

41/09/0026

MR P MORRELL

ERECTION OF 11KW WIND TURBINE (18.3 METRES HIGH TO HUB WITH ROTORS AT 13 METRES DIAMETER) AT BRIDGETS FARM, TOLLAND, AS AMENDED BY AMENDED DESIGN AND ACCESS STATEMENT RECEIVED 29TH OCTOBER 2009, EMAIL DATED 19TH NOVEMBER 2009 WITH ACCOMPANYING PLAN AND ENVIRONMENTAL NOISE ASSESSMENT DATED 28TH NOVEMBER 2009

310367.132831

Full Planning Permission

PROPOSAL

The proposed wind turbine is a Gaia-Wind GW11 with a hub height of 18.3m and a fixed speed downwind rotor with a diameter of 13m. All non galvanised elements of the turbine will be coloured pale grey. The mast will be a solid tubular tower. Access to the site will be gained via the existing farm and site access. The purpose is to enable the applicants to reduce carbon emissions and energy bills of their business and home, and to increase self-sufficiency in terms of electricity production. The energy produced by the turbine would represent almost half of the farm's electricity needs and would replace part of the farm's current grid supply.

A Design and Access Statement and Planning Statement were submitted with the application. These included an appraisal of the context of the proposal involving an evaluation process that has sought to balance the various aspects of the proposal.

A Landscape Assessment was submitted. This concludes that the proposed turbine would occupy an elevated position, but is hidden from most surrounding vantage points by folds in the land or tree ' hedgerow screening. It therefore considers that the proposal would have a limited, non-material impact on the character of the landscape.

An Environmental Noise Assessment has also been submitted. This predicts turbine noise levels at the nearest residential properties and compares these with the maximum noise levels specified in the relevant guidance.

SITE DESCRIPTION AND HISTORY

The proposed wind turbine would be located on agricultural land about 220m north west of Bridgets Farm on the southerly slope of Tolland Down at a ground height of approx 198m AOD. The land continues rising to the west to Willett Hill, which is covered with a forest plantation. Apart from Bridgets Farm, the nearest residential properties are all over half a kilometre from the site.

CONSULTATION AND REPRESENTATION RESPONSES

Consultees

SCC - TRANSPORT DEVELOPMENT GROUP - no observations to make.
LYDEARD ST LAWRENCE & TOLLAND PARISH COUNCIL - Supports – renewable energy is an important consideration.

NATURAL ENGLAND – requests that the recommendations of the TDBC Nature Conservation Officer be used in determining the application and attaching conditions.

MINISTRY OF DEFENCE – no objection.

LANDSCAPE OFFICER – Having now had the opportunity to assess the impact of the proposed turbine site, as indicated on site by a pole, I am concerned that it is too close to the local skylines – which it clearly breaks from several vantage points- and would have a detrimental impact on the landscape character of the area. Most of the vantage points are to the south and east of the site. However, I think there is still scope for a turbine within the farm's ownership, but lower down the slope of the field.

NATURE CONSERVATION OFFICER (original siting) – concerned that no wildlife survey has been submitted with the application. The proposed wind turbine is located approx 5m from a hedge line, a possible bat foraging route, contrary to a Natural England Technical Information Note. The submitted Design & Access Statement states 'potential impact on bats is thought to be low'. This statement should be supported by survey information.

(amended siting) - the installation of a wind turbine is one of the instances listed on the trigger list when a wildlife survey is required. However as the proposal is located away from any designated sites, woodland or water feature and the proposed location of the structure has been amended to be over 50 m away from any hedge, the risk to bats is greatly reduced. As you are recommending refusal and the applicant has taken steps to reduce the risk to bats, it seems unreasonable to request a wildlife survey.

ENVIRONMENTAL HEALTH OFFICER – comments on the Environmental Noise Assessment:-

The report details the noise level measurements taken from around the surrounding area of the proposed wind turbine site and predicts the turbine noise levels at the nearest residential properties. The report concludes that although the turbine site is in a rural location and well away from main road the predicted turbine noise levels will have no significant impact on the neighbouring residential properties. The report suggests a noise condition limiting the turbine noise level to 35 dB $L_{A90,10min}$ at a wind speed of 10 m/sec at 10 m high. I find the report satisfactory to address my concerns regarding the impact the proposed wind turbine will have on the neighbouring residential properties and am happy to except the condition put forward in the report with a slight amendment, see suggested condition below.

Suggested condition:

Noise emissions from the wind turbine to which this permission refers shall not exceed 35 dB $L_{A90,10min}$ at a wind speed of 10 m/sec at 10 m high when measured at any point at the facade of any residential or other noise sensitive boundary.

For the purposes of this permission background levels shall be those levels of noise which occur in the absence of noise from the turbine to which this permission relates, expressed in terms of an A-Weighted, 90th percentile level, measured at an appropriate time of day and for a suitable period of not less than 10 minutes.

Representations

SEVEN LETTERS OF SUPPORT making the following points:-

1. Need new energy sources and wind turbines are an excellent form of energy.
2. Size and position of wind turbine will have very little adverse impact on the environment but will have a huge benefit to us all in the future.
3. Seems to be an attempt on a sensible scale to generate energy from a renewable source and reduce reliance on fossil fuels, which should be encouraged.
4. The benefits of such an initiative far outweigh any minor negative effects.
5. Consider it to be a suitable site.
6. Local businesses should be encouraged.
7. Suitable sites for wind power are exposed by their very nature.
8. Close to other developments which have been allowed by Taunton Deane.
9. Existing telecommunications mast is far more visually intrusive than the proposed turbine.
10. Site is well related to roads and tracks to service the site.
11. Sited well away from noise sensitive development.
12. Sited well away from public footpaths or roads and therefore no risk to the public in the case of mechanical failure.
13. Will not cause shadow flicker nuisance to neighbouring properties or other interference since the nearest permanent dwelling is more than 500 metres away.
14. The development would not present a significant danger to wildlife, being away from farm buildings where bats and owls concentrate their feeding activities.

FIVE LETTERS OF OBJECTION making the following points:-

1. Will be extremely visually intrusive and noisy.
2. It will be seen for miles and could be a distraction to motorists on the B3224.
3. Applicant should have contacted local residents before proceeding with such an application.
4. It is completely inappropriate to compare the installation with electricity pylons because there are none in the vicinity.
5. The turbine will be white and stand out like a beacon in this predominantly green landscape.
6. Seems that wind farming will catch on as agriculture desperately seeks returns on new forms of diversification and this application will undoubtedly be regarded as a precedent for many others to come.
7. Will decimate what's left of the community.
8. This huge turbine should be sited far away from the ancient and historic village – it has no place interrupting and disturbing resident's lives whilst it can so obviously be sited elsewhere on the farmer's high land where it will not disturb anyone.

PLANNING POLICIES

PPS1 - Delivering Sustainable Development,

PPS 1 SUPP - Planning and Climate Change,

PPS7 - Sustainable Development in Rural Areas,

PPS9 - Biodiversity and Geological Conservation,

PPS22 - 'Planning for Renewable Energy' and its associated 'Companion Guide' provide the national framework within which local planning authorities decide on individual applications. It sets the objective based criteria that must be applied by Local Planning Authorities in deciding individual planning applications to generate energy from wind.

RPG10 - Regional Planning Guidance for the South West - Policy RE6 covers Energy Generation and Use.

Draft Regional Spatial Strategy – sets out the region's commitment to sustainable development and to tackling climate change. Policy SD1 'The Ecological Footprint' states that building a sustainable, low carbon and low resource consuming economy is key. Policy SD2 'Climate Change' specifically targets climate change and says that the region's contribution to further climate change will be reduced by reducing greenhouse gas emissions at least in line with national targets. Policy RE1 'Renewable Energy targets 2010 and 2020 sets out renewable energy targets. The push towards these targets is supported by Policy RE4 'Meeting the Target through development of New Resources', which states that planning authorities will take into account the wider environmental, community and economic benefits of proposals, whatever the scale.

S&ENPP64 - S&ENP - 'Renewable Energy' - Policy 64 states that provision should be made, where environmentally acceptable, for the development of renewable energy resources.

C12 - TDBCLP - 'Renewable Energy' - "Development of renewable energy sources will be permitted where relevant Local Plan policies would be met. In assessing the impact of the proposed development, account will be taken of individual and cumulative effects, the mitigating measures and of wider environmental benefits".

C13 - TDBCLP - 'Wind Turbines' - "Proposals for wind turbines, wind farms and any associated development, including access roads, will be permitted provided that:

- (A) development is sited to minimise impact on the landscape, utilising landscape features and avoiding the skyline;
- (B) turbines on a wind farm are of a similar size, type and of a uniform plain colour chosen to minimise landscape impact;
- (C) development is well-related to roads capable of carrying construction traffic. New access roads across open countryside will not be permitted;
- (D) development is sited and designed to avoid causing noise nuisance, particularly near noise-sensitive development;
- (E) development is sited and designed to minimise possible danger to the public, with turbines set back by at least their height from public footpaths, roads, railways and buildings;
- (F) turbines will not cause 'shadow flicker' nuisance to neighbouring properties or

electro-magnetic interference;

(G) development would not disturb or present a significant danger to wildlife, and;

(H) any connection to the local electricity distribution network is by underground cable.

Where planning permission for a wind turbine is extant or has been implemented, development proposals which could reduce local wind speeds and the regeneration of electricity by that turbine will not be permitted".

EN12 - TDBCLP - 'Landscape Character Areas'.

DETERMINING ISSUES AND CONSIDERATIONS

Renewable and Sustainable Energy

The benefits of renewable and sustainable energy is a major consideration weighing in favour of the proposal, particularly when taking into account the Government's targets for renewable energy. The Government's view on renewable energy has been set out in various policy documents. One of the key principles of PPS22 is that renewable energy developments should be capable of being accommodated in locations where the technology is viable and environmental, economic and social impacts can be addressed satisfactorily. The guidance goes on to state that development proposals should demonstrate that any environmental, economic and social benefits as well as how any environmental and social impacts have been minimised through careful consideration of location, scale, design and other measures. However, it is important to note that PPS22 goes on to say that the wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that should be given considerable weight in determining whether proposals should be granted planning permission. It is clear therefore that a judgement has to be made on the benefits of a sustainable form of energy and that of the impact of the turbine on the surrounding area.

Need

PPS22 states that small scale projects can provide a limited but valuable contribution to overall output of renewable energy and that planning authorities should not reject planning applications simply because the level of output is small. It goes on to say that small-scale developments should be permitted within sensitive landscape areas providing there is no significant environmental detriment to the area concerned.

Visual Impact

The Council's Landscape Officer has concerns that the proposal would have a detrimental impact on the landscape character of the area. I concur with that view. The proposed turbine will be particularly prominent and intrusive from a number of vantage points in the area. Although the area is not subject to any landscape designation, the proposed site is located on high ground within an area of attractive countryside.

Noise

PPS22 states that renewable technologies may generate small increases in noise levels and that Local Planning Authorities should ensure that renewable energy developments have been located and designed in such a way to minimise increases in ambient noise levels. A Companion Guide refers to a Report which describes a framework for the measurement of wind farm noise and gives indicative noise levels calculated to offer a reasonable degree of protection to wind farm neighbours, without placing unreasonable restrictions on wind farm developers or planning authorities. It makes a series of recommendations that can be regarded as relevant guidance on good practice and should be used by planning authorities when assessing and rating noise from wind energy developments. There is a specific recommendation for single wind turbines in that a simplified noise condition may be suitable if the noise is limited to a certain level. The submitted Noise Assessment states that the predicted noise levels are well below the required criterion and concludes that there will be no significant impact from the noise of the turbine, subject to a condition limiting the turbine noise level to the required level. The Environmental Health Officer concurs with that view subject to the condition in the consultation response.

Wildlife

The British Wind Energy Association (BWEA) considers that experience and careful monitoring by independent experts shows that birds are unlikely to be damaged by the moving blades of micro wind generators. General advice from the Bat Conservation Trust and the Wildlife Trust regarding domestic scale installations and other similar turbine applications states that it is good practice for the siting of turbines to avoid close proximity to buildings that could be used as roosts, or groups of mature trees, hedgerows and water bodies which could be used as foraging and commuting routes. They recommend siting of domestic scale turbines 50m away from any such feature. This advice is backed up by English Nature in technical advice. The amended siting complies with this requirement. Taking the above into account, the proposed construction and operation of the wind turbine can be carried out without having any adverse impact on existing ecological or hydrological features or assets of value. The Nature Conservation Officer does not consider that it would be reasonable to require a wildlife survey to be carried out following the amendment to the siting.

Other Issues

Shadow flicker can cause a problem to nearby properties early in the morning or late in the evening. It is caused by the rotating blades interrupting the light from the sun when the turbine is between you and the sun. This would occur early in the morning to the west of the turbine and late in the evening to the east of the turbine. The effect is likely to be worse on sunny days in winter than in summer, as in summer the sun is much higher for longer and therefore the shadow is more local to the actual turbine. It is generally accepted that some degree of shadow flicker is acceptable, but that limits should be imposed to restrict the number of hours per year for which one property will be affected. Properties greater than 85m are unlikely to be seriously affected, since the duration of any shadow flicker will be reduced and its severity will be lower since the shadows from the blades will become more diffuse. Separation distance between the proposed turbine and the applicant's

property is well in excess of industry recommendations. Due to the larger separation distance between the proposed turbine and other nearby properties, shadow flicker is not considered to be likely to adversely affect residential amenity.

PPS22 states that provided careful attention is paid to siting, wind turbines should not cause any significant problems of electromagnetic interference. It is also intended to use a permanent magnet brushless alternator, which avoids one main source of potential electromagnetic interference – worn brushes. Also following the full changeover to digital TV viewing, signal interference will no longer be of concern as digital signals will not be subject to electromagnetic interference.

The Ministry Of Defence confirms that they have no objection to the proposal from an aviation point of view.

Due to the location of the proposed turbine, at a considerable distance from the road, driver distraction on the B3224 is not considered to be an issue. Furthermore, the County Highway Authority has not raised any objection.

Conclusion

I recognise the need to encourage the use of renewable technologies in areas such as electricity generation and that the proposal is relatively small scale in terms of wind turbines. However, the proposed siting is on elevated ground close to where the land drops away to lower ground. The proposal will appear as skyline development from a number of vantage points particularly to the south and east. I consider that the proposal will have a detrimental impact on the landscape character of the area and will appear as an incongruous feature. My conclusion is that the sustainable benefits of the proposal do not outweigh the visual detriment that the proposal would result in.

The applicant has been requested to withdraw the current application and consider alternative positions. However he wishes the application to be determined as it stands. He is concerned that alternative locations would have a negative impact on the proposed turbine's efficiency, due to proximity to buildings and mature trees, etc. The BWEA outlines guidance for turbine height and siting and states that the output from a wind turbine is highly sensitive to wind speed and obstacles. It considers that it is essential that turbines be sited away from obstructions.

RECOMMENDATION AND REASON(S)

Recommended Decision: Refusal

- 1 The application site is located in an attractive area of countryside where it is considered that the proposed development, due to its size, form and siting, will have a significant adverse impact on the local landscape character by reason of its visual intrusion which will adversely affect the setting of this landscape. As such the proposal is considered contrary to advice given in PPS1, PPS7 and PPS22, and Taunton Deane Local Plan Policies C13(A) and EN12.

RECOMMENDED CONDITION(S) (if applicable)

Notes for compliance

In preparing this report the Planning Officer has considered fully the implications and requirements of the Human Rights Act 1988.

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