DESIGN AND ACCESS STATEMENT

FOR THE PROPOSED INSTALLATION OF AN EVANCE 5kW WIND TURBINE BY

INVESTMENT RENEWABLES, UNIT 2, 14 WAKEFIELD ROAD, GRANGE MOOR, WAKEFIELD WF4 4DS

FOR AND ON BEHALF OF

MR W ASH, LOWER EAVED FARM, CHAPEL-EN-LE-FRITH HIGH PEAK, DERBYSHIRE SK23 9UA

OUTLINE OF THE PROPSAL

Investment Renewables plan to install an Evance R9000 5kW wind turbine at the above referred site to generate electricity for use by the client for his property/business. The turbine is grid connected and during times of low power use excess electricity can be fed into the National Grid.

Evance R9000 Wind turbine

Height to nacelle	15.0 metres
Blade Diameter	5.5 metres
Overall height	17.25 metres
Power Generation	9,314 kWh per annum
Based on wind speed	4.8 metres per second
Cut in wind speed	3.0 metres per second
Cut out wind speed	None
Survival wind speed	60.0 metres per second (134mph)
Construction	Galvanised steel tower with GRP blades and nacelle

A design drawing of the turbine and base fixing detail shall accompany the application, a technical data sheet is available online, and can be viewed here:

http://www.evancewind.com/images/uploads/products/Evance_R9000.pdf

LOCATION

Latitude	53.3188° N
Longitude	1.9018° W
Grid Reference	SK 06639 80212
Local Authority	High Peak

Ordnance Survey Site plans shall accompany the application.

Access to the site will be via the B5470 and onto Park Road and will not require any permanent road closures. There may be the unlikely need for the delivery vehicle to slow traffic for a very short time during access to site, but this will be adequately manned and kept to an absolute minimum.

GOVERNMENT POLICY

Government policy, namely Planning Policy Statement 22 (PPS22) was introduced to achieve 10% of the nation's electrical requirements from renewable sources by the end of 2010, and 30% by 2030.

It emphasizes the importance of renewable energy as a key resource in the United Kingdom, It also encourages planning authorities to adapt planning policies appropriate for the promotion of small scale renewable energy.

PPS22 Paragraph 20 offers guidance relative to small wind turbines:

"Of all renewable technologies, wind turbines are likely to have the greatest visual and landscape effects. However, in assessing planning applications, local authorities should recognise that the impact of turbines on the landscape will vary according to the size and number of turbines and the type of landscape involved and that these impacts may be temporary if conditions are attached to planning permissions, which require the future decommissioning of turbines."

LOCAL POLICY

PPS1 Delivering Sustainable Development

PPS1 sets out the Government's overarching planning policies on the delivery of sustainable development through the planning system. This PPS replaces Planning Policy Guidance Note 1, General Policies and Principles, published in February 1997. The document states that planning should facilitate and promote sustainable and inclusive patterns of urban and rural development by:

- Making suitable land available for development in line with economic, social and environmental objectives to improve people's quality of life;
- Contributing to sustainable economic development;
- Protecting and enhancing the natural and historic environment, the quality and character of the countryside, and existing communities;
- Ensuring high quality development through good and inclusive design, and the efficient use of resources; and,
- Ensuring that development supports existing communities and contributes to the creation of safe, sustainable, liveable and mixed communities with good access to jobs and key services for all members of the community.

PPS22 Renewable Energy

This PPS aims to encourage further development of renewable energy resources. It states that all Regional Spatial strategies and local development documents should contain policies designed to promote and encourage the development of renewable energy resources. Planning authorities should set out the criteria that will be applied in assessing applications for planning permission for renewable energy projects.

The Regional Spatial Strategy should include the target for renewable energy capacity in the region, where appropriate this can be disaggregated into subregional targets.

Local planning authorities may include policies in local development documents which require a percentage of the energy to be used in new residential, commercial or industrial developments to come from on-site renewable energy developments.

CERTIFICATION

The Evance R9000 complies with IEC 61400-2 standard for small wind turbine design.

The turbine has CE certification.

The turbine has MCS Certification.

Evance and Investment Renewables are approved as a certified installers.

VISUAL IMPACT

Every effort has been made to site the turbine sensitively and to blend the turbine into the local surroundings and topography.

Wind turbines rely on a clean supply of wind, free of turbulence in order to ensure maximum performance. However, it is critical that the site chosen not only offers efficiency, but minimises visual impact where possible.

The site lies does not lie within an Area of Outstanding Natural Beauty, Green Belt, or National Park, however, the site is directly adjacent to the High Peak National Park, hence every care has been taken to site the turbine sensitively. In the case of this site, due to the rapid rise of the land to the immediate east, in the direction of the National Park, the turbine is extremely unlikely to be visible from the Park.

Several other aspects have also been taken into consideration during the proposed siting, namely;

Position relative to hedgerows and trees – the turbine should not be sited within 50m of a hedgerow of tree to minimise the risk to bats, in accordance with Natural England's Technical Note TIN051.

Location relative to neighbouring properties – a minimum of 100m distance from any neighbour must be maintained in order to minimise noise impact to neighbours.

Location relative to public footpaths and highways – the turbine must be sited at least overall height plus 10% in order to maintain safe distance in the unlikely event of collapse.

View from neighbouring properties – Where possible, the turbine will have been sited in a position which will obscure the turbines view using the sites topography, vegetation and existing structures.

Proximity to power lines – YEDL guidance states any turbine should be at least turbine height plus 9m from any overhead cables

SAFETY

Suitably maintained turbines are safe and offer little in the way of danger to the public. A full servicing and maintenance programme will be provided.

The icing of the blades is not seen as a risk on this site.

The turbine has been sited to ensure no risk from overhead power cables.

The nearest airport is Woodford approximately 25km away.

The nearest railway line is 290m south west, and poses no danger to passing trains.

The distance from the turbine to neighbouring properties ensures that shadow flicker will not pose a risk to the client's neighbours.

IMAGES FROM THE SITE

The following images form a 360 degree panoramic view from the proposed position of the turbine. Note the steep rising land to the north, northeast, east and southeast, which combined with the extensive tree line to the east running north to south, shall mean zero visibility from the east other than that along the Ashbourne Lane for approximately only 500m.

Note also the significant distances to the west of any visible residential dwellings, and presence of any access from public access routes. The line of trees to the immediate north will obstruct the turbine from view completely to the areas along Beresford Avenue, Brooklands road, Homestead Way, and Thornell Close; the nearest residential streets to the site.

North

North East

East

South East

	
South	South West
	
West	North West

PHOTOMONTAGE

Please see the supporting Visual Impact Assessment detailing the likely visual impact from the surrounding area.

NOISE

Noise generated by wind turbines are gentle "swooshing" noises as the turbine blade passes the mast. It is also possible that as the turbine turns in the wind, this can create a temporary increase in noise from the blades themselves.

There is no scientific evidence that low frequency noise produced by turbines is hazardous to the health of either humans or wildlife.

However noise is subjective, and it is critical due consideration be given to the siting to ensure the turbine does not cause harm to neighbouring properties.

The turbine is 105m from the nearest domestic dwelling not owned by the client, and at this distance, the noise generated by the turbine should not be audible. In addition, the turbine shall be sited behind a group of mature trees. The turbine begins operation at 3.0m/s, and at such wind speeds the background noise levels will be increased to mask the noise produced by the turbine.

In order to ensure minimal noise disruption, the turbine will be sited a minimum of 100m from any neighbouring dwelling. On particular sensitive sites, it may be necessary to carry out an environmental background noise survey to ensure no noise nuisance to neighbours.

A noise report is supplied with the planning application.

Friends of the Earth Cymru constructed a data sheet which includes details regarding noise concerns with wind turbines, which have no scientific base, and can be viewed here:

http://www.foe.co.uk/resource/briefings/wind_myths.pdf

ECOLOGY

The site does not lie within an area of Specific Scientific Interest.

Research by the American Wind and Energy Association has shown turbine blades pose minimal risk to birds, and far less than the risk of static high rise buildings and moving vehicles.

The RSPB state "…the RSPB favours a broad mix of renewables, including solar, wind, and marine power, wherever they are used in ways that minimise unnecessary damage to wildlife and the natural environment. We particularly support solutions that enable individuals and communities to generate their own power close their homes and businesses."

We take bat safety extremely seriously. Turbines are sited with due consideration to possible bat roosts and foraging grounds, and are sited in accordance with guidelines set out by the Bat Conservation Trust and Natural England. Should bat safety be a concern, bat surveys will be provided to support the application.

CONCLUSION

The turbine will provide renewable energy for the client for a minimum period of 20 years, with negligible impact, and will assist with the councils efforts to attain Government targets on renewable energy generation.