

Elaborated by	Date	Checked by	Issue date	Rev no	Comments
Donna Clarke	31/08/2022		31/08/2022	01	First Issue

Revision history

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1 Response to Statutory Consultee Comments and Objections

Consultee	Response to Application	Applicant's Response
Natural England	Natural England considers that the proposed development will not have significant adverse impacts on statutorily protected nature conservation sites	No response required
Environment Agency	Propose conditions with respect to contamination Propose conditions with respect to a kingfisher protection plan Require confirmation that the solar panels will remain operational during a proposed flood event Satisfied that the finished slab levels for the HV compound and energy storage compound are above the design flood level Holding objection	Agreed Agreed The solar panels will remain operational. No response required
KCC Highways	Confirmation of the proposed temporary construction access will be retained in perpetuity and form the primary site access onto Sheephurst Lane An update site plan, preferably at scale 1:500, demonstrating the location of the site compound area Confirmation of the number of parking spaces that will be provided in the site compound area Amendments to the proposed route strategy so that all HGV's travel via the B2079, West End Goudhurst Road	See revised CTMP See revised CTMP See revised CTMP See revised CTMP
Consultee	Response to Application	Applicant's Response
Kent County Council Flood and Water Management	Propose vegetation planting rather than gravel strips to reduce runoff and soil erosion Propose conditions with respect to drainage and surface water	This can be considered as part of the detailed SUDS. Agreed

Environmental Health	<p>Query the methodology used for the noise assessment at NR2. Noise assessment should be widened to include 1/3rd Octave Band spectra data (NANR45 and Phon) and BS4142 assessments done for all locations. NANR45 and Phon charts can be used to demonstrate impact rather than the generic 30dB level</p> <p>Do not consider LA890 values are the worst case</p> <p>NANR45 and phono graphs should be used for transformer noise</p> <p>In a low background area 30dB should not be used</p> <p>The 4 metre barrier can exacerbate low frequency noise due to the long wavelengths of low frequency noise</p>	<p>See response issued separately</p> <p>See response issued separately</p> <p>See response issued separately</p> <p>See response issued separately</p> <p>See response issued separately</p>
Upper Medway Internal Drainage Board	<p>Request that Drainage Board consents are received prior to determination</p>	<p>There are no proposals to alter watercourses or banks. Any consents required from the Drainage Board will be applied for post determination and can be made a condition of a planning consent.</p>
Weald of Kent Protection Society	<p>Object</p>	<p>See response issued separately</p>
Consultee	Response to Application	Applicant's Response
Southern Water	<p>Possible that a public sewer crosses the site</p> <p>SUDS should include an arrangement for adoption by the water authority</p> <p>Loss of agricultural land</p>	<p>Southern Water have issued accurate plans and safeguarding of the foul sewer can be accommodated within the proposed development</p> <p>The outline SUDS does not require adoption by the water authority</p> <p>See response issued separately</p>
Collier Street Parish Council	<p>Cumulative impact with other development in the Weald including the Bockingfold solar farm</p>	<p>See response issued separately</p>

	Concerned about flooding and the lack of assessment of flooding on Sheephurst Lane	The FRA and Outline SUDS report address flooding and drainage
	Hours of traffic movements should be limited with no weekend traffic	No weekend working is proposed
Marden Parish Council	Support use of land for low carbon energy generation	No response required
	Prefer the construction traffic use to utilise A229 at Stilebridge onto the B2079, onto Underlyn Lane, Hunton Road, Green Lane, B2162 and Sheephurst Lane	See response issued separately and response from Kent County Council Highways
Kent Police	Propose security measures for the site	See response issued separately.
	Security measures are proposed for the solar arrays and other equipment	The suggestions made by the Police can be incorporated in the equipment specification for procurement.
Historic England	No advice given	No response required
Maidstone Borough Council Heritage and Design	Objection	See response issued separately
Consultee	Response to Application	Applicant's Response
Public Rights of Way Officer	This means that the Public Right of Way must not be stopped up, diverted, obstructed (this includes any building materials or waste generated during any of the construction phases) or the surface disturbed	It is proposed to reroute KM248. The entrance and exit will remain the same. No work will be undertaken until permission is given for the diversion.
KCC Minerals Officer	No objection	No response required

2 Response to Public Comments and Objections

Consultee

Applicant's Response

Agricultural Land and BMV

Loss of good quality agricultural land

Good (best) quality agricultural land (BMV) is defined as Agricultural Land Classification Grades 1, 2 and 3a. 45% of the land within the red line boundary is BMV. It represents 4.6% of the total land holding at Eckley Farms and a significantly smaller proportion of the total BMV within Maidstone Borough Council (MBC) and Kent as a whole. There are no opportunities within MBC for solar farm developments on brownfield land where there is a grid connection. This is set out in the Sequential Analysis report.

Not temporary

The development proposed is for a period of 37 years after which it will be decommissioned and the site restored to the same condition, if not better, than prior to the development. During the operational period of the development rotational sheep grazing is proposed which will maintain, if not improve, the agricultural land classification of the lower grade land.

Existing farming activity is productive (regenerative farming)

Eckley Farms are an agricultural innovator. The Eckley regenerative farming practice has been successful in demonstrating that sustainable farming can make a positive contribution to mitigating the impacts of climate change. The proposed development will reduce the total land farmed by Eckley Farms by 4.6%.

Food security should be the priority

It should be noted that a significant proportion of income for arable farm businesses is derived from subsidy schemes. Subsidies under the Basic Payment Scheme are being phased out completely and less money will be available through new schemes so farm business need to diversify to remain viable. This new income will replace income foregone due to the loss of BPS thereby enabling the farm to continue to innovate rather than chasing higher yields at the expense of its sustainable farming practice.

Food security has become a concern because of the impact of world events on global food supply chains. Threats to food stability include climate change, conflict and economic factors such as volatile price fluctuations. The National Food Strategy Review found that solar does not present a risk to food security in the UK. It also found that solar farms can complement agricultural production, providing income which can be invested in machinery or modernisation of a farm's agricultural output. This can make it more efficient, thus improving the profitability and supporting food production. 71% of UK land is dedicated to agriculture, 72% of this grassland and 26% cropland, the remainder being fallow land. Currently, 0.08% of UK land is taken up by solar farms. This would increase to just under 0.4% if the UK achieved its target of 70GW of solar generation which the UK's Energy Security Strategy stated as the target for 2035.

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On food security the UK is largely self-sufficient in production of grains, producing over 100% of domestic consumption of oats and barley and over 90% of wheat. The UK produces a significant proportion of its other crop needs, including around 60% of sugar beet, 70% of potatoes and 80% of oilseeds. The proposed development will not impact on the UK's food security.

Shadow from the panels will degrade the land

Agriculture will continue in the form of sheep grazing. A Sheep Grazing Plan will be prepared in consultation with the landowner and the sheep farmer who will graze sheep on the land within the solar arrays. The design of the solar farm has been assessed by an independent research organisation in The Netherlands, TNO. In The Netherlands it is a requirement that solar farms meet specific criteria so that soil quality is not degraded. TNO simulated the ground irradiance with the proposed solar development and concluded that there would be no deterioration of soil quality.

Energy Generation

Energy security

In 2020 40.8 percent of our electricity was generated using fossil fuels. Wind and solar accounted for 28.4%. Gas accounted for 35.7% of electricity produced and in 2020 59% of Gas was imported. With global prices dictating the cost of imported gas and England's high reliance on imported gas, energy prices are soaring. The proposed development will contribute to the UK's policy objective of being self-sufficient with respect to energy.

Brownfield and roof tops should be preferred

Brownfield land is land which has previously been developed and not currently in use that is potentially contaminated. Such sites include former industrial buildings, landfill sites and abandoned mines. None of the sites on Maidstone's brownfield land register are of a suitable size for solar energy regeneration. Whilst rooftop solar is efficient in terms of land usage, it is less efficient in terms of material use and more labour intensive, time consuming and expensive to install, and the opportunities are limited. To rapidly achieving the scale of renewable energy the UK needs to achieve net zero and energy supply security, both solar farms and rooftop solar will be needed alongside other renewable energy technologies.

Too large

Solar energy developments are no longer subsidised by the UK Government. As they are now commercial developments they therefore have to be financially viable. The key factor that will influence the size of a solar energy development is the availability and cost of the grid connection.

Community Impact

No benefit to local community

Statkraft undertook pre-application consultation with the local community between 23 July – 27 August 2021. As a result of the feedback from the local community a second permissive footpath and a community orchard have been incorporated in the proposal. The biodiversity net gain achieved by the proposal is significant and exceeding the minimum biodiversity net

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	gain required for new development by the Government and Maidstone Borough Council.
Residential Amenity	
Little Sheephurst Cottages and Little Cheveney Farm significantly detrimental impact	See response issued separately
Visual impact of HV compound on 7 and 8 Little Sheephurst cottages, Willow Cottage and Willow Barn	See response issued separately
No plans or photos showing visual impact of HV compound on properties	See response issued separately
CCTV and privacy	The CCTV cameras are for the security of the solar energy development. They are infrared motion activated cameras and are positioned at intervals around the site. They are angled away from nearby residential properties and public footpaths.
Consultation	
No community engagement	The pre-application community consultation was undertaken from July - September 2021. This included a leaflet drop to 588 addresses within a radius of 2 km of the site, meetings with the local Parish Council and an on site meeting with Ward Councillors. A project website has been active since July 2021.
Consultation undertaken during COVID	The consultation was undertaken during the period when the Government removed most legal limits on social contact.
Alternative Options	
Marden roof tops are preferable	There is now more than 5GW of residential, commercial and industrial rooftop capacity in the UK compared to 9.2 GW of utility scale solar. Rooftop solar clearly has a role to play in achieving the UK's net zero target and energy supply security alongside other low carbon electricity generation technologies. Rooftops in Marden may have the potential to deliver solar energy but this will depend on landowners, both commercial and domestic, coming forward with proposals to install solar panels.
Offshore wind is more efficient	Offshore wind is an efficient renewable energy technology. However, offshore wind projects can take around 12 years from start to finish. Solar energy can be deployed in significantly less time and therefore can make a contribution to achieving net zero much faster than offshore wind. The typical cost of offshore wind is £1.3 million per MW. Solar costs have decreased significant yin the last 4 years and the typical cost is £30-60 per MW.
Alternative site by Yalding railway	It is understood that this 5 acre site is to be developed as a business park.
More appropriate sites in Kent	There are limited brownfield sites in Kent that would be suitable for a solar energy development. There are currently no large sites on the Maidstone Brownfield Land Register and much of the brownfield land in Kent is in North Kent in Dartford and the Medway towns. These areas are unlikely to be suitable for a solar energy development.
Use rooftops at Pattenden Lane and Tranfesa Road (Paddock Wood)	These sites comprise industrial and business units. It is unlikely that these rooftops, if suitable, could deliver over 500kw of solar energy.

Footpaths

Fenced in and tunnel effect

There will not be a tunnel effect because the distance between the solar farm fence and the site boundary is over 50 metres.

Removing footpath

The existing public footpath is not being removed. It is being repositioned so that the route is around not diagonally across the corner of the field. The entrance and exit remain the same.

Flood Risk

Area known for flooding. This will increase flooding

The Flood Risk Assessment and the Outline Surface Water Drainage Strategy assess flood risk and surface water drainage.

Impact on Lesser Teise

The Lesser Teise flows along the eastern periphery of the red line boundary. Runoff from the energy storage compound is proposed to be discharged at a controlled rate to the Lesser Teise via a flow control device. It is not considered that this will increase the risk of flooding in the local area.

Run off from panels will increase flood risk ESS is located where there is flooding

The solar arrays will include filter drains every tenth row. This will reduce the risk of surface water flooding. The position of the ESS was agreed in consultation with flood risk consultants JBA. It is located on ground which has a low risk of flooding.

Planting deciduous trees will increase flooding

The removal of trees and hedges and changes in cropping have increased run-off from fields. Planting trees, whether coniferous or deciduous, and hedges can increase water infiltration and reduce and slow run-off on agricultural land. The proposed development retains the existing trees and proposes extensive new tree planting this will be of benefit to the local area in terms of surface water flooding and flood risk.

Flooding of local ponds

Flooding of local ponds is not a likely consequence of the proposed development. Swales have been incorporated in the layout design to mitigate the risk of flooding in areas where hardstandings are required - the energy storage compound and the HV compound.

Ecology

Threat to wildlife

The ecological impact assessment sets out the impacts of the proposal on ecology. There are no impacts with respect to sites of nature conservation, hazel dormice, wintering birds, aquatic mammals or invertebrates. Mitigation measures are proposed with respect to great crested newt, birds and badgers. It is expected that there will be ecological gains as a result of the biodiversity improvement measures proposed as an integral element of the proposed development.

Prevent free movement of wildlife due to fencing

Whilst the solar element of the proposed development will be fenced, outside the fence line there will be no barriers to wildlife. In addition, the fence will incorporate gaps for small mammals to pass through the site.

Construction impact on wildlife

The construction methods for the proposed solar energy development are low impact and are comparable to existing disturbance events from farming activities. During the construction phase an ecological clerk of works will be present on site to ensure that the construction works do not have a negative impact on wildlife.

Impact on pond at 7 Little Cheveney Cottage

This is a private pond in a private garden. No impacts on this pond are envisaged due to its location and distance from the proposed development.

Roads and Traffic

Plain Road and Sheephurst Lane are unsuitable for construction traffic

The traffic routing proposed is the same routing as that taken for the Widehurst Farm solar farm development (15/505971/FULL). Where construction traffic would have turned left from Plain Road to access Widehurst Farm, they would continue along Plain Road to enter Sheephurst Lane from the east.

Safety

The level of traffic during the temporary construction phase is not considered to result in a material impact on the safety or operation of the local highway network.

Damage to road

A highway condition survey would be undertaken with highways officers prior to commencement of construction. Should damage to the highway arise attributable to the construction works this will be remedied prior to commissioning of the development.

Contamination

Contaminated water from construction and batteries discharging to rivers

In order to protect human health and the environment containment on site will be provided to prevent the uncontrolled release of contaminated water. This will be undertaken in accordance with current guidance and advice from the local fire authority.

Leakage and run off from the arrays

Solar panels do not leak. No chemicals are used in cleaning solar arrays during maintenance.

Heritage

Impact on listed buildings including historic farmstead

The listed buildings are all Grade II and include Little Long End, buildings at Little Cheveney Farm, Great Sheephurst farm, Turkey Farmhouse and Longends Farmhouse. There will be no direct physical impacts on these listed buildings. In terms of their setting the desk based heritage assessment concludes that there would be no harm to the significance of these designated heritage assets. This is because their setting would not be altered due to the low level of intervisibility between the heritage assets and the proposed development.

Demolition of Tar Pit Chimneys

No structures are being demolished in order to facilitate the proposed development. The footpath KM318 is not in the vicinity of the proposed development.

Glint and glare

Panels are 2.7metre above ground will have an impact (glare) on 45 homes

The maximum height of the solar panels is 2.47 metres as shown on drawing 27899/105 A. The Glint and Glare Study predicts that only 2 dwelling may experience glare and that this impact is expected to be moderate. Screening is included within the proposals to fully remove all views of the reflective areas.

Reflection of solar panels

Anti-reflection technology is used on solar panels in order to minimise the potential for glare. In addition, the layout of the proposed development has been designed in order to minimise adverse impacts with respect to glare.

Noise

Noise from cooling fans and hum from solar farm inverters

The noise study undertaken by dBc Consultation Ltd concludes that the sound levels are negligible and unlikely to be audible or disturb sleep.

Tonal noise from inverters

The tonal noise from the inverters has not been assessed because the solar panels themselves act as a noise barrier with respect to the string inverters and

due to their positioning with respect to sensitive receptors.

Trees

Loss of trees

Detrimental impact on ancient woodland which will be fenced on three sides

The setback from the Wealden parkland which contains old oaks should be increased

There are no proposals to remove trees from the site. The ancient woodland is not fenced. The setback from the ancient woodland to the solar array fence line is 15 metres at the closes point. The setback distance from the solar arrays to the fence line is between 2 and 10 metres. The setback from the fence line to the red line boundary varies between 3 metres on the western boundary to 15 – 36.7 metres on the northern boundary and between 5 – 42 metres on the eastern boundary. This is considered sufficient to mitigate impacts on the parkland.

Decommissioning

Who will be responsible

The responsibility for decommissioning is the applicant's.

Landscape and visual impact

Industrialisation of the countryside

The layout of the solar array and associated infrastructure has been designed to minimise impacts on the countryside. The mitigation measures which include landscaping and extensive tree planting address this concern.

Impact on wider landscape

The position and containment of the site south of the railway line and north of Sheephurst Lane is such that the impact on the wider landscape is low.

Impact on residential

The solar arrays and associated infrastructure are positioned so that the impact on nearby residential properties is minimised. The setback distance from the fence line of the proposed development and the intervening green spaces outside the red line boundary provide a significant buffer to reduce the impact on the nearby residential properties. Drawing 27899/SK01.

Cumulative impact with existing and proposed developments (UK and another solar farm)

The cumulative impact is addressed in the LVIA report. The cumulative visual effect with respect to Paddock Wood and Widehurst solar farm are considered to be negligible and nil. This is due to intervening vegetation and distance.

Appeal decision for another solar farm between Staplehurst and Marden found that the landscape impact was unacceptable

The landscape character and location of this proposed solar farm is significantly different to the proposed development. The Staplehurst proposal was in a landscape with wide open vistas. The Inspector therefore concluded that the harm to the landscape visual qualities of the landscape did not outweigh the benefits.

Cumulative impact of Paddock Wood solar farm and another solar farm proposed south west of Claygate

There is no cumulative impact with the Paddock Wood solar farm. A planning application for the proposed Bockingfold solar farm south west of Claygate has not, as yet, been submitted to the LPA.

Other

EMFs

Electricity from solar panels and transmission to the grid emits extremely weak electromagnetic fields. Exposure to low-level electromagnetic fields has been

Light pollution

studied extensively, and there is no evidence that it is harmful to human health.(World Health Organisation). No light pollution will emanate from the proposed development as no external lighting is proposed within the solar arrays. The sub station buildings will have external lighting in accordance with DNO (distribution network operator) requirements. This is motion detected lighting.

Negative impact on property value

The impact on property values is not a planning matter.

Fire risk of ESS

The fire management and safety measures will be developed in consultation and with the agreement of the local fire authority.

Health impact of solar

No health impacts with respect to solar arrays are known.

Fence should be 2m high

The proposed fence height is 2.4 metres. This is the recommended height to prevent deer jumping into the solar arrays and causing damage.