

MEETING:	PLANNING COMMITTEE
DATE:	15 JUNE 2011
TITLE OF REPORT:	<ul> <li>DMN/102648/F- ERECTION OF SINGLE 300KW</li> <li>WIND TURBINE (MAXIMUM HEIGHT 66.7M) AND</li> <li>ASSOCIATED INFRASTRUCTURE AND ACCESS</li> <li>TRACK AT LOWER BUCKLAND, DOCKLOW,</li> <li>HEREFORDSHIRE, HR6 0RU.</li> <li>For: Mr Thomas per Mr Oliver Penney, 1 High</li> <li>Street, Clydach, Swansea, SA6 5LG.</li> </ul>

# Date Received: 1 October 2010Ward: Hampton CourtGrid Ref: 356145,256855Expiry Date: 15 December 2010Local Member: Councillor JW Millar

## 1. Site Description and Proposal

- 1.1 Lower Buckland is a 360 acre farm located on the A44, approximately half way between Leominster and Bromyard. It is a working farm and is currently used for a mix of farming practices including sheep and arable farming and pig rearing. Activities are concentrated around an established farm yard that is comprised of a range of modern, steel framed farm buildings and this is accessed via a privately maintained track which emerges directly onto the A44.
- 1.2 The farm falls within the landscape character area of Plateau Estate Farmlands as defined by the Council's Landscape Character Assessment. Such areas are particularly characterised by pronounced upstanding topography in a mixed farming land use. Due to the undulating character of the landscape, hedgerows on high land are a particularly visually prominent feature.
- 1.3 The area is typical of its landscape type. It is ordered, with regular shaped, medium sized fields, separated by mature hedges and small woodlands, the closest being Oak Wood approximately 150 metres to the north east. Buildings are scattered randomly within the general locality of the farm, but are absent within more immediate proximity to the application site itself. The complex of farm buildings that comprise Lower Buckland lies approximately 600 metres to the north west. An un-related farm holding known as Burnt Mill is located approximately 540 metres to the south east and a residential dwelling known as Sheepcote 770 metres to the south. A larger group of dwellings that have resulted from a conversion scheme lies a similar distance to the north east and other private residential dwellings are scattered in a random fashion along the A44. Amongst this group is the Grade II\* listed Church of St Bartholomew which is also identified as a known roost for the Brown Long Eared Bat.
- 1.4 The land at Lower Buckland is crossed by a number of public footpaths and one of these footpath DH6, runs immediately adjacent to the application site in a north / south direction.

- 1.5 The proposal is for the erection of a single Enercon E33 300kW wind turbine, access track, hard standing and electronics enclosure. The turbine has a total height of 66.7 metres 50 metres to its hub and a 16.7 metre blade radius. The supporting information accompanying the application advises that it is a gearless design and that this will mean that it is quieter than other comparable turbines as the absence of a gearbox removes mechanical noise. The supporting statement also indicates that the tower and rotor blades are to be coloured off-white. An option to paint the lower part of the tower in concentric green bands is highlighted if the local planning authority considers this necessary.
- 1.6 The access is a continuation of the existing track from the A44 to the farm and follows a field hedge running east/west for a length of 220 metres before turning south for a further 100 metres. The electronics enclosure is positioned at the point at which the track changes direction and is a 6.5 square metre steel cabinet, which will be coloured brown. An underground connection will run for approximately 310 metres to an existing 11kV power line to the north of the application site.
- 1.7 Prior to the submission of this application the applicant sought a Screening Opinion to determine whether the proposal would require the completion of an Environmental Impact Assessment (EIA). Officers concluded that a scheme for a turbine lager than that which the local planning authority is now being asked to consider would constitute EIA development and issued its Screening Opinion accordingly. This was appealed by the applicant's agent and the Government Office for The West Midlands overturned this decision, concluding that:

"...the proposal would not have significant effects on the environment such as to require an EIA."

1.8 Consequently the application is not accompanied by an Environmental Impact Assessment. It does however include a detailed information document that covers matters relating to the specifications of the turbine, methods for its delivery and construction and a commentary on the perceived environmental, economic and wider benefits. It also includes information relating to potential environmental, archaeological and noise impacts, the potential for telecommunication, aviation and radar interference and the potential flood risks of the proposed development. Separate documents to assess the ecological and landscape impacts of the wind turbine have also been prepared and form an integral part of the planning application to be considered.

# 2. Policies

2.1 <u>Herefordshire Unitary Development Plan – March 2007</u>

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S1	_	Sustainable Development
S2	_	Development Requirements
DR1	_	Design
DR4	_	Environment
DR13	_	Noise
T6	_	Walking
Т8	_	Road Hierarchy
LA2	_	Landscape Character and Areas Least Resilient to Change
LA5	_	Protection of Trees, Woodlands and Hedgerows
NC1	_	Biodiversity and Development
HBA4	_	Setting of Listed Buildings
CF4	_	Renewable Energy

## 2.2 National Policy

PPS1	-	Delivering Sustainable Development
PPS5	_	Planning for the Historic Environment
PPS7	_	Sustainable Development in Rural Areas
PPS9	_	Biodiversity and Geological Conservation
PPS22	_	Renewable Energy
PPG24	_	Planning and Noise

Supplement to PPS1 – Planning and Climate Change Planning for Renewable Energy – A Companion Guide to PPS22

West Midlands Regional Energy Strategy – November 2004

#### 3. Planning History

3.1 DCNC2008/1311/F – New access onto the A44 – Approved 2 July 2008

#### 4. Consultation Summary

#### Statutory Consultations

4.1 National Air Traffic Control Systems (NATS)

The proposed development has been examined by our technical and operational safeguarding teams and although the proposed development is likely to impact our electronic infrastructure NATS has no safeguarding objection to the proposal.

4.2 Civil Aviation Authority (CAA)

I have studied the information provided and can advise that I do not believe that the CAA would wish to make any site-specific observations. However, more generically, I must highlight that all parties should be aware that:

- There might be a need to install aviation obstruction lighting to some or all of the associated wind turbines should development proposals be progressed. This comment is made specifically if there were concerns expressed by other elements of the aviation industry. For example, if the Ministry of Defence (MoD) or a local aerodrome had suggested such a need, we the CAA (sponsor of policy for aviation obstruction lighting) would wish, in generic terms, to support such a claim.
- An anticipated amendment to international aviation regulatory documentation will require that the rotor blades, nacelle and upper 2/3 of the supporting mast of wind turbines that are deemed to be an aviation obstruction should be painted white, unless otherwise indicated by an aeronautical study.
- 4.3 Ministry of Defence (MOD)

The MOD has no objection to the proposal but comment as follows:

- The turbine should be fitted with 25 candela omni-directional red lighting or infra red lighting with an optimised flash pattern of 60 flashes per minute of 200ms to 500ms duration at the highest practicable point.
- If planning permission is granted you must tell us:

- a) The date construction starts and ends
- b) The maximum height of construction equipment
- c) The latitude and longitude of the turbine

This information is vital as it will be plotted on flying charts to make sure that military aircraft avoid this area.

4.4 Ofcom

Ofcom have found that within the assessed fixed link frequency bands there are currently no link ends within or fixed link paths that cross a 1000 metre radius coordination area for the stated turbine location.

#### Internal Council Consultations

- 4.5 Transportation Manager has no objection.
- 4.6 Public Rights of Way Manager has no objection.
- 4.7 Conservation Manager

#### Landscape

- 4.8 The Landscape & Visual Impact Assessment (LVIA) does present an assessment of the quality, condition and value of the landscape surrounding the proposal, together with a professional judgement on the impact that the proposal will have on this landscape. I accept the assessment that there will be no direct effect on key landscape character elements.
- 4.9 The LVIA also presents a systematic visual impact assessment, including view points from the adjoining public footpath (DH6). I agree with identification of viewpoint 7 as the key representational view, however I do not agree that the turbine's simple form has the ability to remain in balance with the scale and form of the landscape (para. 6.5.4). I remain of the view that the turbine will attract views as a new focal point, appearing as a large, isolated structure, detracting from the semi-natural landscape in the rest of the panoramic view.
- 4.10 On balance this application does not meet the requirements of UDP Policy LA2 as an identifiable significant change in the character of the landscape and visual amenity will occur as a result of the proposal. The LVIA professional assessment of the proposal has addressed this issue, however I remain against the principal of a large scale construction in this Bromyard Plateau landscape setting where there is a marked absence of built development. There will be a significant visual impact, although whether this is seen negatively or positively can vary.

#### Ecology

- 4.11 The proposed location for the wind turbine is within an arable field and more than 50 metres from the field boundaries in compliance with Natural England guidelines. The survey area does now include the area where the trench will be dug to link the turbine to the National Grid.
- 4.12 I am broadly satisfied with the assessment of the site; although it is not clear whether any trees are to be felled to enable the wind turbine to be installed, the potential for bat presence is negligible. I would expect best practice measures to be employed should any trees require felling. It is important that the ecological recommendations are followed to avoid any negative impacts. I would also expect an application of this nature to offer biodiversity enhancement measures, in line with PPS9. If the application is approved it is recommended that a condition is imposed to reflect this.

# Archaeology

- 4.13 The site lies to the west of the scheduled Westington Camp. It is some distance away and, on balance it is considered that the location of the development is acceptable. It will not cause harm to the heritage asset at Westington and therefore no concerns are raised.
- 4.14 Environmental Health and Trading Standards Manager

## Contaminated Land

4.15 Does not consider that the proposal will have any implications in respect of contaminated land issues and therefore raises no objection.

#### Noise

4.16 The details provided in respect of the proposed turbine and noise levels at nearby dwellings are acceptable. It is not necessary to provide a background noise survey and on the basis of the information submitted no objection is raised to the proposal.

## 5. Representations

## Docklow & Hampton Wafer Parish Council

5.1 With the Government's new policy towards green energy the parish council are in favour of pursuing renewable energy. The accompanying survey to the application is comprehensive and should allay any concerns for local residents.

#### Humber, Ford & Stoke Prior Group Parish Council

5.2 The Council heard concerns raised by local residents in respect to the scale of the turbine and its impact upon the character of the landscape, the possible problems with noise, TV reception, and potential shadow flicker arising from the rotor blades. However the Council resolved to support the application by a majority vote and noted the plans for the underground cabling in order to connect to the main power line and for the siting and colouration of the substation building.

#### The Ramblers Association

5.3 The structure is adjacent to footpath DH6 and it is felt that this would affect the enjoyment of the footpath because of the visual impact of such a large structure. It will also be visible from other footpaths in the area. It would also result in unacceptable noise levels and presents a potential safety risk. The work involved in erecting the structure would impact upon the use and enjoyment of the footpath and for these reasons the Ramblers object to the application.

#### Hereford and Worcester Gardens Trust

- 5.4 The proposed turbine is sited close to a relict parkland landscape at Buckland. It is clear that the amenity planting associated with the parkland extended well beyond the formally designated area, towards the site of the turbine adjacent to Oak Wood and on the evidence alone the Trust registers its opposition.
- 5.5 The turbine will also have a significant visual impact, being evident from the rising land to the west of Leominster which will include the Croft Castle estate, and English Heritage Grade II\* Registered Landscape. It will be seen well within the middle distance from Croft Ambrey and

for several miles along the Mortimer Trail. The turbine represents an alien intrusion in an otherwise unspoilt vista with the backdrop of the Malvern Hills.

#### National Farmers' Union

- 5.6 The NFU believes that farmers should aspire to becoming carbon neutral and should have the opportunity to diversify their business by supplying renewable energy services.
- 5.7 It notes the statement in PPS22 that the wider environmental and economic benefits of renewable energy projects should be given significant weight and therefore strongly supports the proposal.
- 5.8 35 letters of objection have been received from local residents. In summary the points raised are as follows:
  - 1. The proposal will have a negative effect on the character and appearance of the countryside.
  - 2. The turbine is out of keeping with its surroundings due to its scale.
  - 3. It is an alien, man-made feature that will industrialise the appearance of the countryside.
  - 4. It will dominate the landscape.
  - 5. The proposal will be detrimental to the setting of Buckland as an unregistered park and garden.
  - 6. The photomontages submitted are not an accurate reflection of the proposal and do not show the visual effect of the proposal from the properties closest to it.
  - 7. The turbine is sited too close to dwellings and will detrimentally affect their residential amenity due to its scale and overbearing appearance.
  - 8. It will also have an effect on the wider community.
  - 9. A Private Members Bill has been lodged to introduce a 1500 metre minimum separation distance between turbines and residential properties. The Council should defer the determination of this application until the outcome of the Bill is known.
  - 10. Some planning authorities (Carmarthenshire) have already introduced a 1500 metre separation distance between turbines and dwellings. Herefordshire should do the same.
  - 11. The proposal will have a detrimental impact on tourism in the County.
  - 12. The potential impact on bats has not been fully investigated and further survey work should be completed during the season when they are active (April to October). It is only then that mitigation and monitoring procedures can be established with any validity.
  - 13. The benefits claimed to be derived by the application are spurious and do not outweigh the negative visual impacts or the negative effect on the countryside.
  - 14. There are no off-setting benefits for the local community. The proposal benefits nobody else other than the applicants.

- 15. The proposal will potentially affect the television reception of up to 130 properties. What protection will be afforded to local residents to mitigate against this?
- 16. If approved, the proposal will set a precedent for similar developments in this area and across the County.
- 17. The Council should have a strategic plan for wind turbines instead of letting development happen in a piecemeal fashion.
- 18. Concerns raised about shadow flicker and its effect over the landscape.
- 19. The proposal will introduce unacceptable levels of background noise that will destroy the tranquility of the area and detrimentally affect the properties nearest to it.
- 20. The subject of de-commissioning is not addressed.
- 21. The efficiency of wind turbines is questionable
- 22. The market for renewable energy is an artificial one created and maintained by Government and EU legislation and the subsidies paid.
- 5.9 One of the objectors has also commissioned a critique of the Landscape and Visual Impact Assessment prepared on behalf of the applicant. A full copy of this is retained on file and can be made available for inspection but its summary reads as follows:

#### Benefits of the Proposal

5.10 SUMMARY: The API over-states output and benefits

#### The Turbine in Context

5.11 SUMMARY: This is a 'Medium' fast-spinning turbine, but large in context.

#### **Visual Characteristics of Wind Turbines**

5.12 SUMMARY: Inquiry decisions accept that while turbines may be functionally effective, their scale and nature may contrast with the humanised environment; receptors' 'valency' should be discounted.

#### Receptors (People) and Usage

5.13 SUMMARY: A local and largely dispersed population of country-loving residents is supplemented by a network of public rights of way making this an accessible yet secluded area of Herefordshire countryside.

#### The Landscape and the Project

5.14 SUMMARY: The turbine is located on the locally high point in the midst of a rolling and varied landscape which is without significant detractors and would become its defining and out-of-character feature.

#### The Landscape and Visual Impact Assessment

5.15 SUMMARY: Superfluous viewpoints confuse the issue and none are analysed in the LVA. This assessment finds significant adverse effects at the 11 key locations plus an area to the SE omitted from the LVA. Major impacts occur for users of the footpath and bridleway

network due to proximity which contravenes PPS22. Adverse impacts affect the visual amenity of occupants at Marston Stannett and the fringes of Risbury, and in combination with possible noise effects may amount to impacts on living conditions of residents at Sheepcote and Burnt Mill.

- 5.16 29 letters of support have been received, the vast majority of which are also from local residents. In summary the points raised are as follows:
  - 1. Wind turbines are the best way to produce renewable energy.
  - 2. Our reliance on fossil fuels is too great.
  - 3. There are dangers associated with other forms of energy production. Nuclear power and the situation in Japan is clear evidence of this.
  - 4. The proposal is a reasonable response to an urgent need to diversify farming.
  - 5. Wind turbines are a worthwhile asset to the community.
  - 6. The proposal will have little impact on the surrounding area, as demonstrated by the landscape and Visual Impact Assessment that accompanies the application.
  - 7. Wind turbines are graceful and this proposal will not be a blot on the landscape.
  - 8. The location of this proposal holds a good wind source and is also readily accessible.
- 5.17 Three non-committal letters have also been received. These acknowledge the need to pursue alternative forms of renewable energy production but comment upon the scale of the proposal.
- 5.18 The landscape and Visual Impact Assessment is a lengthy document that considers the landscape implications of the proposal. It has been complied using an accepted methodology that has been agreed with the Council's Landscape Officer. The document is too long to reproduce in full, but the parts of its summary and conclusion relating to landscape and visual effects are detailed below:

#### Landscape Effects

- 5.19 Adopting this precautionary approach and taking into account the sensitivity and capacity of the landscape character and the scale of the proposals, including the mitigation measures described, the assessment concludes that there would be no significant effect on the overall character of either the landscape or the key characteristics identified.
- 5.20 There would be no direct effects on landscape elements and new planting and landscape management proposals would result in a Minor improvement.
- 5.21 The detailed assessment carried out within the 5 KM radius of the turbine demonstrates that effects are very sensitive to the distance from the turbine and the clarity of view. The large number of photomontages taken from the close range of a few hundred metres to a maximum at 6359 metres demonstrate this point.
- 5.22 Although it is possible to identify some potentially Major impacts in the immediate surroundings of the turbine, these should not be taken as representative of the overall effect on landscape character. Any turbine at any location within the County would have a similar implication.

- 5.23 Some Moderate impacts are more widespread, where the turbine is clearly visible from landscapes south of Docklow, and areas on the south side of the Holly Brook valley, including Marston Stannett, Sheepcote and Risbury. These landscapes within 2 kilometres of the turbine can be considered to be the most sensitive to change, but as set out, the impact of the single turbine is mitigated by its simple form and ability to remain in balance with the scale and form of the landscape.
- 5.24 A typical view is Photomontage V7 taken from the road approaching Marston Stannett, one of the closest and clearest views available and could be described as a worse case scenario. In this view the landscape continues to be the dominant element, not the turbine. Photograph 6.1 has been annotated to illustrate the relationship between the turbine and the form and scale of its setting. A crucial factor here is that the proposal is for a single feature of medium scale, which can act as a deliberately placed focal point providing a simple balance with its surroundings. As set out in Section 5.1 which deals with alternative options considered, this would not apply to the deployment of multiple, larger turbines in the same location. The key characteristics of the landscape are still present and its overall character remains.
- 5.25 Beyond this range, it is clear from the photomontages that the turbine would become a much more incidental feature with less impact on character varying from Minor to Negligible. It is also the case that these lesser impacts are more widespread within the ZTV and that the Moderate impacts are localised to a relatively close range of 2 km.
- 5.26 Beyond 5 or 5 km it is considered that for a single turbine of this scale, there would be no effects of significance.

## Visual Effects

- 5.27 In terms of visual impact there is considerable variation in the impacts identified as views are so sensitive to range and orientation, the level of exposure and the screening effects to topography and vegetation. One factor emerging strongly from the site inspection was the influence of hedges, trees and woodlands on the potential impact, either by blocking or breaking up views or providing the scale and setting to reduce its prominence.
- 5.28 Where Large effects have been identified, for example at Sheepcote, a farmhouse at close range, parts of the Three Rivers Ride and footpath DH6, they are very localised and within 1 kilometre. Any turbine, anywhere in the County is likely to have a dominant effect on its most immediate surroundings. However, these close range effects are not duly obtrusive or overbearing for the dwellings involved, in the case of Sheepcote there is an opportunity to carry out planting, with the owner's agreement, which could edit out or deflect views within the wide panorama available to this property.
- 5.29 Moderate effects have been identified for properties in Risbury smaller numbers in Docklow and Marston Stannett and public rights of way. These effects are not considered significant.
- 5.30 Impacts for the unregistered parks and gardens at Buckland and Oaklands are considered to be small. Views of the turbine are peripheral, lying outside the main design axes, and planting can be carried out in mitigation. Impacts on other heritage features are also assessed as Small, as are all the communities, trails and features outside the 2.5 kilometre study area. Small impacts result in Slight or Neutral effects which are not significant.
- 5.31 For both the landscape and visual assessment there remains an alternative view that the impacts are not adverse and that many people, local residents or users or public footpaths, may at least have a neutral view. The precautionary assessment has defined a Very Large visual impact for footpath DH6 immediately next to the proposal. Some users may see this route as a positive opportunity to visit the turbine.

## **Conclusions**

- 5.32 The provision of a single, medium scale turbine would not have a significant effect on the overall character of the landscape, or the key characteristics identified.
- 5.33 Any significant visual effects for individual receptors are localised and limited to a range of 1 kilometre.
- 5.34 The assessment demonstrates that the simple form of the single structure proposed enables it to remain in balance with the scale and form of the landscape.
- 5.35 In landscape terms Lower Buckland is an appropriate location for the proposed turbine.
- 5.36 The full text of these letters can be inspected at Planning Services, Garrick House, Widemarsh Street, Hereford and prior to the Committee meeting.

## 6. Officer's Appraisal

## The Principle of Development

- 6.1 Renewable energy is the term used to cover forms of energy that occur naturally and repeatedly in the environment energy from the sun, the wind and the fall of water. It is accepted that renewable energy resources can often only be developed where they occur and this is of particular relevance with regard to proposals for wind turbines such as this that rely on locations where wind sources are good.
- 6.2 Of all of the policies contained within the Herefordshire Unitary Development Plan, Policy CF4 is the primary policy as it sets out the main issues to be considered in the determination of applications for renewable energy. There are of course many other policies that are also relevant, including those at a national level, and these will be referenced later.
- 6.3 The first two points identified by the policy relate to applications that are likely to affect the integrity of nationally designated sites such as Areas of Outstanding Natural Beauty or Sites of Special Scientific Interest. This is of no direct relevance to this application as no such areas exist within any proximity to the site. The remainder of the policy is relevant as it deals with proposals where there is no specific landscape character designation. The key issues can be identified as follows:
  - Landscape impact
  - The wider social and economic benefits of a proposal for renewables
  - Impact on residential amenity of neighbouring properties
- 6.4 By their very nature, proposals for renewable energy schemes will be located in the open countryside and therefore the principle of appropriately sited installations is accepted, subject of course to all other material planning considerations.
- 6.5 Whilst the letters of objection do raise a number of other issues that will be covered in this report, the three highlighted above appear to be absolutely key to their authors, and also to the determination of this application, and it is these that will be assessed first.

#### Landscape Impact

6.6 It is clearly evident that a wind turbine of a height of 66.7 metres will have significant visual implications and it will be visible from many public vantage points for miles around. The matter at stake here is the capacity of the landscape to absorb such a development, and this depends upon its characteristics and the scale of the proposal in comparison. Policy LA2 of

the Herefordshire Unitary Development Plan requires the developments should demonstrate that landscape character has influenced their design, scale, nature and site selection and it is against this that the proposal should be considered purely in terms of its landscape impact.

- 6.7 Although wind is clearly a valuable resource, it must be acknowledged that many people have negative opinions of wind turbines due to their visual impact. It is important therefore that developments of wind turbines are carefully managed and due consideration is given to the potential impact on the landscape, and it is for this reason that officers requested the completion of a detailed Landscape and Visual Impact Assessment prior to the determination of this proposal.
- 6.8 The methodology employed by the applicant's landscape consultant is generally accepted, although the critique prepared on behalf of one of the objectors does question elements of it, particularly the location from which some of the photomontages have been compiled. There is also some disagreement between the two regarding the significance of the proposal on visual receptors, those being residential properties in the locality and also the public footpaths that provide recreational routes for the public more generally.
- 6.9 The landscape in which the proposed turbine is to be sited is described as Plateau Estate Farmland and this has been described at the beginning of this report. In her comments, the Council's Landscape Officer notes that the absence of built development is a marked landscape characteristic, as are medium and long distant views that are often framed by groups of trees, in some cases planted specifically for this purpose. It is also noted from the information provided by the applicant's agent, and from visiting the site and surrounding area, that the turbine will have a visual impact in all directions up to 5 kilometres (3 miles) away.
- 6.10 The comment regarding the absence of built development needs some clarification as dwellings are identified in the LVIA as 'visual receptors'. There are a number of buildings within the local area, but due to the topography and vegetation they are not visually prominent from medium and long distance views. Notwithstanding this, the introduction of a wind turbine into a small scale and undulating landscape without any notable vertical man-made features will have a significant visual impact. The proposed turbine would result in a large isolated structure and the Landscape Officer expresses the opinion that this will result in something that will act as a new focal point in the wider panorama of the semi-natural landscape. Consequently she does not agree with the conclusion of the applicant's LVIA that;

"...the impact of the single turbine is mitigated by its simple form and ability to remain in balance with the form of the landscape."

6.11 I am minded to agree with the conclusion reached by the Council's Landscape Officer. The only other man-made feature of note that does exist is a telecommunications tower approximately 1 kilometre to the east of the application site. It is set against the backdrop of a wooded area and is comparable in height to this landscape feature. As a result it is not prominent and retains a human scale that reflects the landscape in which it sits. The same cannot be said for the proposed turbine and therefore it does have a detrimental impact on the character and appearance of landscape, contrary to policy LA2 of the Herefordshire Unitary Development Plan.

# Social and Economic Benefits

6.12 Government policy regarding renewable energy is covered most specifically by PPS22. It provides a positive strategic approach to planning for renewable energy, and highlights the Government's aspiration to produce 20% of the country's energy from renewable technologies by 2020. It also suggests that renewable energy development can make an important contribution to the national economy, and can help to meet international commitments on limiting greenhouse gas emissions. When considering proposals, the wider environmental,

economic and social benefits of renewable energy projects, whatever their scale, are material considerations that should be afforded significant weight.

- 6.13 The supporting statement submitted by the applicant's agent provides a numerical analysis of the proposal and the amounts of electricity that it can be expected to generate annually. This assumes a 35% efficiency rate (load factor) from the maximum output of the turbine and is calculated using average wind speeds. As an average it estimates that the type of turbine proposed will generate 883,008kWh per year, enough electricity to supply 188 homes. It also suggests that over a 25 year period it would result in emissions savings if the electricity were to be generated by fossil fuels as follows:
  - 10,154,592 kg of carbon dioxide 129,802 kg of sulphur dioxide 35,364 kg of nitrous oxides
- 6.14 It also advises that, due to the output of the turbine proposed, the electricity that it produces can be fed directly into the local distribution network, rather than being stepped up in voltage and sent into the high voltage national grid. The statement suggests that this increases the overall efficiency in the transmission of the electricity generated as it reduces losses through transformers and long distance power lines.
- 6.15 In terms of local economic benefits the statement suggests that planning permission for the turbine would secure the economic viability of Lower Buckland Farm and allow it to continue producing local produce and employing local people. During the construction phase non-technical work could be undertaken by local firms and it is estimated that 10-20 short term jobs would be created. More specialist work would need to be undertaken by others but they would stay in local accommodation during the construction phase.
- 6.16 The output of the turbine is questioned in the critique prepared on behalf of one of the objectors. It opines that the load factor of 35% is a grossly over-optimistic and that a more realistic figure might be in the region of 22-25%. The author of the document bases this assertion on actual data collected over the past three years from operational wind turbines. A comparison is drawn specifically to a site at Lynch Knoll, Nympsfield near Stroud where a turbine with a 42 metre high hub with 20 metre blades (62 metres in total height) has been installed. It has the capacity to produce 500kW of electricity, is sited at an almost identical level above sea level at 230 metres (as opposed to 225 for the application site), and has a measured wind speed of 7.2 m/s (6.6 m/s for the application site). Data collected over the last three years shows that load factors of 19.6%, 21.9% and 22.3% were achieved at the Nympsfield site. The data also suggests that load factors for onshore turbines have fallen over the last three years from 26.1% to 23.8% to 23%, suggesting a declining wind resource.
- 6.17 In your officers opinion the information provided in the critique does call into question the information provided by the applicant's agent as it has an evidence base. It does not seem unreasonable to assume a similar wind resource at the application site to that at the example given due to the relative proximity between the two. It also seems clear that wind speeds have declined over the past three years and consequently turbines have become less efficient at generating electricity.
- 6.18 It is acknowledged that PPS22 makes clear that local planning authorities should not reject planning applications simply because their output is small. However, it is considered that this difference in opinion about the expected output of the turbine does materially affect the weight that may be afforded to this aspect of the proposal when assessing it against other impacts.
- 6.19 The economic benefits derived from the proposal are considered to be limited and the suggestion that an approval would create short term jobs somewhat misleading. It is accepted that work would be generated during the construction phase, but the reality is that this would

be contracted, with no guarantee that it would be undertaken by local companies. This is no different to an argument that might be made for any form of development in the open countryside and in your officer's view should only be afforded very limited weight when determining the application.

- 6.20 The farm currently employs 5 people from the local area, some of which are on a part time basis, and they are engaged in a range of farming activities. Additionally contract workers are employed as and when required. The supporting statement advises that part of the income derived from the proposal will offset the applicants electricity costs associated with their farming business. Although it is not explicit, it is assumed that the remaining income is expected to cover the cost of the installation of the turbine and to return a profit to the applicant, given that it is referred to as a form of farm diversification.
- 6.21 If the turbine manages to achieve the predicted outputs as specified in the supporting statement then it may well prove to be financially viable and economically beneficial to the applicant, thus helping to secure the long term future of the farm. What is less clear is whether the farm would simply become financially unsustainable without this development. In your officer's opinion, this seems unlikely given the level of investment that is required for a wind turbine.
- 6.22 In conclusion, the economic benefits of the proposal are considered to be limited. The construction of the turbine would possibly create short term work for existing local businesses but the installation would almost certainly be undertaken by a company with that technical expertise. Similarly occasional maintenance would be required but would not result in any meaningful contribution to the local economy. Furthermore, your officers are not convinced that the existing jobs on Lower Buckland Farm would be lost if planning permission were not to be granted for this development.

#### Impact on Residential Amenity

#### Visual Perception

- 6.23 The impact that any proposed development has on the residential amenities of nearby dwellings is largely subjective and this is evident in this case from the difference in opinion about the significance of impacts between the LVIA submitted by the applicant's agent and the critique of it prepared on behalf of one of the objectors.
- 6.24 In terms of a visual presence your officers' attention has been drawn to an appeal decision at Llethercynon in Powys where the Inspector set out his approach to assessing the perception of turbines in terms of their impact on residential amenity. It seems to provide a useful guide and is as follows:

I have described turbines as '**prominent**' when they are easily seen and identified without the need for close examination of the landscape or having to refer to a map or photomontage to identify where to look. Turbines are '**dominant**' in my opinion if they are not just visible but draw the eye to the extent that little else is seen, even in an attractive landscape. I describe a turbine as '**overwhelming**' if it is so close, and of such a size, as to be likely to make the observer uncomfortable and want to move away.

6.25 Interestingly, of the residents most likely to be affected by the proposal, the two closest and within a direct line of sight of the proposed turbine express conflicting views. The resident of Burnt Mill, some 550 metres to the east of the site is fully supportive of the proposal and expresses no opinion about the potential impact to his residential amenity. Conversely the residents of Sheepcote, 770 metres to the south, have registered strong objections based in no small part on issues of residential amenity and the effect it will have on the setting of their property.

- 6.26 Applying the test set out above, the turbine would be both prominent and dominant from both of these properties. It would be clearly visible from both of them and, due to the lack of any other features with comparable vertical emphasis, it would draw the eye immediately to it. However, I am less convinced that it would be overwhelming, particularly from Sheepcote, primarily due to the distances involved.
- 6.27 It is noted that Carmarthenshire have introduced a 1500 metre separation distance between turbines and dwellings and that this has been proposed as a Private Members Bill in the House of Lords. The latter is due to have its second reading on 10<sup>th</sup> June 2011 but is a considerable way from being passed as legislation. It cannot be afforded any weight in the determination of this application.
- 6.28 On balance, it is not considered that a refusal reason based on the impact that the proposal is likely to have on residential amenity in terms of its visual dominance could be substantiated. Whilst the turbine is likely to be prominent and dominant and harmful to the overall character, appearance and qualities of the landscape, it is not considered that it will be overwhelming to those properties closest to it.

<u>Noise</u>

- 6.29 Policy DR13 of the Herefordshire Unitary Development Plan deals specifically with issues relating to noise and advises that development with the potential for generating significant levels of noise or for exposing a noise sensitive use to a noise source will be required to demonstrate the noise impact can be mitigated. This will often require the completion of a noise assessment.
- 6.30 The supporting statement accompanying the application acknowledges that wind turbines do make some sound, but suggests that comparatively the noise generated by them is low compared to other sources such as road traffic or aircraft. It continues by advising that the Enercon E33 is gearless system, thus removing one element of mechanical operation that can give rise to noise. It also has a variable speed design which serves to reduce the blade tip speed and thus the aerodynamic noise as the blade passes through the air.
- 6.31 The applicant's agent undertook pre-application discussions with the Council's Environmental Health Department in respect of noise and has been advised that a detailed noise assessment is not required in this instance. The information submitted is based on evidence collated by a DTI working group and a notion that turbine noise levels at the nearest noise sensitive properties should be kept within 5dB(A) of the existing night time background noise level.
- 6.32 The findings submitted indicate that no property will be within a 35dB(A) radius of the turbine, and this is well within the accepted 20-40 dB(A) range for night time background noise level for a rural area. Your Officers are not in receipt of any detailed information that would seek to contradict this and the Council's Environmental Health Officer has not objected to the proposal. The proposal is therefore considered to be in accordance with Policy DR13 of the Herefordshire Unitary Development Plan and is therefore considered to be acceptable in this respect.

# Shadow Flicker

6.33 When blades rotate and the shadow passes a narrow window then a person within that room may perceive that the shadow appears to flick on and off; this effect is known as shadow flicker. It occurs only within buildings where the shadow appears through a narrow window opening. Information given in the Government advisory notes entitled "Onshore Wind Energy Conditions Guidance Note" (published October 2007) suggests that only dwellings within 130 degrees either side of north relative to a turbine can be affected and the shadow can be

experienced only within 10 rotor diameters of a wind turbine. It is possible to calculate the number of hours per year that shadow flicker may occur at a dwelling from the relative position of a turbine to a dwelling, the geometry of the wind turbine and the latitude of the wind farm site.

6.34 In this case there are no dwellings within such close proximity to be affected by shadow flicker and the proposal is considered to be acceptable in this respect.

## **Other Issues**

6.35 A number of other matters have been raised by objectors that are material to the determination of the application and these will be considered in turn in the following paragraphs.

## Impact on Ecology

- 6.36 It is understood that the applicant's agent contacted English Nature prior to the submission of the application. Their advice generally is that turbines should be located at least 50 metres away from wooded areas and hedgerows and where this is the case they would not expect as a matter of course that an application should be accompanied by detailed ecological assessments. Policy NC1 of the Herefordshire Unitary Development Plan also requires proposals to demonstrate that they will not have adverse effects on biodiversity features or damage habitats of priority and / or protected species.
- 6.37 The proposed location for the wind turbine is within an arable field and more than 50 metres from the field boundaries in compliance with Natural England guidelines. Notwithstanding this the application is accompanied by an Extended Phase 1 Habitat Survey and an Initial Bat Survey, both of which were updated in March at the request of the Council's Ecologist. She has examined the findings contained within these documents and has visited the site and surrounding area herself, concluding that she is broadly satisfied with their findings and that the potential for bat presence is negligible.
- 6.38 The Council's Ecologist has recommended the imposition of a condition to require the completion of a full working method statement and habitat protection and enhancement scheme before any development commences if planning permission is granted. Some objectors have highlighted the existence of evidence to suggest a connection between wind turbines and increased bat mortality rates and in light of this an additional condition to require annual monitoring once the turbine is erected is also recommended. This is approach that has been taken with other applications across the County and is considered reasonable in order that the Council can extend its knowledge and understanding of the ecological implications of wind turbines.
- 6.39 On this basis it is considered that the proposal accords with Policy NC1 and is acceptable in terms of its effect on the surrounding ecology and habitats.

#### Effect on Tourism

6.40 The potential for proposals to have a detrimental impact on the tourism industry is a claim often levelled at significant developments in the countryside. In fact there is no evidence to support this claim and in other parts of the country wind farm developments have actually become tourist attractions. In your officers' opinion the erection of a single wind turbine on this site is unlikely to have any demonstrable effect on the tourism industry across the county.

#### Electromagnetic Interference

- 6.41 The applicant's agent has advised that initial consultations were undertaken with Ofcom who identified three telecommunications companies having links within the vicinity of the proposed turbine Orange, T-Mobile and Airways Solutions. They confirmed that they have no objection to the proposal and the agent concludes that the scheme will not cause any interference to telecommunications links. This is endorsed through the Council's formal consultation process and the response from Ofcom.
- 6.42 Some objectors have raised concerns about the potential for a turbine to cause television interference. The applicant's agent has acknowledged that this may be the case and has indicated a willingness to accept the imposition of a condition requiring a baseline television reception study to be undertaken before any development commences and that mitigation would be undertaken in accordance with its findings. A model condition to address these concerns can be found in the Onshore Wind Energy Conditions Guidance Note referred to earlier. As such these concerns can be adequately addressed by condition.

#### Aeronautical Interference

- 6.43 Detailed consultation has been undertaken in this respect and the responses are provided under the Statutory Consultations heading of this report. No objections have been raised, but the imposition of conditions has been requested. None of these are unduly onerous or unreasonable.
- 6.44 Some objectors have referred to the installation of lighting to identify the turbine and have mistakenly suggested that these would be attached to the blade tips. This is not the case. Two lighting units are proposed to be attached to the hub and it is not considered that they will cause any demonstrable impact on the surrounding area in terms of residential amenity.

#### **De-commissioning**

- 6.45 Planning permissions for wind turbines are usually given 'temporary' periods of up to 25 years as it is widely accepted that technological advancements may render them inefficient and / or obsolete by this time. Decommissioning conditions are commonly applied to permissions to ensure full and satisfactory restoration of the site, usually to its former use, once the planning permission lifetime has expired.
- 6.46 It is important that all restoration and reinstatement work is carried out in accordance with a scheme approved in writing by the local planning authority and this can be reasonably requested by condition. This ensures the specific details of the decommissioning work are outlined and agreed on prior to being carried out. It is standard practice to specify a time by which the required works are to be completed.

#### Conclusion

- 6.47 The determination of this application is finely balanced. It has been demonstrated that the proposed turbine will have an impact on the landscape and there are conflicting views between the applicant's landscape consultant, the Council's Landscape Officer and a consultant employed by an objector about the extent of this impact.
- 6.48 The character of the landscape is quite distinct. It is open and undulating and largely devoid of significant vertical emphasis, either from natural landscape features or man-made structures. The proposal is at odds with this and it is considered that it will be extremely prominent and dominant, contrary to the objectives of Policy LA2 of the Herefordshire Unitary Development Plan.

- 6.49 PPS22 does advocate a positive approach towards renewable technology but does clearly state that all matters should be taken into consideration in the determination of applications. It is not simply a 'green light' to any form of renewable energy production.
- 6.50 The outcome of the application therefore rests with the other social, environmental and economic benefits that might be derived from the proposal, and whether these outweigh the landscape harm that will be caused.
- 6.51 The economic benefits to be derived from the proposal will be accrued solely by the applicant and it is not a scheme that seeks to achieve a wider community benefit. Whilst the electricity generated will feed directly into the local network, this will be of no financial benefit to residents in the local area. Your officers are not convinced that jobs on the farm will be lost if the proposal does not go ahead and the financial benefits to local firms during the construction phase, although welcome, would be limited. The social and economic benefits are considered to be marginal and do not outweigh the landscape harm referred to above.
- 6.52 The eventual output of the turbine has been called into question and it appears to your officers that this is based on a sound evidence base of information collated over a three year period from operational turbines and wind farm sites. It is accepted that PPS22 advises local authorities that the fact that a turbine has a small output is not reason in itself to refuse an application, but this has to be balanced against the other effects that a proposal has. The environmental benefits in terms of reductions in emissions and energy production are considered to be overstated and do not outweigh the landscape harm that is likely to be caused.
- 6.53 It is therefore concluded that the landscape harm caused by the proposal is not outweighed by the other material planning considerations referred to above and is therefore considered to be contrary to Policies LA2 and CF4 of the Herefordshire Unitary Development Plan and the guiding principles of PPS22 Renewable Energy.
- 6.54 Other matters considered to be relevant to this proposal either do not provide sufficient justification to refuse the application or can be satisfactorily addressed through the imposition of conditions, but notwithstanding this the application is recommended for refusal.

#### RECOMMENDATION

#### That planning permission be refused for the following reason:

1. The proposal represents an alien and discordant feature within the landscape whose impact cannot be satisfactorily absorbed by it or mitigated through the imposition of conditions. It will therefore have an unacceptable and detrimental impact upon the character and appearance of the landscape, contrary to Policy LA2 of the Herefordshire Unitary Development Plan. The applicant has failed to demonstrate that there are sufficient social, economic or environmental reasons to outweigh the harm caused and this is further contrary to Policy CF4 of the Herefordshire Unitary Development Plan and the guiding principles of Planning Policy Statement 22 – Renewable Energy.

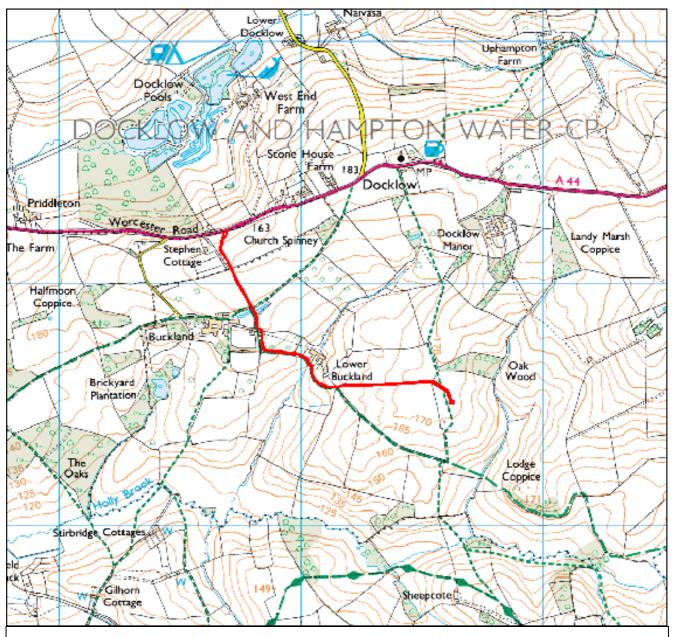
Decision: .....

Notes: .....

# Background Papers

Internal departmental consultation replies.

Further information on the subject of this report is available from Mr A Banks on 01432 383085



#### APPLICATION NO: DMN/102648/F

#### SITE ADDRESS : LOWER BUCKLAND, DOCKLOW, HEREFORDSHIRE, HR6 0RU

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