PROPOSED INSTALLATION OF 15 KWp (60 No PANELS) GROUND MOUNTED SOLAR PHOTOVOLTAIC PANELS AT WHITEFIELD HALL, HEPPLE, NORTHUMBERLAND NE65 7LN

10 November 2019

PLANNING STATEMENT

National Planning Policy Framework – March 2012

Paragraph 94 states that:

Local planning authorities should adopt proactive strategies to mitigate and adapt to climate change, taking full account of flood risk, coastal change and water supply and demand considerations.

Paragraph 97 outlines how local planning authorities should determine planning applications for renewable energy. To help increase the use and supply of renewable and low carbon energy, local planning authorities should recognise the responsibility on all communities to contribute to energy generation from renewable or low carbon sources. They should:

- Have a positive strategy to promote energy from renewable and low carbon sources;
- Design their polices to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts;
- Consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure the development of such sources;
- Support community-led initiatives for renewable and low carbon energy, including developments outside such areas being taken forward through neighbourhood planning;
- Identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.

Paragraph 98 states that when determining planning applications, local planning Authorities should:

- Not require applicants for energy development to demonstrate the overall need for renewable or low carbon energy and also recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and
- Approve the application if its impacts are (or can be made) acceptable. Once suitable areas for renewable and low carbon energy have been identified in plans, local planning authorities should also expect subsequent applications for commercial scale projects outside these areas to demonstrate that the proposed location meets the criteria used in identifying suitable areas.

PRE-APPLICATION ENQUIRY

Results of a pre-application enquiry submitted to Northumberland National Parks (reference 19/0065) considered that the proposal for the ground mounted solar panels to be acceptable.

DESIGN AND ACCESS STATEMENT

1. USE

The application relates to the installation of 60 No. Solar Photovoltaic panels ground mounted to Corbin Solar System 'H' framework. The solar array is expected to produce 15,000 KW of electricity annually which is for domestic use at Whitefield Hall with any surplus power fed to the domestic water heater immersion elements reducing consumption of heating oil.
Using Carbon Trust (www.carbontrust.co.uk) figures of 54.5gm/KWh generated, therefore 15,000 KW x 545gm = 8.17 tonnes which is a representation of carbon emissions saved. This will contribute towards the Carbon Emissions Reduction Target (CERT) as outlined by the Department of Energy & Climate Change.

2. AMOUNT

The planning application only refers to the proposed Solar Photovoltaic ground mounted panels, no access tracks or roads are to be constructed for the installation or maintenance of the panels.

3. LAYOUT

The location of the Solar Panel system is shown on the Location Plan (scale 1:1250), Block Plan (scale 1:200) and Elevations (scale 1:100)

4. SCALE AND TYPE

The 60 solar panels consist of:
Row 1 – 15 x 2 = 30 panels
Row 2 – 15 x 2 = 30 panels
Total = 60 panels
Each panel is mounted in portrait and attached to Corbin Solar System H steel framework which is fixed to the ground, details of the this system can be seen at www.corbinindustries.co.uk . The approximate maximum height of the solar panels from ground level is 2.50m
The photovoltaic panels to be installed are to be REC N-PEAK BLACK SERIES, which are Premium full black mono N-Type, more details can be found at www.recgroup.com

5. LANDSCAPING

The site for the PV array is located on land adjacent to Garage/Workshop which all Owned by the Whitefield Hall estate, taking into account the size and scale of the proposed Solar Photovoltaic ground mounted array it will have minimal effect on the

existing landscape.

6. APPEARANCE

The proposed Solar Panels are to be 325 Wp REC black series
Mechanical Characteristics:
Cell type: 120 half-cut mono c-Sin-type cells 6 strings of 20 cells in series
Glass: 3.2mm solar glass with anti-reflection surface treatment
Backsheet: Highly reflective and resistant polymeric construction (black)
Frame: Anodised Aluminium (black)
Dimensions: 1675 x 997 x 30mm
Total area: 100.20m^2

7. ACCESS

Access is over private land, it does not affect any pedestrians.

INSTALATION PROCEDURE

1.1 Framework: Corbin Solar System H
Panel configuration: 2 panels in portrait – nominal 997 x 1675mm
Angle: 30 degrees
Post system: Single post, inserted into auger drilled hole and surrounded in weak concrete
Post centres: 3m centres
Max. wind loading: 24m/s

1.2 Specification:
Structural standard: Euro code 3
Geotechnical standard: Euro code 7
Frame material standard: Galvanised sheet steel, Z450, S350, to BS EN 10346

1.3 Procedure: 300mm diameter holes drilled into ground using auger attachment to a Bobcat or similar machine at 3m centres on each array row to a maximum depth of 900mm depending on ground conditions, post surrounded in weak mix concrete. The Corbin galvanised steel framework is resilient to occasional ground water ponding and this would not have a detrimental affect to its structural stability.

1.4 The concrete to be used is to be weak post mix concrete, there will be no affect to the porosity of the existing ground.

1.5 The photovoltaic panels are fixed to the Corbin framework with a minimum ground clearance of 800mm and a maximum ground of clearance 2500mm

1.6 All underground cables to be armoured

1.7 All construction and installation equipment is to be transported using standard vehicles

CURRENT USE

The field is currently used as grazing land, the agricultural grade of the land is grade 4 poor. Wildlife on site is likely to be concentrated to the boundary hedges and trees. There is a small possibility that ground nesting birds could be located within the construction area. Contractors are to be briefed prior to the start of the works regarding the presence of common lizard, nesting birds and badger on site.

MANAGEMENT OF ECOLOGICAL RESOURCES

The following measures are to be employed to manage and protect onsite ecological resources during construction of the pv array.

- No disturbance is to take place to any hedges and trees.
- If it is found to be necessary security fencing will be installed to protect any vegetation and any animals traversing the site during construction.
- If any excavations are to be left open overnight, sloping ends to trenches and timber battens are to be put in place to prevent any badgers being trapped.
- Vegetation within the working area will be cut to ground level two weeks before construction work starts and maintained in that condition until the commencement of the works, in order to discourage reptiles from the site.
- Any excavated material to be backfilled immediately to prevent any reptiles using any spoil heaps for refuges.
- If the works are to be carried out during the nesting season (March to August); the site will be mown regularly to discourage nesting birds to the site prior to the commencement of the works. A walkover survey will be undertaken to check for any nesting birds, if any birds are found works will be delayed at any specific areas until nesting is complete.
- Night time working is not to take place, to minimise the disturbance to foraging wildlife.

LANDSCAPE MANAGEMENT PLAN

Appropriate management is vital to ensuring habitat enhancements deliver benefits to biodiversity. If management imposed on site is not suitable then any benefit may not be achieved. This requires careful planning of sowing, grazing and the minimum use of fertilisers. The reduction in use of fertilisers and pesticides will ensure greater biodiversity benefits for solar array site.
Following construction of the solar array, it will be necessary to ensure that some grassland cover is achieved quickly to reduce chances of the colonisation of non-desirable plants such as injurious weeds.
In order to achieve this, the land will be put back into pasture for grazing sheep. A mixture of fine grasses, which will include native red clover will be sown in order to offer greater benefits to wildlife. Native red clover is a species particularly attractive to bumblebees. The grass seed and red clover mix will be sown straight after the completion of the solar array and watered appropriately during dry periods.
There will be a requirement to re-sow the pasture at regular 3-4 year intervals in order to maintain a suitably beneficial habitat.

In order to further increase the biodiversity value of the site, the volume of grazing through the spring and summer periods (April – June) will be reduced, this will in-turn increase the available nectar source from the red clover and therefore offer further benefits to bees. This combination of low stocking density and breaks in grazing should lead to a high diversity of wild flowers and invertebrates.

The site will be monitored on an on-going basis, this will allow for careful monitoring of planting and also to check for injurious weeds.

Brian Newman
Agent