

# Wind Turbines Supplementary Planning Document and Emerging Policy

Wind Turbines Planning Applications

Adopted July 2012



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## Introduction and scope

This Supplementary Planning Document (SPD) and emerging policy has resulted from resolutions made at the Development Control Committee meeting on 13 October 2011, the Cabinet meeting on 4 July 2012 and the Executive Scrutiny Panel meeting on 24 July 2012. The additional guidance is considered necessary due to an increase in the number of submitted and anticipated wind farm applications as well as the increase in the scale of wind turbines since policy D5 of the Local Plan (2005) was written.

The issue was first raised by parish councillors, who requested that a review of the Local Plan policy D5, *Renewable Energy*, be undertaken, primarily with the view that the specified 350m minimum separation distance for wind turbines be increased. A review was requested because the size of wind turbines has increased significantly since publication of local and national policy. At the Development Control Committee meeting on 13 October 2011, a range of concerns were raised and reasons given for the desire for an increased minimum separation distance. The primary planning related concerns raised were residential amenity, noise, health and safety.

The principal objectives of the wind turbines SPD and policy are to:

- 1) offer protection of residential amenity from any unintended impacts of wind turbine developments,
- 2) assess the separation distance for wind turbines (currently 350 metres in Local Plan Policy D5) and
- 3) clarify the approach for assessing individual applications.

It is important to note that this document has a limited focus; it does not provide a comprehensive guide on all of the issues to be considered in determining applications for large scale wind turbine development. Whilst this document relates to large scale<sup>1</sup> wind turbines that are generally constructed as part of a wind farm; it does recognise the potential for smaller non domestic scale wind turbine development.

As a result of the evidence assessed, this document concludes that the wind turbine separation distance in policy D5 of the Local Plan (2005) should be increased to protect residential amenity. The revised separation distance is set out in an emerging policy at the end of the document. However, such proposals should continue to be considered on their merits. For example, appropriate separation distances may also be influenced by other factors such as topography and landscaping, as set out in the emerging policy. Other constraints will continue to be considered alongside this emerging policy

The document will be used as a material consideration in assessing wind turbine applications. This is an emerging position until a statutory review of the policy takes place as part of the full review of all the development management policies in the adopted Local Plan (2005), expected to begin in 2012.

More information is provided in the evidence report accompanying this SPD.

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<sup>1</sup> Large scale wind turbines produce up to and beyond 1.8 megawatts of power and / or are on towers 80 metres and above tall (Source based on definition in Encyclopaedia Britannica) The tower height is measured to the **rotor tip** in the emerging policy.

## **National, regional and local policy**

The government actively promotes and supports renewable energy developments. As part of EU-wide action to increase the use of renewable energy, the UK government has committed to generating 15 percent of energy from renewable sources by 2020 (2009 European Renewable Energy Directive). This will contribute towards the UK's 2008 Climate Change Act target to reduce green house gas emissions by 34%, compared to 1990 levels, by 2020 and 80 percent by 2050. Renewable energy production from wind turbines will play an important role in contributing towards achieving these targets. National planning policy on renewable energy development takes a very positive stance and also makes clear that local authorities must take the same positive approach towards renewable and low-carbon energy developments.

Planning policy in the National Planning Policy Framework (March 2012) states "Planning plays a key role in....supporting the delivery of renewable and low carbon energy and associated infrastructure. This is central to the economic, social and environmental dimensions of sustainable development." (para 93). It goes on to state "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." (para 97).

The NPPF also states that: "Local planning authorities should:

- have a positive strategy to promote energy from renewable and low carbon sources;
- design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative impacts;
- consider identifying suitable areas for renewable and low carbon energy sources" (para 97)

A footnote to the NPPF para 97 refers to the National Policy Statement for Renewable Energy (July 2011) and allied to this, is the UK Renewable Energy Road Map (July 2011) DECC, which amongst other things highlights the variety of different sources of renewable energy. The Actions chapter recognises that in the 'low scenario' "growth slows after 2015 due to a limit on the number of sites available, growth of competing technologies and cumulative planning impacts".

At the time of writing the Planning Policy Statement 22 (Renewable Energy),-Companion Guide (December 2004), remains extant although evidence claims that given the increase in the scale of turbines since 2004, this guidance has become dated.

The Department of Energy and Climate Change website (December 2011)<sup>2</sup> states that "we need to move from finite, high-carbon fossil fuels to clean, secure energy. No individual technology will provide the silver bullet – our energy mix will have to become increasingly diverse. As part of that mix, onshore wind will have an important role to play". It goes on to say that "onshore wind is one of the more cost-effective and established renewable technologies. Studies indicate that the UK has the best wind resource in Europe".

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<sup>2</sup> [http://www.decc.gov.uk/en/content/cms/meeting\\_energy/wind/onshore/onshore.aspx](http://www.decc.gov.uk/en/content/cms/meeting_energy/wind/onshore/onshore.aspx)

National Policy Statements on Energy should be considered for developments that are nationally significant. Environmental Impact Assessment Regulations set the requirements for determining the acceptability of wind turbine developments.

The South East Plan (May 2009 but soon to be revoked by the Localism Act) includes specific policies on renewable energy (including wind): NRM 15 and 16. These require authorities to support and encourage the development of renewable energy. It includes policies for regional and sub regional targets for land-based renewable energy.

Policy D5 of the adopted Milton Keynes Local Plan states:

**RENEWABLE ENERGY**

**POLICY D5**

Planning permission will be granted for proposals to develop renewable energy resources unless there would be:

- i) significant harm to the amenity of residential areas, due to noise, traffic, pollution or odour;
- ii) significant harm to a wildlife species or habitat;
- iii) unacceptable visual impact on the landscape.

Wind turbines should, in addition, avoid unacceptable shadow flicker and electro-magnetic interference and be sited at least 350m from any dwellings.

Milton Keynes Council is determined to drive forward the effort to reduce carbon emissions. The Council's Low Carbon Living Strategy (2010) has an ambition to place Milton Keynes at the forefront of low carbon living, nationally and internationally. The Council has committed to reducing carbon emission by at least 20 percent by 2020. The development of renewable energy will play a vital role in reaching this target and fulfilling the Council's ambition. The Low Carbon Action Plan (2010) states that Milton Keynes Council should use the planning system to encourage the provision of renewable energy (page 7).

## **Amplitude Modulation Noise**

Noise is one of the issues considered in assessing applications for wind farms, and one which is significant in assessing the impacts of a proposal on residential amenity. The potential for Amplitude Modulation (AM) noise can be a particular cause of concern for many residents close to the site of a proposed wind farm; excess wind shear is the primary cause of AM noise. This noise is sometimes referred to as the “thump” or “swish” noise made by the blades of the turbine. AM noise is often cited as the cause of the claimed health impacts associated with wind farms, as well as negative impacts on residential amenity (see evidence paper).

One of the major problems with AM noise is that it is not fully understood and cannot, therefore, be predicted. A July 2007 report commissioned by DEFRA, BERR and CLG, *Research into Aerodynamic Modulation of Wind Turbine Noise*, (which updated an earlier report by the Hayes McKenzie Partnership [2006]) states that “the incidence of AM and the number of people affected is probably too small at present to make a compelling case for further research funding in preference to other types of noise which affect many more people”. This report continues: “since AM cannot be fully predicted at present, and its causes are not fully understood we consider that it might be prudent to carry out further research to improve understanding in this area”. The opinion of the Noise Working Group was “that a greater understanding of the effects and causes relating to AM were required to ensure that this phenomenon can be managed”<sup>3</sup>. The government has published a report in April 2011 on the DECC web site: [http://www.decc.gov.uk/en/content/cms/meeting\\_energy/wind/onshore/comms\\_planning/noise/noise.aspx](http://www.decc.gov.uk/en/content/cms/meeting_energy/wind/onshore/comms_planning/noise/noise.aspx)

In a High Court decision in May 2011, on the Den Brook Wind Farm in Devon, the legality of conditions covering AM noise was established. The implication of this decision is that local planning authorities elsewhere may be able to add similar planning conditions to other wind farm permissions. The result being that there is a mechanism by which residential amenity can be protected from any unexpected AM noise impacts. The ability to apply such a condition is particularly beneficial because, if it is the case that increased separation distance is the only way to avoid noise complaints, then it may encourage energy companies to identify those sites furthest away from settlements.

The Companion Guide to PPS 22 refers to the ETSU R 97 study under the heading ‘Low Frequency Noise (Infra Sound)’. The NPPF includes a footnote to paragraph 97 which advises local planning authorities to follow the approach in the National Planning Policy Statement for Renewable Energy Infrastructure (July 2011) in determining applications and when identifying suitable areas. That document in turn refers to *The Assessment and Rating of Noise from Windfarms* report (1997), by ETSU for the Department of Trade and Industry, which should be used to assess and rate noise from wind energy development. Some commentaries argue this guidance has been overtaken by the speed with which the wind energy developments have been accelerated, (see evidence paper). Although the government has consistently defended the 1997 ETSU guidelines, the Department of Energy and Climate Change (DECC) commissioned study, *Analysis of How Noise Impacts are Considered in the Determination of Wind Farm Planning Applications* (April 2011) concluded that updated best practice guidance on noise was required. Specifically related to AM noise, the document states that “there is currently no requirement in ETSU-R-97 to include any correction or penalty for any modulation in the noise and this is reflected in the way this has been dealt with in the assessments studied. This position would need to be re-stated, or otherwise addressed in any best practice guidance, in line with current research and guidance on this issue”. The document also states “it would be

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<sup>3</sup> 2 August 2006 Noise Working Group, Notes of Meeting



appropriate for any best practice guidance to confirm an appropriate way of dealing with wind shear issues as this is fundamental to the assessment procedure”. However, the DECC website states that “current methods used in practice to implement the ETSU-R-97 guidance continue to apply until supplementary best practice guidance is published”.-The National Planning Policy Statement for Renewable Energy Infrastructure includes a footnote to para 2.7.56 which states that the peer reviewed report published in June 2011 “concluded that the methodology in ETSU-R-97 was inconsistently applied and recommended better guidance on best practice for developers and planning authorities. Government is working with industry to draft better guidance”.

Overall, given the speed of progress in wind energy technology and the age of local and national policy covering wind turbine developments, as well as evidence that updated guidance is required in relation to noise from wind farms, it is considered appropriate to introduce some additional, up to date, guidance relating to wind turbine proposals in Milton Keynes, in order to help protect residential amenity. The best way of protecting residential amenity is to review the separation distances between turbines and housing.

## Separation Distances

### Government separation distances in the UK

As summarised above, the PPS 22 Companion Guide ~~also~~ refers to noise and separation in the Technical Annex. Table 1 shows a wind farm 350 metres away would produce an indicative noise level of 35-45 Db(A), compared with a rural night time background noise of 20-40 db(A). The recommended good practice comes from the ETSU 1997 report.

The Local Government Improvement and Development website (formally IDeA), a government website, has some information on wind turbines. It has a section on “designated areas and approximate setback distances”, under “residential properties” it states that “a setback distance of at least 600 – 800 metres from residential properties for large wind turbines. This may be reduced for smaller projects. Other land uses, including non-residential buildings and agriculture, can still be accommodated in this zone”.

Scottish national policy (February 2010) refers to a separation distance of up to 2 Kilometres. However, it is important to note that this is not a fixed minimum separation distance, nor is it a distance that is enforced in practice. The distance is simply an initial indication of areas of search for energy companies.

Northern Ireland’s PPS18 Renewable Energy policy RE1 (August 2009) states that “For wind farm development a separation distance of 10 times rotor diameter to occupied property, with a minimum distance not less than 500 metres, will generally apply.”

The associated Best Practice Guidance states:

“For wind farm developments the best practice separation distance of 10 times rotor diameter to occupied property should comfortably satisfy safety requirements. For a smaller individual wind turbine, for example on a farm enterprise, the fall over distance (i.e. the height of the turbine to the tip of the blade) plus 10% is often used as a safe separation distance.” It justifies the 500 metres by “In applying this separation distance any significant impact on sensitive noise receptors should be minimised, particularly with the increasing number of proposals for turbines in excess of 100 metres in height”.

In England, the government has rejected the idea of a separation distance (House of Commons Briefing Note (SN/SC/5221 25 March 2011)). There is, however, a private members bill going through parliament which aims to introduce a range of separation distances (the same as those proposed in the parish councillors and residents’ draft SPD shown below). In appeal decision APP/U2615/A/10/2131105 (November 2010), the inspector stated: “It has been mooted that a private members bill may result in mandatory minimum distances between turbines and dwellings. However at the present time this does not form part of Government policy and whether such measures would be enshrined in legislation is not known. The matter cannot therefore carry weight in determining this appeal.” In the mean time, the inspector’s comment shows that little weight is likely to be attributed to the distances contained within the bill at an appeal. The reality is that it would be extremely unlikely for the bill to gain royal assent<sup>4</sup>. As at

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<sup>4</sup> Private Members' Bills are Public Bills introduced by MPs and Lords who are not government ministers. As with other Public Bills, their purpose is to change the law as it applies to the general population. A minority of Private Members' Bills become law but, by creating publicity around an issue, they may affect legislation indirectly. Like other Public Bills, Private Members' Bills can be introduced in either House and must go through the same set stages. However, as less time is allocated to these Bills, it's less likely that they will proceed through all the stages. (Source [www.parliament.uk/about/how/laws/bills/private-members/](http://www.parliament.uk/about/how/laws/bills/private-members/))

the end of November 2011, the bill has passed through the first and second reading stages in the House of Lords. The first reading took place on 26 July 2010 and the second reading on 10 June 2011; and the next stage is 27 January 2012. In total, the bill will have to pass through another nine stages before it could gain Royal Assent.

Further information about separation distances together with more detail from planning appeal decisions are set out in the evidence paper. Suffice to say that there is variation in the approach adopted at appeal.

#### Advice on separation distances for safety

In terms of safety in general, the PPS22 Companion Guide states that “properly designed and maintained wind turbines are a safe technology” it goes on to say that “there has been no example of injury to a member of the public” (the document was published in 2004, so it is possible that this could have changed since then). It states that “The minimum desirable distance between wind turbines and occupied buildings calculated on the basis of expected noise levels and visual impact will often be greater than that necessary to meet safety requirements. Fall over distance (i.e. the height of the turbine to the tip of the blade) plus 10% is often used as a safe separation distance”. Evidence has been provided to the Council of accidents at one wind farm in Scotland, see the evidence paper.

With regards to bridleways, The British Horse Society released an advisory statement on wind turbines in April 2010 to replace its previous advice. The 2010 advice states that “as a starting point when assessing a site and its potential layout, a separation distance of four times the overall height should be the target for National Trails and Ride UK routes”. The reason for this being that, these routes are likely to be used by “equestrians unfamiliar with turbines”. It goes on to state that there should be “a distance of three times overall height from all other routes, including roads, with the 200m recommended in the Technical Guidance to PPS 22 being seen as the minimum, where it is shown in a particular case that this would be acceptable”.

In terms of public rights of way, the PPS22 Companion Guide states “there is no statutory separation between a wind turbine and a public right of way. Often, fall over distance is considered an acceptable separation, and the minimum distance is often taken to be that the turbine blades should not be permitted to oversail a public right of way.” (paragraph 57) As noted in the Appeal Cases in the evidence paper, the inspector on appeal case APP/C3105/A/09/2116152 noted that the stability is rarely a planning consideration because other legislation, which gives adequate assurance over safety, covers this.

With regards to extreme cold weather, the Companion Guide to PPS22 states that the build-up of ice on turbine blades is unlikely to present problems on the majority of sites in England. It states that “in those areas where icing of the blades does occur, fragments of ice might be released from the blades when the machine is started”. It goes on to say that “most turbines are fitted with vibration sensors which can detect any imbalance which might be caused by icing of the blades; in which case operation of machines with iced blades could be inhibited.” (Paragraph 79)

The British Pipeline Agency operate high pressure fuel lines in Milton Keynes and recommend a safety separation zone 1.5 times the height from the turbine.

#### Guidance on separation distances in other local planning authorities

Having reviewed wind energy documents produced by other authorities Cherwell and Torrington District Councils are the only ones that appear to have attempted to introduce specified

minimum separation distances to protect residential amenity. It is made very clear in both documents that these distances are encouraged, rather than enforced. They both recognise that it would be contrary to national policy to rigidly implement the specified distances. Neither of the two documents are a DPD or an SPD and both stress that they do not hold any formal planning status. Other authorities with SPDs or guidance covering wind turbine developments do not specify separation distances and make clear that, in line with national policy, each application must be assessed on a case by case basis, with separation distances likely to be different for each development.

Cherwell District Council's document (dated February 2011) recommends a series of minimum separation distances for the purposes of residential amenity, noise and safety. Full details are in the evidence paper. The key distance between houses and turbines is 800 metres.

Torrige's wind energy policy document (dated May 2010) covers (amongst others) separation distances for different issues. For dwellings this is 600 metres. Unlike the Cherwell guidance, Torrige's wind energy document does not provide any information on how the Council has concluded that these are the most appropriate separation distances. The document does, however, make clear that "noise and visual impact assessment might allow for wind turbine locations at distances of less than 500 and 600m, as in some cases, lesser separation distances might be sufficient or not required for safeguarding purposes". It states that "site-specific measurements will, therefore, determine separation distances from noise sensitive properties and distance to designated landscapes will be determined by landscape and visual impact assessment".

#### Proposals submitted to Milton Keynes Council 13 October 2011

A document put forward to the Development Control Committee on 13 October 2011, prepared by parish councillors/residents, suggests minimum separation distances, taken from Lord Raey's Private Member's bill, as follows:

If the height of the wind turbine generator (measured to the tip of the blade at its highest point) is—

- i. greater than 25m, but does not exceed 50m, the minimum distance requirement is 1000m;
- ii. greater than 50m, but does not exceed 100m, the minimum distance requirement is 1500m;
- iii. greater than 100m, but does not exceed 150m, the minimum distance requirement is 2000m;
- iv. greater than 150m, the minimum distance requirement is 3000m.

Notwithstanding the Government's position on separation distances, the implications of the distances proposed in the SPD have been assessed in the context of Milton Keynes borough. A series of indicative maps have been produced and these are published in the evidence paper and the SA. By using these proposed separation distances and discounting all other potential constraints, there is no site within the Borough where a single large turbine could be located using a separation distance of 2000m from any residential dwelling. Clearly the introduction of such a distance would prevent wind farm development with large turbines in the Borough

altogether<sup>5</sup>. This would be contrary to national policy and the Council's own Low Carbon Living Strategy and Action Plan (October 2010). National policy clearly states that local authorities should encourage renewable energy developments: it is not, therefore, intended to completely rule out large wind turbine developments by introducing the minimum separation distance of 2000m in the SPD. Furthermore the approach in this SPD encourages smaller turbines in many areas.

Using separation distances from settlement boundaries, some indicative mapping work has been carried out to show the implications of a variety of distances for potential wind farm developments in Milton Keynes.

The first map shows 2km buffer zones around the Borough's settlements. The map shows that the buffer areas cover the majority of the Borough, leaving just a limited number of very small areas where wind farms could potentially be sited (providing there are no other constraints in these areas). It is clear from the impacts that it would not be appropriate to set a minimum separation distance of 2km.

The second map created shows 1.5km buffer zones around settlements. Inevitably, the reduced buffer size opens up slightly larger areas for potential wind farm developments. Overall, however, there is limited area outside of the buffers, leaving few opportunities for wind turbine developments. Other constraints would narrow opportunities down further.

The third map shows 1km buffer zones around settlements in the Borough. A buffer of this size opens up more areas for potential wind turbine developments. There does, however, remain a significant area in which large scale wind turbine wind farms would be prevented if a buffer of this size was introduced.

The mapping has shown that a buffer size of 1km would provide some opportunities for potential wind farm developments. It does, however, rule out a considerable amount of the Borough for wind turbine developments. It is considered that introducing a separation distance of 1km across the Borough would be overly restrictive to large wind turbines but by a more relaxed approach for smaller turbines the SPD accords with national policy.

Having established that the separation distances proposed in Lord Reay's Bill would severely restrict, or prevent entirely, the development of wind farms in the Borough, other separation distances have been mapped. Given that the Local Government Improvement and Development website suggests a separation distance of 600m-800m between turbines and houses and that Torridge Council supports a 600m buffer and Cherwell an 800m buffer (see evidence paper), these are the alternative distances that have been assessed.

Mapping for the 800m buffers provides an indicative guide showing the most suitable locations for wind turbine developments in terms of the protection of residential amenity. Discounting all other constraints, the map shows a number of areas which could potentially accommodate wind turbine developments.

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<sup>5</sup> During the second reading of Lord Reay's Bill, Lord Teverson stated that, across the UK, only 0.5 percent of the land mass would remain to potentially accommodate wind farms if a 2km buffer was introduced. He stated that this would effectively "end that industry completely".

As with the 800m buffer map, mapping for the 600m buffers provides a guide showing the most suitable locations for wind turbine developments in terms of the protection of residential amenity. The 600m does, however, open up the potential development areas further, meaning there is more scope (subject to other constraints) , allowing the most appropriate locations for wind turbine locations to be identified.

### Other constraints

There are many constraints that reduce opportunities for wind farm developments, the proximity of settlements is but one of these. Other planning constraints which may prevent wind farm developments in some areas include: landscape character, visual impact, ecology, conservation areas / historic buildings, archaeology and cumulative impact, amongst others.

As set out in the PPS22 Companion Guide, wind farms occupy large areas:

“Wind turbines need to be positioned so that the distances between them are between 3-10 rotor diameters (about 180-600 metres for a wind farm using 60m diameter, 1.3MW wind turbines). This spacing represents a compromise between compactness, which minimises capital cost, and the need for adequate separations to lessen energy loss through wind shadowing from upstream machines. The required spacing will often be dependent on the prevailing wind direction.”

“In addition to wind turbines, the required infrastructure of a wind farm consists of adequate road access, on site-tracks, turbine foundations, crane hard standings, one or more anemometer masts, a construction compound, electrical cabling and an electrical sub-station and control building. Some of these features are permanent and others are required only in the construction phase and as such are temporary.”

So, it is clear that it is important to consider that there are other constraints when establishing a separation distance. There may be an opening of land which falls outside of the buffer zones, but when looking at other constraints in that location (including settlements located on the outside edge of the Borough boundary), together with the site size required, it may be the case that a wind farm cannot be accommodated. One obvious example where this would be the case is Hanslope Park, which is located outside of the settlement buffers, but which itself would require separation from wind farm development. It should not, therefore, be assumed that all the openings in buffers could accommodate a wind farm. Therefore any separation distance should take into account the fact that sufficient opportunities should be available for wind farm developments, given that proximity to settlements is just one of the many planning constraints associated with wind farm developments.

### Recent appeal case at Nunn Wood (APP/Y0435/A/10/2140401)

This appeal was in respect of the wind farm proposed in three local authority areas initially decided on 15 November 2011. The inspector noted that the proposed wind turbines would be large and unmissable and produce significant visual effects. In terms of cumulative impact, the inspector noted that at distances of about 6km there was potential to see many turbines from some view points to produce significant cumulative visual effects.

With regards to noise, the inspector noted that one group had raised concerns about the likelihood of excessive Amplitude Modulation. Despite these issues the first appeal was allowed by the Inspector.

## **-Conclusion and emerging Policy**

Milton Keynes Council considers that it is appropriate to update the 350m minimum separation distance for wind turbines specified in policy D5 of the Local Plan.

From the evidence that has been reviewed, it is apparent that there is a range of separation distances, from a range of different sources, recommended to protect residential amenity. These distances range from 600m to 3km. Mapping work undertaken has shown a separation distance of 1km or more would severely restrict large wind turbines. However a more relaxed approach for smaller wind turbines would allow greater areas for the location of these turbines. The feasible range for a separation distance in Milton Keynes would, therefore, be between 600m and 1km. There may, however, be **exceptional** circumstances where a reduced separation distance would be appropriate. For example if smaller wind turbines are proposed which have a reduced effect in terms of noise and visual impacts, then a more permissive graded approach to the separation distance can offer some flexibility.

In the same way that Scottish national policy aims to direct wind farms to the most appropriate locations (in terms of minimising impact on residential amenity), it is deemed that the most appropriate way of introducing an approach to protect residential amenity without overly restricting the development of renewable energy, would be to encourage developers to identify sites in areas furthest away from settlements. An Amplitude Modulation noise condition may be applied if planning permission was granted, adding weight to the need for energy companies to choose sites furthest away from dwellings.

Having assessed the evidence gathered for this SPD, it is considered appropriate to add the following emerging policy for wind turbines in the Borough.

### **EMERGING WIND TURBINE POLICY**

**1. Planning permission will be granted for proposals to develop wind turbine renewable energy sources, including wind turbines that act as a component of a more extensive development unless there would be:**

- (a) significant harm to the amenity of residential areas, due to noise, traffic, pollution or odour;
- (b) significant harm to a wildlife species or habitat;
- (c) unacceptable visual impact on the landscape;
- (d) unacceptable shadow flicker and electro-magnetic interference; or
- (e) a failure of the application to meet the minimum distance requirement under Section 2, subject to the exception in Section 3.

## 2. Requirements for Minimum Distance from Residential Dwellings

- (a) The “minimum distance requirement” means the necessary minimum distance between the wind turbine generator and residential premises, as set out in sub-section (d).
- (b) “Residential premises” means any premises the main purpose of which is to provide residential accommodation, including farmhouses.
- (c) If a number of wind turbine generators are being built as part of the same project the minimum distance requirement applies to each wind turbine generator individually.
- (d) If the height of the wind turbine generator is:
  - (i) 25m, the minimum distance requirement is 350m;
  - (ii) 100m, the minimum distance requirement is 1000m;
  - (iii) between 25m and 100m, the minimum distance requirement is pro-rata between (i) and (ii) above, according to its height; or
  - (iv) greater than 100m, the minimum distance requirement is projected between (i) and (ii) above, according to its height.
- (e) The height of the wind turbine generator is measured from the ground to the end of the blade tip at its highest point.
- (f) There is no minimum distance requirement if the height of the wind turbine generator does not exceed 25m.
- (g) If planning permission is granted on the condition that the proposed wind turbine generator meets the minimum distance requirement under sub-section 2(d), the actual height of the wind turbine generator must not exceed the maximum height in relation to that minimum distance.

## 3. Exception

- (a) The Local Authority may grant planning permission for the construction of a wind turbine generator which does not meet the minimum distance requirement under section 2(d) if the condition under sub-section (b) is met.
- (b) The condition is that the owners and occupants of all residential premises which fall within the minimum distance requirement for the proposed wind turbine generator must agree in writing to the construction of the wind turbine generator.
- (c) It is the duty of the authority to ensure that no written agreement is elicited by unlawful means and that all necessary written agreements have been received before planning permission is granted.

## 4. Requirements for Minimum Distance from Bridleways

That, as a starting point when assessing a site and its potential layout, a separation distance of four times the overall height should be the target for National Trails and Ride UK routes, or 200 metres, whichever is the greater. The negotiation process recommended in the Companion Guide to PPS 22 should indicate whether, in the particular circumstances of each site, these guidelines can be relaxed or need strengthening to minimise or eliminate any perceived potential difficulties.



## **5. Requirements for Minimum Distance from Public Footpaths**

The minimum distance requirement is the fall-over distance (i.e. height of the wind turbine as defined in 2(e) above, plus 25%.

## **6. Safety requirements**

Wind turbines must be shut down:

- when they have become iced. They must only restart when ice has been cleared as laid out in the recommendation in the Technical Annex of Planning Policy 22 and/or
- upon the request of any of the Emergency services, to allow access to the site(s) in the event of an accident or incident.

A separation distance of 1.5 times the height of the turbine from high pressure fuel lines shall apply.

## WIND FARM AND TURBINE ADVICE FOR APPLICANTS

In addition to the need for EIA, there is advice for prospective developers of Wind Farms in the Government publication:

Wind Energy and Aviation Interests - Interim Guidelines (DTI 2002)

<http://www.bwea.com/pdf/Wind-Energy-and-aviation-interim-guidelines.pdf>

This also includes a Pre-Application Pro-Forma which applicants can submit to assess their schemes before making a formal planning application.

Developers must also assess the impact of the proposed development on TV and radio reception. There is a tool on the BBC web site to do this:

<http://www.bbc.co.uk/reception/info/windfarms.shtml>

Developers should provide evidence that they have used the assessment tool and include the results with the planning application.

Advice for developments near trunk roads:

[http://www.dft.gov.uk/ha/standards/tech\\_info/files/Wind\\_Turbines\\_SP\\_12-09.pdf](http://www.dft.gov.uk/ha/standards/tech_info/files/Wind_Turbines_SP_12-09.pdf)

Nature conservation advice:

<http://www.naturalengland.org.uk/ourwork/planningtransportlocalgov/spatialplanning/standingadvice/default.aspx>

<http://naturalengland.etraderstores.com/NaturalEnglandShop/TIN069>

<http://naturalengland.etraderstores.com/NaturalEnglandShop/TIN051>

Prospective developers and householders are advised to contact our Planning service for advice and information.

<http://www.milton-keynes.gov.uk/development-control/displayarticle.asp?ID=63484>

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