PROPOSED INSTALLATION OF TWO BRITWIND R9000 DOMESTIC WIND TURBINES AT LONGSYKE FARM ONCE BREWED HALTWHISTLE NE49 9PR FOR Mr and Mrs Howard 14 November 2017

DESIGN AND ACCESS 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.

1. USE

The application relates to the installation of two Britwind R9000 wind turbines to generate electricity for Longsyke Farm and Holiday Cottage. The wind speed at Longsyke Farm is approximately 6.2 metres/second (yearly average) each turbine is predicted to generate 15,380KWh annually, this represents a high proportion of the Farms needs.

Using Carbon Trust (<u>www.carbontrust.co.uk</u>) figures of 545gm/KWh generated, therefore 30,760 KWh x 545gm = 16.76 tonnes of carbon emissions saved. This will contribute towards the Carbon Emissions Reduction Target (CERT) as outlined by the Department of Energy & Climate Change. Planning Policy Statement 22 for renewable energy is seen as relevant to this application.

The proposed site is located within the Northumberland National Park and the Hadrian Wall Buffer Zone it is also noted from the Historic England map that the course of a Roman aqueduct lies near the site, there are no visible signs on site of this feature however the turbines have been kept a minimum of 23m from the aqueduct buffer zone shown on the Historic England map. The proposed turbines are located 1300m to the north of Hadrian's wall, they would not be visible from Housesteads Roman Fort or the new National Park visitor centre at Once Brewed.

Farm assurance assessments now enquire about renewables installed on farms as supermarkets move towards carbon footprint labelling for their products, the installation of the turbines will help protect Longsyke Farm for future supplies to supermarkets.

2. AMOUNT

The planning application only refers to the proposed wind turbine **no** access roads or tracks will be constructed for the installation or maintenance of the turbine.

3. LAYOUT

The layout is dictated to by the standard design of the wind turbine as shown on the drawings and planning pack supplied by the manufacturers. The location of the turbine is shown on the Location Plan (scale 1:1250) and detailed Block Plan (scale 1:500) The grid reference for the proposed wind turbines are:

Turbine 1 – eastern 372971 northing 568461

Turbine 2 – eastern 372951 northing 568481

4. SCALE AND TYPE

The proposed domestic wind turbines are to be Britwind R9000 mounted to 12m towers with a rotor diameter of 5.50m, total height to tip 15.05m from ground level. This type of turbine has an upwind 3 blade self regulating rotor, direct drive with permanent magnet alternator, 5KW rated power, manufactured by Britwind Ltd.

5. LANDSCAPING AND WILDLIFE

The general advice from the United Kingdom Bat Conservation Trust and the Wildlife Trust is that a small turbine of this type should be sited to avoid close proximity to buildings that could be used as bat roosts, or groups of mature trees, and water bodies such as ponds and lakes, which could be used as foraging and commuting routes. They recommend siting of domestic scale turbines should be 50m away any such feature. This advice is backed up by English Nature in their 2009 publication Technical Advice note TON051. A further study into small wind turbines <50kw by Stirling University can be viewed at www.sbes.stir.ac.uk/research/ecology/micro-tubines.html which suggests that small turbines can be sited 20m from these features. Guidance published by the BWEA (RenewableUK www.bwea.com) in conjunction with English Nature, RSPB and WWWF-UK indicates that bats species in the UK are unlikely to come into contact with blades during their normal movements. There is no published evidence of turbines of this size interfering with echo-location calls or causing injuries as a result of atmospheric pressure drop at wind turbine blades, and these problems are more commonly associated with large megawatt generators or wind farms and not micro generators as proposed at this location. No bat casualties or other casualties have been observed from a turbine positioned 25m from a bat foraging route. As shown on the block plan the proposed wind turbines at Longsyke Farm has a 50m clear zone from any such features described.

All cables are to be installed underground, any ground disturbed by the construction of the foundations, cable trenches and turbines will be reinstated back to agricultural meadow grass.

6. APPEARANCE

Each proposed wind turbine will be fixed to a concrete pad foundation, the bulk of the foundations are buried with earth. Each turbine is to be mounted on a grey galvanised steel tower, the colour of rotary blades and covers is RAL 9018 Papyrus White.

7. ACCESS

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

CONSTRUCTION METHOD STATEMENT

The works will be carried out by the following contractor:

H E Servicing Ltd Station Court Hexham NE46 1EU will carry out excavations, formwork, concrete foundations, trench works, turbine installation, cable installations works and commissioning.

The duration of the works is not expected to take longer than 20 days. The site compound for the storage of materials and plant will be located at the existing hard standing area at Longsyke Farm which is located approximately 130m from the turbine site.

All excavations is to be carried out in a safe and well organised manor, the setting up of formwork, installation of reinforcement and holding down bolts and pouring of concrete is not expected to take more than 5days, any open excavations to be surrounded by guard rails over night.

All roads to the site including private and adopted roads to be kept free from mud and

debris at all times, all personal on site are to have a duty to make sure that the works are in a clean and well organised state at all times.

Any surplus excavated material arising from the excavations are to be neatly spread on site to the directions of the client, no surplus excavated material is to be removed from site.

All site personal have a responsibility to keep the effects of noise to a minimum during the course of the works.

No breakers or percussion tools are to be used on site without prior notice, in the interests of reducing unnecessary vibration.

The concrete for the foundations will be delivered to site on standard ready mixed concrete wagons.

The wind turbines will be delivered on a standard flat bed delivery wagon.

The turbine will be assembled in a flat position at the site, bolted down to the Foundation with the holding down bolts previously cast into the concrete, the turbine is then erected into it's vertical position with a hydraulic ram which is attached to the tower.

All vehicles leaving the site to be hosed down to remove all mud before entering the highway.

Maximum height of construction equipment 25m (Manitou Rotating Telehandler)

Brian Newman Agent