



Appeal Decision

by **John Braithwaite** BSc(Arch)
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an Inspector appointed by the Secretary of State
for Communities and Local Government

**Inquiry held on 23-26 February
and 2 March 2010 - Site visits
made on 1 March 2010**

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**Decision date:
19 April 2010**

Appeal Ref: APP/Y2003/A/09/2105130

Flixborough Grange Farmhouse, Flixborough, Scunthorpe DN15 8RY

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by Grange Wind Farm Ltd against the decision of North Lincolnshire Council.
- The application Ref WF/2008/0900, dated 16 June 2008, was refused by notice dated 29 April 2009.
- The development proposed is seven wind turbines and associated hardstandings, tracks, anemometry mast, switch gear house and underground cables.

Decision

1. The appeal is dismissed.

Reasons

2. The first three main issues are the effect of the seven wind turbines on the character and views of the landscape, on the amenities and health of local residents, and on the health and well being of the Glathorne family. The fourth main issue is whether any harm caused by the renewable energy project is outweighed by its environmental and economic benefits.

The first main issue – the character and views of the landscape

3. The appeal site is flat arable land at about 4m AOD and is subdivided by drainage ditches and farm tracks. It is part of the flood plain of the River Trent, which bounds the site to the west. Within the site is Flixborough Grange, a residential property. To the east of the site and covered by mainly ash woodland, Burton Wood, is a steep scarp slope that rises to a height of about 67m AOD. The scarp slope extends to the south, and to the north towards the River Humber. Along the east boundary of the wood is a country road between the villages of Flixborough to the south and Burton upon Stather to the north (hereafter referred to as Burton). To the west of Flixborough and to the south of the site is an industrial estate that has a riverside wharf. A steep cul-de-sac lane leads from the centre of Burton down the scarp slope to the small riverside village of Burton Stather.
4. On the opposite side of the river to the site is flat arable land that includes scattered villages, such as Amcotts, Eastoft, Luddington and Garthorpe, and other individual properties. About 5kms to the south-west of the site, and also on the west bank of the river, is Keadby Power Station. Power lines supported by steel pylons extend out across the flat landscape to the west, north, east and south of the power

station. The area including the site has been characterised as part of an England-wide study; the Countryside Character Initiative (CCI). The site is at the eastern edge of the Humberhead Levels (HL) character area whilst the scarp slope is part of the defining feature of the Northern Lincolnshire Edge with Coversands (NLE) character area. The Council has carried out its own character assessment which identifies character areas but these are broadly similar to the CCI areas.

5. Each of the seven wind turbines would have a hub height of about 80 metres and a blade rotor diameter of 92 metres. The height to top blade tip of each turbine would thus be about 126 metres. Flixborough Grange is located towards the south end of the site and the occupants of this dwelling have a financial interest in the proposed wind farm development. Three of the turbines would be located in an arc of about 350 metres radius around the dwelling from the south-east to the north. The other four turbines would be in a rough square further to the north of the dwelling; two of the turbines would be about 400 metres from the edge of Burton Wood and the other two would be about 500 metres from the river.

6. The site, given the height, number and disposition of the turbines, would become a wind farm landscape and the character of this part of the HL character area would be adversely affected to a significant degree. The flat landscape on the west side of the river is virtually featureless and the large pylons and multiple power lines extending north from Keadby Power Station are its main characteristics. Given also the degree to which the river dissects the landscape the wind turbines would not affect the HL character area on the west side of the River Trent.

7. The proposed wind farm at Flixborough Grange (hereafter referred to as Grange) would be located outside the NLE character area and would not thus adversely affect its character. The turbines would, however, have a significant adverse effect on views across the landscape towards the scarp slope that is the defining feature of this character area. In views from the west across the river the turbines would be seen against the backdrop of the wooded slope. The slope is at its steepest and is undeveloped where it is covered by Burton Wood whereas to the south and north it is less steep, partly developed and less covered by trees. Given also the flatness of the flood plain Burton Wood is a distinctive feature in the aforementioned views from the west. Notwithstanding the presence of the pylons and power lines close to the river, the seven wind turbines would be prominent and intrusive in views of Burton Wood from this direction.

8. From the footpath along the west bank of the river, with the pylons and power lines behind, the seven wind turbines would have a significant adverse effect on views towards Burton Wood. In more distant views, with the pylons and power lines in the foreground and with the blades of Bagmoor wind farm appearing above the tops of the trees on the slope, the turbines would have an adverse effect on views towards the wood but not to a significant degree. Bagmoor is a cluster of eight turbines about 3kms to the east of the site and is visible in views towards the site from the south. In these views, with the tall buildings and cranes at the industrial estate in the foreground, the wind turbines would not be intrusive and would not significantly affect the landscape. From the vicinity of Flixborough and from the north the turbines would be seen in close proximity to the wooded scarp slope and would adversely affect views of the landscape though, again, not significantly.

9. A bridleway along the west edge of Burton Wood and footpaths within the south part of the site, given their proximity to Burton and to Flixborough, are likely

to be well used by residents of the two villages for recreational purposes. From the bridleway and footpaths, and from the track that leads down to the bridleway from Burton, there are far reaching views across the flood plain of the river. From these well used public vantage points the turbines would be seen in the immediate foreground and they would be prominent and intrusive in views across the landscape. The Grange wind farm would have a significant adverse effect on views of the landscape from the bridleway and the footpaths.

10. Five permitted but yet to be constructed wind farms, on the flood plain of the River Trent and River Humber, would be within 15kms of the site. About 5kms to the south-west of the site would be 34 turbines at Keadby, about 12kms away roughly in the same direction would be 22 turbines at Tween Bridge, about 6kms to the west would be 14 turbines at Twin Rivers, about 11kms away in the same direction would be 16 turbines at Goole Fields, and about 12kms to the north-west of the site would be 10 turbines at Sixpenny Wood. There is no evidence to indicate that the five wind farms will not be constructed. However, all of these wind farms would be seen in the distance in views from the vicinity of the site and they would not add to or reduce the adverse effect of the appeal proposal on the character and views of the landscape. Similarly, Bagmoor wind farm is some distance away and on higher ground and there would be no cumulative impact with the appeal proposal.

11. The Grange wind farm would have a significant adverse effect on the character of the landscape between Burton Wood and the River Trent but would not adversely affect the character of the landscape outside this relatively small area. The seven turbines would have a significant adverse effect on near views across the site from the bridleway and footpaths within the site and from the footpath along the west bank of the river, but would have only a minor adverse effect on more distant views from the west and on views from the south and north. The proposed development thus conflicts with policy LC7 of the North Lincolnshire Local Plan (LP). There would be no cumulative adverse effect on the character and views of the landscape with either existing or probable future wind farms in the area.

12. The Council has adopted Supplementary Planning Guidance (SPG) 'Wind Energy Development' to guide such developments in the District. The SPG sets out matters to be considered, such as the visual impact of wind energy proposals in WIND3, and seeks to minimise the impact of wind energy developments in WIND1. The Appellants have considered all the matters set out in the SPG and have not sought to underestimate the impact of their proposal. In this regard there is no minimising the fact that the proposal is for the erection of seven, 126 metre high, wind turbines on an open site in the countryside. There is no conflict with the SPG.

The second main issue – the amenities and health of local residents

13. Local residents are primarily concerned that the Grange wind farm would generate disturbing noise that would adversely affect their residential amenities. This matter was the subject of a reason for refusal of the application but at the Inquiry the Council's noise consultant accepted that the noise conditions suggested by the Appellants, and discussed by the main parties at the Inquiry, would overcome their concerns regarding noise. Burton Against Turbines (BATs) maintained their position that conditions would not overcome their concerns.

14. Planning Policy Statement 22 'Renewable Energy' (PPS22) states, at paragraph 22, that "The 1997 report by ETSU...should be used to assess and rate noise from

wind energy development". The ETSU report is 'The assessment and rating of noise from Windfarms' and is known as ETSU-R-97. There is nothing to indicate that the Appellants assessment of noise that would be generated by the proposed wind farm has not been carried out in accordance with procedures and methodologies set out in ETSU-R-97, as modified by a Bulletin published by the Institute of Acoustics. In this regard BATs concern regarding the baseline data used by the Appellants in their assessment of noise is unfounded. Furthermore, the noise limits put forward by the Appellants are appropriate and would protect amenity at residential properties in Flixborough and Burton, and at all stages in the assessment the Appellants have considered the worst case scenario and there would thus be a significant safety margin between predicated noise levels and acceptable noise limits.

15. The subject of Amplitude Modulation (AM), a particular type of noise generated by wind turbines, was aired at the Inquiry. AM is sometimes described as a 'thumping' noise or is referred to as 'blade swish'. The Appellants maintain that AM is not likely to be generated by the proposed wind farm but the cause or causes of AM are not clear and there is no degree of certainty for local residents that this type of noise would not cause disturbance. The Appellants have, however, suggested conditions that would specifically address the consequences of AM if it did occur. The possibility that AM would occur cannot be ruled out and the conditions therefore meet the test of necessity even if they only provide comfort for local residents. It is, after all, they who would suffer disturbance from AM if it were to occur. The AM conditions, and the other suggested noise conditions, satisfy all the tests set out in Circular 11/95 'The Use of Conditions in Planning Permissions'.

16. In the north-west corner of the industrial estate to the south of the site is an incineration plant that is licensed by the Environment Agency (EA) to burn animal waste including carcasses and chicken litter. In their proofs of evidence BATs have expressed concern that the wind turbines, which would be between the plant and Burton, would disturb the prevailing wind carrying emissions from the plant to the detriment of the health of residents of Burton. This matter was not mentioned at the Inquiry possibly because the EA have considered BATs concerns and wrote to the Appellants shortly before the Inquiry commenced. The main conclusions of the letter are that "Given the distance of the proposed wind turbines from the power plant, we consider that they will have an insignificant effect on the impact of emissions from the power station". The wind turbines are not likely to increase the potential for harm to the health of local residents resulting from emissions from the incinerator.

17. The nearest dwelling in Burton to the proposed wind farm would be a dwelling on Ridgewood Drive. This dwelling would be about 700 metres from the nearest turbine but its curtilage backs onto Burton Wood, which would screen views of the turbines from the property during summer months. During the winter, however, when the trees are not in leaf, it is likely that the turbines would be partially visible from this property through the trees. This visibility of the turbines would adversely affect the amenities of residents of the dwelling, but not to any significant degree. The intervening wood is the reason for reaching the same conclusion on this matter for most other dwellings in Burton. Residents of Burton have expressed concern that Burton Wood could be felled either before, or whilst, the wind turbines are in place thus bringing them into constant view from the village. At the Inquiry the Appellants agreed to the imposition of a condition which would prevent this occurring.

18. There are dwellings in Burton from where there would be views of the wind turbines throughout the year. These few dwellings are on Linton Rise and Hillcrest

Drive, cul-de-sacs that terminate beyond the north end of the wood. Two or three of the turbines would be visible from the dwellings, such as 15 Linton Rise, but the nearest turbine would be about 850 metres away and they would be seen obliquely in expansive views across the flood plain of the River Trent. Nevertheless, the proposed turbines would dominate views to the south-west from the dwellings and the proposed wind farm would have a significant adverse effect on residential amenity at the dwellings. There are also a few dwellings in Burton Stather, such as Poppyfields, from where there would be clear views of all seven turbines. Though the nearest turbine would be over 1km away the wind farm would be prominent and intrusive in views south across the flood plain from these dwellings. The proposed wind farm would have a significant adverse effect on residential amenity at some dwellings in Burton and Burton Stather.

19. The proposed wind farm would not, given the imposition of conditions if planning permission were to be granted, cause unacceptable disturbance to local residents as a result of noise, including AM. The proposal would not, furthermore, add to any potential harm to the health of local residents from emissions from the incinerator at the nearby industrial estate. The proposed wind turbines, however, would be prominent and intrusive in the outlook from several dwellings in Burton and Burton Stather and would have a significant adverse effect on residential amenity at those properties.

The third main issue – the health and well being of the Glathorne family

20. The Glathorne family live at 73 Flixborough Road in Burton. The family comprises Mr and Mrs Glathorne, their twin eight year old sons, Lewis and Ross, and their two year old daughter, Lilly. Their two storey house is the southernmost house in Burton and is at about 63m AOD. It has a long rear garden and a side elevation to a field on the opposite side of the road to Burton Wood. The nearest turbine would be T7, which would be about 830 metres from the front elevation of the house on the opposite side of the wood. The hub of the turbine, and the hubs of the other six turbines, would be about 20 metres above ground level of the house. Bagmoor is about 3kms to the south-east of the house and most of the eight turbine blades are visible all year round from parts of the rear garden and from the east facing first floor bedroom window in the dwelling.

21. Lewis and Ross have Autistic Spectrum Disorder (ASD), which was diagnosed by Dr Stebbings, a Consultant Clinical Psychologist, over six years ago. In her written evidence to the Inquiry she explains that the boys also have significant speech, language and communication difficulties and severe learning difficulties; their current learning development age is no more than eighteen months. She also explains that the boys have "...significant sensory sensitivities which is a very characteristic component of ASD". Lewis and Ross have "...a fixation with spinning objects" and the "...time they spend engaged in spinning and observing spinning objects has to be limited in order to allow them to engage in other more meaningful activities". The boys are doubly incontinent and have other medical problems such as Lactic Acidosis, a dangerous condition where the blood becomes too acidic.

22. Lewis and Ross have no sense of danger and their parents, having found a house that would suit their particular needs, have spent many years adapting their home and garden to provide a safe environment for their sons. The boys attend St Luke's Primary School and are under the care of the Assistant Head, Mr Binnington, who has specific responsibility for pupils with ASD. At the inquiry he described Lewis

and Ross' obsessive behaviour and how clear structured routines, with the minimum of unpredictable changes, are important in their learning environment. The emphasis on daily routine was emphasised by Mrs Burnett, who has known the boys since they were diagnosed with ASD and who was, until retirement last year, the Assistant Head of the ASD Team for North Lincolnshire. She has stated that "Both boys had extreme sensory sensitivities and often had extreme responses to sensory distress" and that "A 24 hour curriculum is considered to be the most appropriate and successful way of helping anyone with ASD to make sense of their complex and bewildering world".

23. Mr and Mrs Glathorne have reiterated the degree to which routine is essential to Lewis and Ross' well being. When not at school the boys spend most of their time at home and, in particular, in their bedrooms where everything is familiar. The routine of their lives is maintained by their parents, in particular by Mrs Glathorne who has given up work to care for her sons, and by trained carers who attend four evenings per week and on Sundays. A significant effect of a loss of routine is disturbed sleep patterns for the boys and therefore for their parents.

24. Mr and Mrs Glathorne had not thought that Bagmoor wind farm would be visible from the house and garden. They now find that it is and its construction has, in the words of Mrs Glathorne, "...caused immense distress". Before Bagmoor was in place Ross' bedroom was at the rear of the dwelling with an east facing window. With a clear view of the wind farm Ross became obsessed with it to the extent that his parents had to relocate him to a bedroom with a north facing window. Nevertheless, his obsession with the turbines leads him to attempt access to what is now his sister's bedroom and his routine has been seriously undermined. The twins enjoy being outside and, in particular, in the rear garden where there is a trampoline and other play equipment. It is likely that opportunities for outside play have been reduced by the visibility of the turbines from parts of the garden. The wind farm is close to Normanby Park which offers a variety of recreational opportunities that the twins have previously enjoyed. Their parents can no longer take their sons to the Park because of the distress it causes due to the proximity of Bagmoor.

25. Lewis' bedroom has two west facing windows. The windows are at the same height as the proposed turbines and if Burton Wood was not in place there would be a view of all seven turbines from the windows throughout the year. The wood provides a visual barrier when the trees are in leaf and would screen the turbines in views from the windows for about half of each year. It is possible that the tips of the blades of the nearest turbine would be visible above the trees but this is not likely to be a significant factor. What is significant, however, is the situation that would prevail when the trees are not in leaf. Photographs taken by Mr Glathorne from Lewis' bedroom show that the River Trent, the landscape either side of the river, and the horizon, can clearly be seen through the trees during the winter months. The site visit to their house was also during the winter and the view through Burton Wood from Lewis' bedroom windows was noted at that visit. Whilst static objects beyond the wood might not be particularly visible, moving objects certainly would be. Lewis would be able to see the turning blades of the seven wind turbines through the trees from his bedroom windows during the winter months and, given the limited extent of the property and the height of the windows, screening of the turbines would not be feasible or possible.

26. Ross' obsession with Bagmoor wind farm gives a clear indication of how Lewis would react if Grange wind farm was to be built. The seven turbines would be visible from his bedroom windows for about half the year and the turning blades would

stimulate, as Dr Stebbings describes, his "...fixation with spinning objects". With Ross having been relocated from his original bedroom there would be no where in the modest dwelling for Lewis to be relocated to a bedroom from where there would be no view of spinning turbine blades. Consequently, the construction of the proposed wind farm would have a significant adverse effect on Lewis' health and, given the degree to which he is dependant on the care of his parents, would have a significant adverse effect on the health of Mr and Mrs Glathorne. In this regard the effect of their obsessive behaviour on the twin's sleep patterns must have an adverse effect on their parents' quantity and quality of sleep.

27. The Appellants have highlighted the fact that the hearing ability of both boys has been assessed and has been found to be 'normal'. The assessments are likely to have considered their ability to physically hear sound and are not likely to provide any guide as to how sensitive they are to sound. The Appellants admit that "...noise from the turbines may exceed background levels during the night time period..." at the Glathorne home but that "...this is only by a small margin and assuming that all worst case factors are incorporated into the assessment". Nevertheless, consideration must be given to the possibility that Lewis and Ross would be able to hear noise from the turbines during the night when their sensory sensitivities are likely to be at their highest. It is possible that hearing noise from the turbines would exacerbate already developed obsessive behaviour and disturbed sleep patterns. This consideration is not conclusive in itself but contributes to an overall assessment of the effect of the proposed wind turbines on the health of Lewis and Ross.

28. There is no doubt that Mr and Mrs Glathorne are currently dealing with the health effects of Bagmoor, on Ross in particular. The proposed wind farm is likely to have a similar health effect on Lewis, if he was not to change bedroom. This is not, on the evidence available, an option. The cumulative effect of Bagmoor and Grange wind farms must also be considered. Limiting the time the twins spend "...engaged in spinning and observing spinning objects..." would be very difficult with Bagmoor visible to the south-east and Grange visible to the south-west, albeit for only part of the year. The likely regular visibility of spinning turbines would stimulate the twins' obsessive behaviour to the detriment of their engagement in learning activities. It would also undermine the strict routine of their daily lives to the detriment of, amongst other things, their sleep patterns.

29. On the evidence provided by Mr and Mrs Glathorne, and by those who supported them at the Inquiry and in writing, the effect of the Grange wind farm on the health and well being of Lewis and Ross, and on the health and well being of their parents and sister, cannot be underestimated. It is, in fact, difficult to imagine how the family could continue to live at their home if Grange was to be built in addition to Bagmoor. All of Mr and Mrs Glathornes' efforts to provide a safe home for Lewis and Ross, and to provide as normal as possible a home life for Lilly, would be seriously compromised.

30. The proposed wind farm at Flixborough Grange would have a very serious adverse effect on the health and well being of the Glathorne family.

The fourth main issue – the balancing exercise

31. Government policy on renewable energy is set out in Planning Policy Statement 22 'Renewable Energy' (PPS22). It is stated in this document that 'Increased development of renewable energy resources is vital to facilitating the

delivery of the Government's commitments on both climate change and renewable energy'. A key principle of national policy in PPS22 is 'The wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that should be given significant weight in determining whether proposals should be granted planning permission'. National planning policy therefore establishes a clear presumption that a renewable energy project should be granted planning permission unless it is established that the significant positive weight that is given to such a project is outweighed by any adverse consequences that would be caused by its construction and operation.

32. Regional planning policy, which carries forward national policy in PPS22, is set out in the Regional Spatial Strategy for the Yorkshire and Humber Region (RSS). The supporting text to RSS policy ENV5 indicates that by 2010 9.4% of energy generation in the region should be met from renewable energy sources and by 2021 the percentage should be 22.5%. The consequent overall required installed grid-connected renewable energy capacities of 708MW by 2010 and 1862MW by 2021 are disaggregated to Council areas and for North Lincolnshire the targets are 54MW by 2010 and 112MW by 2021.

33. The target for 2010 has not been met; current installed grid-connected renewable energy capacity is 30MW. 9MW of permitted capacity at Tween Bridge is in the Council area and permitted capacity at Keadby is 84MW. Permitted capacity is likely to be built out so by 2021 North Lincolnshire will contribute 123MW of installed grid-connected renewable energy capacity. The RSS 2021 target will almost certainly be met without any additional permissions. However, RSS policy ENV5 clearly states that Councils should deliver "...at least..." the targets for installed grid-connected renewable energy capacity and the Government has made it clear that targets should be regarded to be the minimum to be achieved.

34. This main issue is addressed in LP policy DS21; which states that proposals for the generation of energy from renewable resources will be permitted provided that, amongst other things, any detrimental effect on features and interests of acknowledged importance, including local character and amenity, is outweighed by environmental benefits.

35. The landscape within which the wind turbines would be sited has been altered by man, for farming and other purposes, over the last several millennia. These farming and other activities, such as an increasing reliance on private transport in the last hundred years, have contributed to changes in the global climate that are having an increasingly detrimental effect on, amongst other things, the landscape. The landscape of North Lincolnshire is not immune from the effects of climate change. Flooding is a serious issue and will have adversely affected the area, and the lives of those who live within the area; particularly those who live on the flood plain of the River Trent. This one effect of climate change causes erosion of the landscape and alters how the landscape can be farmed and used. It also causes severe hardship for those who suffer the direct consequences of flooding; damage to their homes, properties and businesses.

36. A significant factor to be considered in the balancing exercise is the agreed condition that would require the decommissioning and removal of the seven wind turbines and all other buildings and equipment, and the reinstatement of the land on which they would be sited, twenty-five years after the first export of electricity to the national grid. Twenty-five years is a very small part of the history of the landscape

of North Lincolnshire and if that landscape is to survive in the long-term future then consideration must be given to accepting short-term harm to its character.

37. The proposed wind farm would have a significant adverse effect on only a small part of the landscape and only on near views across the site from the bridleway and footpaths within the site and along the west bank of the river. Otherwise, the wind farm would have only a minor adverse effect on more distant views from the west and on views from the south and north. The short-term adverse effect on the landscape is therefore limited to a relatively small area and is outweighed by the long-term environmental benefits of the renewable energy scheme. In this regard compliance with LP policy DS21 outweighs the conflict with LP policy LC7.

38. Twenty-five years is short-term when considering the landscape but is long-term when considering residential amenity. The proposed wind farm would have a significant adverse effect on residential amenity at several properties outside the wind farm landscape that would be created. But at all of these properties, notwithstanding the length of time they would be in place, the wind turbines would not be over dominant or overwhelming. The residents of these properties would experience loss of amenity and the wind turbines would adversely affect their living conditions but even this harm is outweighed by the long-term environmental benefits of the renewable energy scheme.

39. The proposed wind farm at Flixborough Grange would have an immediate effect on the health and well being of the Glathorne family. This effect would be very serious for Lewis and Ross in particular, given their various medical conditions, but would also be very serious for Mr and Mrs Glathorne who are their principal carers. This very serious effect would also affect Lilly at a time in her life when stability is crucial to her well being and development. The construction and operation of the seven turbines would have very serious adverse consequences that would not be outweighed by the environmental benefits of the renewable energy scheme. The health and well being of residents directly affected by proposed development is an interest of acknowledged importance and, in this regard, the renewable energy scheme conflicts with LP policy DS21.

Other matters

40. The appeal site is beneath the flight path of military aircraft and warning lights would be fitted to the hubs of the turbines. The Ministry of Defence (MOD) indicated before the Inquiry that they would require the southernmost and northernmost turbines to be fitted with 200 candela red lights and the others to be fitted with 25 candela lights. After the Inquiry the MOD indicated that they are trialling infra red (IR) lights for use on wind turbines, which would be invisible to the naked eye, and that they would seek, for this scheme, a combination IR/embedded 25 candela red light that would shine upwards on the southernmost and northernmost turbine hubs. Though the IR lights are under trial at present it is likely that they would be available for use by the time the Grange wind farm would be under construction. Any 25 candela red light on any or all of the turbine hubs could be embedded and a suggested condition would require a scheme for aviation warning lights to be agreed by the local planning authority before the development commences. With such a condition in place local residents can be assured that the turbine hubs would not be fitted with aviation warning lights that would be visible from ground level or from any residential property in Burton or Burton Stather.

41. Shadow flicker is a recognised phenomenon but is not the shadows cast on the ground by turning turbine blades but the situation that occurs within a residential property when a window in that property is aligned with a turning turbine blade and the sun; light within the property flickers as a result of the moving shadows cast by the turning turbine blade. The Environmental Statement submitted with the application included an assessment of whether shadow flicker could occur at any residential property. This assessment indicated that shadow flicker might occur at only a few properties and only under certain circumstances. A suggested condition would require the prior approval and implementation of a scheme setting out the protocol to be followed for the assessment of shadow flicker if any complaint was to be made. The scheme would include the action to be taken if a complaint was justified and this action could include shutting down the turbine that is causing shadow flicker to occur, at the appropriate times. With such a condition in place the potential for shadow flicker to occur is not a reason to dismiss the appeal.

42. A suggested condition would permit the micro-siting of the seven wind turbines to within 50 metres of the positions shown on the application drawings but would not permit any of the turbines to be sited any closer than shown to any residential property in Flixborough or Burton. Another suggested condition would require the prior approval by the local planning authority of a scheme of investigation and alleviation of any electromagnetic interference to TV and radio reception that may reasonably be attributable to the operation of the turbines. A Flood Risk Assessment has been carried and the Environment Agency has not raised any concerns with regard to flooding. Natural England have been consulted and their advice is that the proposed wind farm would not be likely to have a significant effect on the ecological interests of the Humber Estuary Special Protection Area or Site of Special Scientific Interest, amongst other designated areas. There is no reason to disagree with the advice of English Nature. The primary school in Burton would be about one kilometre from the proposed wind farm and Burton Wood and dwellings on Flixborough Road would screen the turbines in views from the school.

43. All other matters mentioned by local residents and by other interested parties have been taken into account but do not, either individually or collectively, justify refusing planning permission for the proposed development.

Conclusions

44. The adverse effect of the proposed wind farm at Flixborough Grange on the character and views of the landscape and on residential amenity at several properties in Burton and Burton Stather is collectively outweighed by the long-term environmental and economic benefits of the renewable energy scheme.

45. The very serious adverse effect of the proposed wind farm on the health and well being of the Glathorne family is not outweighed by the long-term environmental and economic benefits of the renewable energy scheme.

Overall conclusion

46. For the reason given above the appeal has been dismissed.

John Braithwaite

Inspector

APPEARANCES

FOR THE APPELLANT:

Mr R Glover	Solicitor and Partner at Hammonds
He called	
Ms K Hawkins BSc(Hons) BLD CMLI	Director of E4environment Ltd
Mr I Bennett BSc CEng MIOA	Partner of ACIA Engineering Acoustics
Mr D Stewart MA DipTP MRTPI	Principal of David Stewart Associates

FOR THE LOCAL PLANNING AUTHORITY:

Mr M Carter	Barrister – instructed by Mr M Wood, Director of Legal and Democratic Services at North Lincolnshire Council
He called	
Mr I Goldthorpe MA BA(Hons) DipURP CMS MRTPI	Principal Environmental Planning Officer at NLC
Eur Ing R D Bines BTech CEng FIMEchE FIOA	Principal Acoustic Consultant at RdB Associates
Mr D Jennings BSc(Hons) DipTP DMS MRTPI	Planning Consultant

FOR BURTON AGAINST TURBINES (BAT):

Mr Fuller	Local resident – gave evidence and called
Mr Vessey	Local resident
Mr Bennett	Local resident
Mr B Nutt	Local resident
Mr T Glathorne	Local resident – gave evidence and called
Mrs J Burnett	Retired Assistant Head of Autism Services Team
Mr P Binnington	Assistant Headteacher at St Luke's Primary School

INTERESTED PERSONS:

Mr J Briggs	Axholme North Ward Councillor of NLC
Mr B Regan	Burton and Winston Ward Councillor of NLC
Mrs J Overington	Chairman of Burton Parish Council
Ms W Mitchell	Local resident
Mr J Lings	Local resident
Mrs C Nutt	Local resident
Mr A Travis	Headteacher of Burton upon Stather Primary School
Mrs A Glathorne	Local resident

DOCUMENTS

Documents submitted by the Local Planning Authority

- 1 Newspaper notice of the Inquiry.
- 2 Council's letter of notification of the Inquiry.
- 3 List of those notified of the Inquiry.
- 4 Appearances for the LPA.
- 5 Mr Carter's opening statement on behalf of the LPA.
- 6 Mr Carter's closing submissions on behalf of the LPA.

Documents submitted by the Appellant

- 7 Mr Glover's opening statement on behalf of the Appellant.
- 8 Wind Turbine Sound and Health Effects – An Expert Panel Review.
- 9 NHS publication – Wind turbine sound 'needs research'.
- 10 NHS publication – Are wind farms a health risk?
- 11 Statement of agreement between Mr Bines and Mr Bennett.
- 12 Noise level graphs for 73 Flixborough Road, Burton.
- 13 Mr Glover's closing submissions on behalf of the Appellant.

Documents submitted by BATs

- 14 Newspaper article dated 3 October 2009.
- 15 Letter from RidgeWind Ltd to Mr and Mrs Glathorne.
- 16 Objection to appl. no. WF/2009/0573 dated 15 June 2009.
- 17 Review of noise limits from data provided before and during the Inquiry.
- 18 Mr Fuller's closing statement on behalf of BATs.

Other documents

- 19 Statement of Common Ground.
- 20 Recommended noise conditions.

- 21 Suggested planning conditions.
- 22 Mr Travis' statement.
- 23 Mrs Glathorne's statement.
- 24 Mr Glathorne's statement.
- 25 Mr Ashley's statement.
- 26 Mr Regan's statement.
- 27 Rt. Hon. Ian Cawsley's statement.
- 28 Mrs Overington's statement.
- 29 Mrs Mitchell's statement.
- 30 Mrs Nutt's statement.
- 31 Mr Bottomley's statement.
- 32 Councillor Mr Brigg's statement.
- 33 Mr Regan's statement.