

APPLICATION NO	WF/2010/1242
APPLICANT	Grange Wind Farm Ltd
DEVELOPMENT	Planning permission to site six wind turbines and associated hardstanding, tracks, anemometry mast, switchgear house and underground cables
LOCATION	Land adjacent to Flixborough Grange Farmhouse, Flixborough
PARISH	FLIXBOROUGH
WARD	Burton Stather and Winterton
SUMMARY RECOMMENDATION	Grant permission subject to conditions
REASONS FOR REFERENCE TO COMMITTEE	Officer discretion Objections by Burton upon Stather and Flixborough Parish Councils Third party request to address the committee Significant public interest Member 'call in' (Councillor Bernard Regan – significance and in the interests of transparency)

BACKGROUND

This application was validated on 2 November 2010 and is a resubmission of planning applications WF/2008/0900, which was refused by the Planning Committee on 29 April 2009, and WF/2009/0573, which was refused by the Planning Committee on 19 August 2009.

The developers appealed against the refusal of WF/2008/0900 and the appeal was determined by way of a public inquiry held at the Kingsway Centre in February 2010. The appeal was dismissed on the grounds of the impact upon two children living in Burton-upon-Stather who have been diagnosed as having autistic spectrum disorder and who already displayed behavioural problems from the Bagmoor development.

This planning application, as submitted, was identical to the previous planning applications that were refused and involved the construction of seven wind turbines with associated foundations, crane hardstandings, site entrance, internal access tracks, underground cable network, temporary construction compound, switchgear house and wind monitoring mast. The developer has now confirmed in writing that they will accept a condition limiting the development to six turbines. The site is located to the north of Flixborough Stather industrial estate on land that is currently in agricultural use and is approximately 6 kilometres north-west of the centre of Scunthorpe, 1.5 kilometres north-west of Flixborough village and 1.5 kilometres south-west of the village of Burton-upon-Stather. The village of Amcotts is to the south-west of the application site approximately 1.5-2 kilometres away and is on the western bank of the River Trent. The proposed array of turbines would have one property

within it (Flixborough Grange) which is owned by the same landowner as land upon which the wind turbine development is proposed to be located. Each turbine would have a rated capacity of 2 megawatts and therefore the installed capacity of the array would be 12 megawatts. Each turbine would have a maximum height of up to 126 metres to the blade tip with a maximum tower height of approximately 80 metres giving a blade diameter of approximately 92 metres.

At 12 megawatts installed capacity the development is well below that required by BERR (the Department for Business Enterprise and Regulatory Reform) to determine the application and therefore the decision in respect of whether this development is acceptable or not lies with the local planning authority.

The design life of the development is 25 years from when it first produces electricity: at the end of the 25 years a decision to refurbish, remove or replace the turbines will be taken. If the turbines are to be removed the land will be reinstated to agricultural use.

A significant number of consultations have been carried out, receipt of the application has been advertised in the local press and site notices posted, and individual letters have been sent out to those properties closest to the application site. This method of public consultation is in line with the council's policy and is considered to be appropriate and adequate.

During the consultation exercise a significant number of responses have been received: some from those statutory and non-statutory consultees that the council would normally consult on an application of this type, and also a large number of letters of representation.

These representations are made up of individual letters, emails and a letter from a pressure group called Burton Against inappropriate Turbines (BATS).

The application is accompanied by a full environmental impact assessment and this has been available for people to view both in the planning office and also on the council's website since the application was received.

All responses need to be considered against and in the light of national, regional and local policies, guidance and advice.

NATIONAL, REGIONAL AND LOCAL POLICY GUIDANCE AND ADVICE

National policy

Since entering into the Kyoto protocol the UK has been committed to reducing greenhouse emissions by 12.5% below 1990 levels by 2012.

The UK has set targets to generate 10% of electricity from renewable energy sources by 2010 followed by 15% in 2015 and 20% by 2020. This is in addition to cutting carbon dioxide emissions by 60% by 2050. To achieve this Planning Policy Statement (PPS) 22, Renewable Energy has been published which requires the planning system to actively promote renewable energy development. PPS 22 also provides detailed guidance for the consideration of renewable energy planning applications. Since the publication of PPS 22 regional planning guidance for Yorkshire and the Humber has set challenging renewable energy targets for the Humber and other sub-regions. The 2010 target for the Humber is set at 146 megawatts.

The UK's energy policy, including renewable energy, is set out in the Energy White Paper. Through various iterations this White Paper and its principles have been enshrined by the Energy Act being given Royal Assent in November 2008.

The Renewable Energy Strategy was published in July 2009 and states that:

'We need to radically increase our use of renewable electricity, heat and transport. This Strategy explains how and why we will do so. It sets out the path for us to meet our legally-binding target to ensure 15% of our energy comes from renewable sources by 2020: almost a seven-fold increase in the share of renewables in scarcely more than a decade.

This Strategy will help us tackle climate change, reducing the UK's emissions of carbon dioxide by over 750 million tonnes between now and 2030. It will also promote the security of our energy supply, reducing our overall fossil fuel demand by around 10% and gas imports by 20-30% against what they would have been in 2020. And it will provide outstanding opportunities for the UK economy with the potential to create up to half a million more jobs in the UK renewable energy sector resulting from around £100 billion of new investment. In parallel with energy saving, nuclear and carbon capture and storage, this is a key element of our overall transition plan for setting the UK on the path to achieve a low-carbon, sustainable future that helps address dangerous climate change.'

The Renewable Energy Strategy sets out action for planning for delivering higher levels of renewable energy development. It describes the balance of fuels and technologies likely to achieve the Government's goals, the strategic role of Government and the specific actions it intends to take. It also sets out the opportunity for all in society to harness renewable energy and contribute towards action against climate change. The strategy sets out the path for the country to meet its legally binding target of 15% of energy from renewable sources by 2020.

However the document is still conscious of the need to protect the environment, including the landscape, from unacceptable development. Paragraphs 4.9 and 4.10 of the document set out this balance of considerations:

'4.9 The planning system plays a central role in delivering the infrastructure we need to reduce our carbon emissions and ensure continued security of energy supply. Equally the planning system plays a vital role in safeguarding our landscape and natural heritage and allowing communities and individuals the opportunity to shape where they live and work.

We therefore need to ensure that the planning system properly reflects the range of interests in land use, applies existing safeguards to protect areas where development may not be appropriate, but delivers swift, consistent and effective decisions in areas where development is appropriate.'

This is reflected by the planning policy cascade from national through to regional and local policies detailed below:

PPS 1: Delivering Sustainable Development (2005) and Planning and Climate Change, Supplement to PPS 1 (2007)

PPS 1 sets out the overarching planning policies on the delivery of sustainable development through the planning system. It explains that the Government is committed to protecting and enhancing the quality of the natural and historic environment, in both rural

and urban areas. A high level of protection should be given to most valued townscapes and landscapes (paragraph 17):

‘The Government is committed to protecting and enhancing the quality of the natural and historic environment, in both rural and urban areas. Planning policies should seek to protect and enhance quality, character and amenity value of the countryside and urban areas as a whole.’

At paragraph 18 it notes that: ‘the condition of our surroundings has a direct impact on the quality of life and the conservation and improvement of the natural and built environment brings social and economic benefit for local communities.’

Paragraph 19 requires planning policies and decisions to ‘be based on:

- up-to-date information on the environmental characteristics of the area;
- the potential impacts, positive as well as negative, on the environment of development proposals (whether direct, indirect, cumulative, long term or short term); and
- recognition of the limits of the environment to accept further development without irreversible damage.’

The section adds that planning authorities should seek to enhance the environment as part of development proposals and that significant adverse impacts on the environment should be avoided and alternative options which might reduce or eliminate those impacts pursued.

Paragraph 20 recognises the need to consider both the effects of climate change and the protection of the wider countryside. In particular:

- ‘- mitigation of the effects of, and adaptation to, climate change through the reduction of greenhouse gas emissions and the use of renewable energy; air quality and pollution; land contamination; the protection of groundwater from contamination; and noise and light pollution;
- the protection of the wider countryside and the impact of development on landscape quality; the conservation and enhancement of wildlife species and habitats and the promotion of biodiversity; the need to improve the built and natural environment in and around urban areas and rural settlements...’

At the same time it calls for a prudent use of natural resources and requires development plans to seek to promote and encourage, rather than restrict, the use of renewable resources (paragraph 22).

The supplement to PPS 1 – Planning and Climate Change (2007) – sets out how planning should contribute to reducing emissions and stabilising climate change and take into account the unavoidable consequences. It advises that it does not seek to assemble all national planning policy relevant or applicable to climate change and should be read alongside the national PPS series. Where there is any difference in emphasis on climate change between the policies in this PPS and others in the national series, this is intentional and this PPS takes precedence.

In relation to renewable and low carbon energy generation the supplement (at paragraphs 19 and 20) states:

- ‘19. In developing their core strategy and supporting local development documents, planning authorities should provide a framework that promotes and encourages renewable and low-carbon energy generation. Policies should be designed to promote and not restrict renewable and low-carbon energy and supporting infrastructure.
20. In particular, planning authorities should:
- not require applicants for energy development to demonstrate either the overall need for renewable energy and its distribution nor question the energy justification for why a proposal for such development must be sited in a particular location;
 - ensure any local approach to protecting landscape and townscape is consistent with PPS 22 and does not preclude the supply of any type of renewable energy other than in the most exceptional circumstances;
 - alongside any criteria-based policy developed in line with PPS 22, consider identifying areas suitable for renewable and low-carbon energy sources, and supporting infrastructure, where this would help secure the development of such sources, but in doing so take care to avoid stifling innovation including by rejecting proposals solely because they are outside areas identified for energy generation;
 - expect a proportion of the energy supply of new development to be secured from decentralised and renewable or low-carbon energy sources.’

PPS 7: Sustainable Development in Rural Areas (2004)

The key principle PPS 7 expresses is:

- ‘(i) Decisions on development proposals should be based on sustainable development principles, ensuring an integrated approach to the consideration of:
- social inclusion, recognising the needs of everyone;
 - effective protection and enhancement of the environment;
 - prudent use of natural resources; and
 - maintaining high and stable levels of economic growth and employment.’

The PPS requires regional spatial strategies (RSSs) to recognise the environmental, economic and social value of the countryside that is of national or, where appropriate, sub-regional significance. Policies in RSSs and LDDs (local development documents) should seek to maintain and enhance these values, so enabling the countryside to remain an important natural resource, contribute to national and regional prosperity and be enjoyed by all (paragraph 14).

At paragraph 15 it states that:

‘Planning authorities should continue to ensure that the quality and character of the wider countryside is protected and, where possible, enhanced. They should have particular

regard to any areas that have been given a statutory designation for their landscape, wildlife or historic qualities where greater priority should be given to restraint of potentially damaging development.'

Paragraph 16 goes on to state that:

'When preparing Local Development Documents and determining planning applications for development in the countryside, planning authorities should:

- (iv) provide for the sensitive exploitation of renewable energy sources in accordance with the policies set out in PPS 22; and
- (v) conserve specific features and sites of landscape, wildlife and historic or architectural value, in accordance with statutory designations.'

At paragraph 24 the PPS explains that the Government recognises and accepts that there are areas of landscape outside nationally designated areas that are particularly highly valued locally. It advises that these should be capable of being protected by carefully drafted criteria-based policies utilising tools such as landscape character assessments. In compiling LDDs where local designations are retained, such designations should be based on a formal and robust assessment of the qualities of the landscape concerned.

PPS 4: Planning for Sustainable Economic Growth (2009)

This PPS supersedes some of the provisions of PPS 7 which have now been cancelled. The relevant policy is EC6: Planning for Economic Development in Rural Areas which states at EC6.1 that:

'Local planning authorities should ensure that the countryside is protected for the sake of its intrinsic character and beauty, the diversity of its landscapes, heritage and wildlife, the wealth of its natural resources and to ensure it may be enjoyed by all.'

And at EC6.2:

'In rural areas, local planning authorities should:

- a. strictly control economic development in open countryside away from existing settlements, or outside areas allocated from development in development plans'

PPS 24: Planning and Noise

Paragraph 10 of PPG 24 indicates that the planning system should not place unjustifiable obstacles in the way of essential infrastructure development. It also refers to the need to prevent an unacceptable degree of disturbance. Paragraph 11 specifies that:

'Noise characteristics and levels can vary substantially according to their source and the type of activity involved. In the case of industrial development, for example, the character of the noise should be taken into account as well as its level. Sudden impulses, irregular noise or noise which contains a distinguishable continuous tone will require special consideration.'

PPS 5: Planning for the Historic Environment

PPS 5 seeks to protect built heritage assets such as conservation areas, listed buildings and scheduled ancient monuments and states that the benefits of renewable energy must be weighed against any harm to the significance of heritage assets.

PPS 22: Renewable Energy (2004)

The Government published a revised PPS on renewable energy in 2004, together with a companion guide which sets out practical advice on how policies for renewable energy can be implemented. These documents reinforce the overall regional role for renewable energy in helping to deliver national energy targets for energy generation and reductions in greenhouse gas emissions.

The PPS explains that it follows on from the Energy White Paper 'Our energy future – creating a low carbon economy' (2003) whose aim was to put the UK on the path to cut its carbon dioxide emissions by some 60% by 2050 with real progress by 2020.

The PPS sets out eight key principles to be followed by regional planning bodies and local planning authorities. In particular:

- Key principle (i) explains that renewable energy developments should be capable of being accommodated throughout England in locations where the technology is viable and environmental, economic, and social impacts can be addressed satisfactorily;
- Key principle (ii) explains that regional spatial strategies and local development documents should contain policies designed to promote and encourage, rather than restrict, the development of renewable energy resources. Regional planning bodies and local planning authorities should recognise the full range of renewable energy sources, their differing characteristics, locational requirements and the potential for exploiting them subject to appropriate environmental safeguards;
- Key principle (iii) explains that at the local level, planning authorities should set out the criteria that will be applied in assessing applications for planning permission for renewable energy projects;
- Key principle (iv) explains that the wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations and should be given significant weight in determining whether proposals should be granted planning permission; and
- Key principle (viii) requires development proposals to demonstrate any environmental, economic and social benefits as well as how any environmental and social impacts have been minimised through careful consideration of location, scale, design and other measures.

The PPS sets out the principles for regional targets, policies in regional spatial strategies and local development documents, locational considerations and a range of other considerations relating to scale, landscape and visual effects, noise, odour and types of renewable energy, eg biomass and energy crops, and wind turbines.

Paragraph 3 states that:

‘Targets should be expressed as the minimum amount of installed capacity for renewable energy in the region, expressed in megawatts...Targets should be reviewed on a regular basis and revised upwards (if they are met) subject to the region’s renewable energy resource potential and the capacity of the environment in the region for further renewable energy developments.’

At paragraph 15 the PPS states that local landscape and local nature conservation designations should not be used in themselves to refuse planning permission for renewable energy developments. Planning applications for renewable energy developments in such areas should be assessed against criteria-based policies set out in local development documents, including any criteria that are specific to the type of area concerned.

In paragraphs 19 to 21 the PPS gives guidance on the landscape and visual effects of renewable energy developments. In particular it states that these effects will vary on a case by case basis according to the type of development, its location and the landscape setting of the proposed development (paragraph 19); that of all renewable technologies, wind turbines are likely to have the greatest visual and landscape effects, but that these impacts may be temporary if decommissioning conditions are attached (paragraph 20); and that planning authorities should take account of the cumulative impact of wind generation projects in particular areas.

At paragraph 22 the PPS specifies that:

‘Local planning authorities should ensure that renewable energy developments have been located and designed in such a way to minimise increases in ambient noise levels.’

The Companion Guide to PPS 22

At paragraph 5.10 the Companion Guide sets out what planning authorities must assess for each project and thereby come to an objective view:

- the extent to which the project is in conformity with the development plan, in particular criteria-based policies and any ‘broad area’ policies in RSSs
- the extent to which the reasons for any area-based designations may be compromised
- the extent of any positive or negative impacts, and the means by which they may be mitigated, if negative
- the contribution towards meeting the regional target, but recognising that a small contribution cannot, in itself, be a reason for refusal of permission.

The Regional Spatial Strategy for Yorkshire and The Humber (2008)

The RSS at Section 2 (Spatial vision and core approach), in Table 2.1 (Spatial vision and headline outcomes), at outcome 7 says, ‘Environmental quality has been raised, resource demands from development minimised, and the region is responding proactively to the global and local effects of climate change’ and countryside quality and installed renewable energy capacity are quoted as two of the headline indicators for this outcome.

Policy YH1 (Overall approach and key spatial priorities) states at B that plans, strategies investment decisions and programmes should aim to:

- ‘6. Protect and enhance the region’s environmental resources, including areas of international and national importance, and the character and qualities of the Region’s coast and countryside including for economic and social development.’

The explanatory text accompanying the policy explains that a good quality environment is critical to the social, economic and environmental wellbeing of the region. It acknowledges that pressure on environmental assets and resources are likely to increase with the demands for growth (paragraph 2.9).

Policy YH2 (Climate change and resource use) sets out seven areas where plans, strategies, investment decisions and programmes should help meet the RSS target in relation to the reduction in greenhouse gas emissions, the seventh of which is increasing renewable energy capacity.

Policy YH3 (Working together) states that ‘plans, strategies, investment decisions and programmes should be based on:

A Effective collaboration between areas within the region, particularly to:

6. Achieve effective environmental management and enhancement and address climate change.’

In delivering the RSS’s core approach, paragraph 2.76 explains that ‘Change needs to be managed realistically and sensitively in the Region. The pace and degree of change must be handled in a way that is responsive to objectives such as urban regeneration, housing market renewal and rural renaissance and is reflective of local conditions, whilst ensuring the benefits of change and growth are delivered in a sustainable way as soon as possible.’ Table 2.2 (Delivering the core approach over 15-20 years) sets out how this change might be achieved through different policy approaches during early, mid and later years. In the area of the environment, the increased generation of renewable energy, mostly from wind turbines, is seen as being important, as is the protection of important landscapes and habitats. Policy ENV5 (Energy) states that ‘The region will maximise improvements to energy efficiency by increases in renewable energy capacity. Plans, strategies, investments, decisions and programmes should:

A reduce greenhouse gas emissions, improve energy efficiency and maximise the efficient use of power sources by:

- (1) requiring the orientation and layout of development to maximise passive solar heating;
- (2) ensuring that publicly funded housing and Yorkshire Forward supported developments meet high energy efficiency standards;
- (3) maximising the use of combined heat and power, particularly for developments within energy demands over 2 megawatts, and incorporating renewable sources of energy where possible;

- (4) ensuring that development takes advantage of community heating opportunities wherever they arise in the region, including at Immingham and near Selby;
- (5) providing for new efficient energy generation and transmission infrastructure in keeping with local amenity and areas of demand;
- (6) supporting the use of clean coal technologies and abatement measures;

B maximise renewable energy capacity by:

- (1) delivering at least the following regional and sub-regional targets for installed grid connected renewable energy capacity:

	2010	2021
Humber	124 megawatts	350 megawatts
North Yorkshire	209 megawatts	428 megawatts
South Yorkshire	47 megawatts	160 megawatts
West Yorkshire	88 megawatts	295 megawatts
Offshore	240 megawatts	630 megawatts
Total	708 megawatts	1862 megawatts

- (2) monitoring annually planning permissions and developments against the indicative local authority targets for 2010 and 2021 set out in Table 10.2 and taking action accordingly to ensure the regional and sub-regional targets are exceeded
- (3) promoting and securing greater use of decentralised and renewable or low carbon energy in new development, including through development plan documents (DPDs) setting ambitious but viable proportions of the energy supply for new developments to be required to come from such sources. In advance of local targets being set in DPDs, new developments of more than 10 dwellings or 1,000 square metres of non-residential floor space should secure at least 10% of their energy from decentralised and renewable or low-carbon sources, unless, having regard to the type of development involved and its design, this is not feasible or viable.'

Table 10.2 sets indicative local targets for installed grid-connected renewable energy in 2010 and 2021. For North Lincolnshire this is 54 megawatts and 112 megawatts respectively.

Policy ENV10 (Landscape) states that the 'region will safeguard and enhance landscapes that contribute to the distinctive character of Yorkshire and the Humber. Plans, strategies, investment decisions and programmes should safeguard and enhance certain identified landscapes and related assets of regional, sub-regional and local importance.'

Policy E7 (Rural Economy) states that 'Plans, strategies, investment decisions and programmes should help diversify and strengthen the rural economy by facilitating the development of rural industries, businesses and enterprises in a way that:...

5. Supports and protects an attractive and high quality rural environment.'

North Lincolnshire Local Plan

Policy DS21 (Renewable Energy) states that proposals for the generation of energy from renewable resources will be permitted provided that:

- (i) any detrimental effect on features and interests of acknowledged importance, including local character and amenity, is outweighed by environmental benefits; and
- (ii) proposals include details of associated developments including access roads and other ancillary buildings and their likely impact upon the environment.

Where appropriate, conditions will be imposed requiring the restoration of the site to its original condition or the implementation of an agreed scheme of after-use and restoration.

Policy DS1 (General Requirements) is applied to all development proposals. It requires a high standard of design in all developments irrespective of location. Proposals for poorly designed development will be refused. All proposals must be considered against several criteria. In the case of this proposal the criteria are considered to be:

- (i) The design and external appearance of the proposal should reflect or enhance the character, appearance and setting of the immediate area.
- (ii) The design and layout should respect, and where possible retain and/or enhance, the existing landform of the site.
- (iii) No unacceptable loss of amenity to neighbouring land uses should result in terms of noise, smell, fumes, dust or other nuisance, or through the effects of overlooking or overshadowing.
- (vi) There should not be an adverse effect on features of acknowledged importance on or surrounding the site, including species of plants and animals of nature conservation value (particularly species protected by Schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981), scheduled ancient monuments, archaeological remains, listed buildings and conservation areas, or trees and woodland covered by tree preservation orders.

Policy DS11 (Polluting Activities) states that planning permission for development will only be permitted where it can be demonstrated that the levels of potentially polluting noise do not create adverse environmental conditions likely to affect nearby developments and adjacent areas.

Policy RD2 sets out the council's overall development control policy for development within the open countryside. It aims to balance the needs and benefits of economic activity with maintaining and/or enhancing the quality of the countryside. It specifies that development in the open countryside will be strictly controlled and sets out six provisos:

- (a) the open countryside is the only appropriate location and development cannot reasonably be accommodated within defined development boundaries
- (b) the proposed development accords with the specific requirements set out in the relevant policies of this chapter and elsewhere in this local plan
- (c) the development would not be detrimental to the character or appearance of the open countryside or a nearby settlement in terms of siting, scale, massing, design and use of materials
- (d) the development would not be detrimental to residential amenity or highway safety
- (e) account is taken of whether the site is capable of being served by public transport
- (f) the development is sited to make the best use of existing and new landscaping.

Policy LC5 (Species Protection) covers the impact of development on badgers or species protected under Schedules 1, 5 or 8 of the Wildlife and Countryside Act 1981 (as amended).

Policy LC7 (Landscape Protection) states that where development is permitted within rural settlements or within the open countryside, special attention will be given to the protection of the scenic quality and distinctive local character of the landscape.

Development which does not respect the character of the local landscape will not be permitted.

Policy LC12 (Protection of Trees, Woodland and Hedgerows) requires all new development proposals, where possible, to ensure the retention of trees, woodland and hedgerows.

Supplementary Planning Guidance (SPG) 13: Wind Energy Development (March 2005)

As well as outlining national and regional policies and guidance, the SPG sets out local policies against which North Lincolnshire Council will assess proposals for electricity production by wind power in North Lincolnshire. It does so in WIND1 by referring to targets and locational and environmental criteria that were set out in Regional Policy Guidance (RPG) 12. It then refers to the particular local plan policy relating to renewable energy (DS21) and then sets out in more detail in WIND2 to WIND9 those issues it will have regard to (based on the RPG and PPS 22 criteria).

These are set out below:

WIND1 sets out the then RPG 12 targets for energy to be generated from renewable resources for the Humber sub-region of at least 146 megawatts for 2010. North Lincolnshire's target to meet its contribution from wind energy development was 40 megawatts for 2010 and a further 100 megawatts for 2021. These have been superseded by the RSS figures set out in Table 10.2. It then states that:

'Proposals for wind energy development to meet these targets must:

- (i) minimise the visual and physical impacts of wind energy developments on the surrounding area;

- (ii) minimise the cumulative impact on the area of other existing, and permitted wind developments as well as those which are the subject of submitted planning applications;
- (iii) minimise the impact of the proposed development on the landscape;
- (iv) minimise the ecological impact of any development.'

The policy states that the 'Council will review its 2010 target when met whilst having regard to progress elsewhere in Yorkshire and the Humber.'

WIND2 relates to the planning implications of a proposal and states that:

'The key issues that North Lincolnshire Council will assess in relation to planning applications for wind energy developments are:

- visual effects
- cumulative impact
- noise
- amenity impacts
- landscape impact
- nature conservation and ecology interests
- archaeology and the built environment'

The explanatory text provides more detail about each issue and provides a clarifying policy in relation to each one as follows:

WIND3: 'North Lincolnshire Council will consider the following matters when assessing the visual impact of wind energy proposals:

- distance from which it can be seen
- landscape characteristics
- siting and layout
- design of the turbine
- impact of ancillary elements
- potential after-use of wind farm site.'

WIND4: 'North Lincolnshire Council will consider the following matters when assessing the cumulative impact of wind energy proposals:

- the proximity of existing, and permitted wind energy developments

- the impact on the surrounding zone of visibility
- the impact of development ancillary to the development
- the nature, character and landscape of the location in which the proposal is sited
- the impact on nature conservation and ecology interests
- the impact of noise'

WIND5: 'In assessing the implications of noise from wind energy development, developers and the council should have regard to:

- proximity of settlements and buildings
- the framework for assessing noise set out in the ETSU report
- the topography and local environmental conditions surrounding the proposed development'

WIND6: 'In siting wind energy developments, developers should consider the following:

- minimising disturbance to residential amenity by means of noise, shadow flicker, visual and cumulative impacts
- how the proposed development will be accessed for construction, servicing and maintenance purposes and how any disturbance can be mitigated
- the impact on informal recreation sites and public rights of way, and
- liaising closely with local communities regarding the impact of the development'

WIND7: 'In assessing the landscape impacts of wind energy development, the council will consider the following matters:

- ability of the landscape to accommodate the development
- impact on areas of landscape protection and enhancement, and nature conservation importance.

Developers should also provide an assessment of their proposals against the council's approved Supplementary Planning Guidance on Landscape Character Assessment and Guidelines, and Countryside Design Summary.

Proposals for wind energy development must also comply with relevant landscape and conservation policies in the North Lincolnshire Local Plan.'

WIND8: 'In assessing the implications for ecology and nature conservation for wind energy development North Lincolnshire Council will assess the following issues:

- effect on designated sites for nature conservation
- effect on protected species of plants and animals

- effect on cited bird species from designated sites feeding or roosting in areas adjacent or inland
- effect on migratory routes for birds, especially large, less manoeuvrable birds such as swans and geese
- assessment of cumulative effects in relation to other wind farms and other developments
- effects on nesting birds, especially during construction
- adequacy of mitigation measures'

WIND9: 'Developers should consider the impact of their proposals for wind energy development, both during and after construction, on archaeology and cultural heritage, and the historic landscape, including designated conservation areas, scheduled ancient monuments and listed buildings, and other non-designated sites and remains.

Developers will need to demonstrate that the objectives of the designation of the area will not be compromised by the development, and that any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by the environmental, social and economic benefits.'

SPG 5a North Lincolnshire Countryside Design Summary and SPG 5b North Lincolnshire Landscape Character Assessment and Guidelines

Policies LC7 and SPG 13 are underpinned by the findings of a landscape assessment conducted by landscape architect consultants (Estell Warren) on behalf of the council. This assessment has been adopted by the council as SPG 5b.

CONSULTATIONS

Severn Trent: No objections or comments.

Yorkshire Water: Not within operational boundary.

NHS: No objections.

Highways Agency: Recommends a condition and include guidance.

Humberside Airport (East Midlands): No safeguarding objection. Wish to register their concern that the cumulative impact of turbine development could compromise the safe control of aircraft in this area.

Government Office for Yorkshire and Humber: No comments.

Ministry of Defence: No objection. Recommend a condition.

RSPB: Advises condition regarding monitoring for two years.

Natural England: Wish to see a survey/monitoring programme.

Shire Group of Internal Drainage Boards: Comments.

British Waterways: Is content with the application.

Environment Agency: No objection subject to a condition.

Health and Safety Executive (HSE): Have passed the information on to the inspector for the area who would be responsible for inspecting the construction of the wind farm.

Highways: Advise a condition (number 12).

Humberside Police: Request lights be fitted.

Humberside Fire Brigade: Make a general comment that both access for the Fire Brigade and water supplies for fire-fighting should be made available. No specific reference is made to this application being for a wind farm.

English Heritage: General observations.

Lincolnshire Wildlife Trust: Comment that some of the data is from 2004, and should be updated. They also have concerns about the bat data. Recommend conditions regarding monitoring.

PARISH AND TOWN COUNCILS

Burton-upon-Stather Parish Council: Object on the following grounds:

- '1. The proposed development is contrary to the policies contained in SPG 13 (Wind Energy Development) adopted in March 2005 as part of the North Lincolnshire Local Plan in so far as it fails to minimise the visual and physical impacts of the development on the surrounding area contrary to policies WIND1 (i), 2 and 3 and the impact of the development on the landscape contrary to policies WIND1 (ii), 2, 4 and 7. In particular the scheme fails to take into account the impact on the woodland to the east of the site on the escarpment.

The height of the turbines at 126 metres to the blade tip will dominate the landscape and the structures would have a detrimental impact on the character and appearance of the surrounding open countryside, contrary to the North Lincolnshire Council Special Planning Guidance 13 of November 2004 and Policy RD2 (Development in the Open Countryside) North Lincolnshire Local Plan. The turbines would be too prominent a feature on the surrounding landscape in terms of siting and scale.

Residents have calculated that the blades will be in line with Burton village and fear the visual impact of light flickering through the turbine blades, creating a strobe effect. There are also fears that ice could be shed from the blade tips.

There is great concern about the environmental impact of the turbines, particularly on birds such as bats, skylarks and marsh harriers. According to Cllr Bernard Regan, a similar project in Ireland resulted in 3000 bird kills in the first year and the site had to be dismantled. The wind farm cluster would be therefore contrary to SPG 13.

2. In accordance with policies WIND1 (ii), 2 and 4 of SPG 13, the proposed development would, in conjunction with existing and proposed wind farms in the

locality, result in an undesirable cumulative impact of turbines in a small geographical area.

Many residents expressed the fear that their properties would be devalued if the turbines were built, which would have a significant effect on the local economy. There appear to be approximately 153 wind turbines planned in and around this area, resulting in over concentration. It would be fairer if the raft of applications for wind turbines were considered in total so that no single area was saturated.

3. The proposed development is considered to be too close to the residential settlements of Burton upon Stather and Flixborough contrary to policies WIND1(i), 2, 5 and 6. Great concern is expressed by residents of these settlements about the proposals. The turbines will also be too close to Bridleway 304.

There is significant evidence that the turbines are noisy with annoying “whooshing” and drumming sounds and a hum generated by the turbines during operation. A paper has been written by Dr Amanda Harry M.B.Ch.B.P.G.Dip.ENT linking the low frequency noise of wind turbines to a complex disease known as vibroacoustic disease.

Local horse riders fear for the safety of horses, concerned that the animals might be spooked by the turbines.

4. As the target for renewable energy for the year 2021 contained in policy WIND1 of SPG 13 has now been reached, the residents believe that no further renewable energy projects should be granted permission in North Lincolnshire until a review of the policy has been carried out.
5. A resident of Linton Drive, Burton Upon Stather, has now advised that he has 2 step children who live within the village overlooking the proposed site for wind turbines and both are autistic. One of their many symptoms is that they suffer with severe migraine attacks with changes in light. A further resident advised he had recently moved his home from Immingham to Ridgewood Drive, Burton Upon Stather to escape the effect of wind turbines, only to suffer the same prospect of a wind turbine site affecting his quality of life. This particular resident suffers from epilepsy. These are only two instances where the health and wellbeing of residents will be directly affected by the proposed development and conflicts with policy DS21.

It is suggested the adverse effect of the proposed wind farm at Flixborough Grange on the character and views of the landscape and on residential amenity of several properties in Burton Upon Stather and Burton Stather should collectively outweigh the long-term environmental and economic benefits of the renewable energy scheme.’

Flixborough Parish Council: Object – unsightly in an agricultural area, reported noise from the blades will be intrusive, also possible problems with MOD and their radar.

PUBLICITY

Receipt of the application has been advertised in the press and a number of site notices posted around the application site. Nearby residential properties have been consulted by individual letter and as a result the council has received a considerable number of representations, the vast majority of which raise objections to the proposal. Each letter has

been read individually and following these opening paragraphs is a résumé of the broad headings under which the objections have been made.

Approximately, 405 letters of objection and five in favour of the wind farm have been received.

Some of the letters of objection are pro-forma style with a signature attached and some are letters and emails that emanate from the same family at the same address, so in this number there is an element of duplication. It has not been possible to itemise or quantify the amount of duplication.

Objections

- very serious adverse impact upon the health and wellbeing of two autistic boys who live in a property close to the proposed turbines
- adverse health impacts, migraines from strobe effects, epilepsy seizures may be triggered by flicker/strobing
- health impact on people with dyslexia
- too close to villages, should be buffer zones
- no-one will move to the village and it will slowly die
- effect upon Burton conservation area – views out of properties on High Street, should be 1000 metres from the conservation area
- extended industrialisation into the countryside
- power stations and power lines in view already, don't need any more eyesores
- how will it be guaranteed that they will be removed after 27 years?
- impact on bats
- consultation negligent to the point of insulting, no public display or consultation in Burton
- visual and landscape impacts, loss of amenity and cumulative impact, adverse impacts, landscape would become a 'wind farm landscape', public views spoiled
- the visual impact will be frightening and intimidating
- epilepsy caused by a brain tumour may be triggered by the turbines
- wind conditions may cause the turbines to catastrophically fail with debris landing large distances away
- there are more appropriate sites on industrial land, such as the steelworks
- the applicants are trying to rush the application through under the old 'Labour' planning system

- the landscape was designated as of high landscape value under policy LC10 – the policy may have gone but the landscape is still valuable, contrary to policy LC7, within the EIA Ridgewind accept that the impact will be significant and overbearing
- effect upon public views
- contrary to policies LC8, LC10, DS1, RD2(c), SPG 13
- where will the energy be distributed?
- too close to villages, contrary to SPG 13, the developer wishes to be able to re-site up to 50 metres nearer to villages
- loss of house values, Ridgewind should reimburse homeowners
- cumulative impact due to 153 turbines either in planning or permitted within 10 miles of the site, 45 turbines approved within North Lincolnshire
- the benefits as may be are insignificant as balanced against the loss of landscape and visual amenity
- would be looking up at turbines, would be overbearing, area is still – a place of beauty and tranquillity
- height of spindles in relation to houses – unprecedented situation – at same height as properties in Burton
- effect upon family member with epilepsy
- interference with TV and radio
- disruption to wildlife, area is protected under the Habitat Regulations 1994, large number of bird species and animals seen in area, near the Humber Estuary Special Protection Area, parts of the riverbank SSSI
- heavy traffic, businesses would not want to invest in this area
- proximity to school and nursery and effect on children's development, noise impact upon children at school, distraction to studying
- effect on users of the bridleway
- no details of mitigation for Robin Hood Airport
- danger to military aircraft following line of the Trent
- wildlife reports flawed
- flicker effect
- effects of icing, especially close to the bridleway, not addressed adequately
- no real attempt to harness the power of the tides

- turbines are only viable because of grants and subsidies
- targets on renewables have been met in North Lincolnshire for 2010 and 2021
- until there has been progress in other areas there should be no more wind farm development within North Lincolnshire
- the development would be on the Trent floodplain where its impact would be substantial
- Burton will be surrounded by three wind farms: Crowle, Saxby and Winterton
- safety for horse riders
- noise: the application relies on non-transparent and highly questionable baseline data and noise prediction modelling, inappropriate locations for noise data gathering, NLC should INSIST upon an impartial background noise survey, noise from construction should be controlled by condition, if approved there should be a condition penalising excessive aerodynamic modulation, cumulative noise impact, low frequency noise leading to sleep loss and stress, lack of example calculations, noise from Bagmoor can be heard in the village of Burton, the prevailing wind will carry noise to Burton, amplitude modulation
- wind turbines idle at peak times at Bagmoor
- full impact of noise and vibration due to objector's home and garden being just 20 metres below the hubs
- flood risk to switchgear house
- non-local companies (Luton and Germany) used for Ridgewind's other wind farms, even site security at Bagmoor is an outside company
- the visual impact of the structures is enormous – they will tower above all ridge top properties
- adverse impact upon tourism
- proximity of turbines to dwellings, should be 920 metres not 710 metres
- wind farms are OK but they should never be near human settlements
- the site is adjacent to the Glanford Power Station
- the local authority has a duty to care for Ross and Lewis Glathorne, the two autistic boys, concerns about their health led the inspector to dismiss the previous appeal
- what about other autistic children in the village and what about future children born with autism – don't they count?
- what about democracy and the overwhelming objection and opinion of local people?
- impact on the village if Kingsferry Wharf is successful in its application to supply aggregates and cement for the bases, problems on local roads

- may be further turbines on or near the site
- impact upon children at local school from shadow flicker, noise and ultra sound, European guidelines advise 2 kilometres separation, these would be within 1 kilometre
- lack of attempts to minimise the impact upon Burton and Flixborough
- villagers can hear the drone from Bagmoor
- radar operators mistaking aircraft for turbines and vice versa, the MOD is the biggest objector to wind farms, 'clutter' compromising safety
- reflection of the sun
- the Government has indicated targets to be revoked, do not need to raise targets
- the developer has proposed a scheme which will have more impact as it is moved closer and closer to the village
- the application remains unchanged
- the scheme would have the most serious detrimental impact upon the Glathorne children, it should not be morally possible
- please ensure little weight is given in planning balance to Ridgewind's false claims of economic benefit
- one of the few unspoilt natural areas around Scunthorpe, would have a catastrophic impact upon the natural rural aspect of the area
- the hill itself acts as an echo chamber, noise and turbulence would be accentuated
- wind farm is a misnomer, what is proposed is an industrial site
- impact upon families who have autistic children in the future, children with autism would not be able to live on Ridgewood Drive
- the two nearest turbines should be removed
- cumulative impact
- impact upon health – will hold North Lincolnshire Council responsible.
- views are currently pastoral
- an area of natural beauty would turn into a turbine landscape, would be a continuous industrial panorama
- family have a severely autistic grandchild who comes to stay, it would limit their use of outdoor space, already limited at Normanby Hall due to Bagmoor
- impact upon people enjoying their gardens

- residents can hear noise from the Trent and the speedway, which are further away than the proposed turbines
- there should be a Section 106 agreement, if approved, so benefits accrue to the community
- there is no guarantee that the turbines would be removed at end of 27 years
- the noise generated would be heard and felt, and can lead to vibroacoustic disease
- the nearest turbines would only be 700 metres from the dwellings on Ridgewood Drive, Burton
- the council should plan rather than just react to applications
- the Lincoln Edge and Trent valley are unique landscape features that should be protected, the area to the east was designated an Area of High Landscape Value
- violation of human rights
- substantial damages may be awarded due to loss of house values
- the EIA is deficient as there is no evidence of noise emissions from turbines
- 'wind generation region'
- ineffectiveness of wind – the answer is nuclear or clean coal
- the woods could be felled at any time – noise and visual impact
- if it is discovered that they do cause harm, will they be able to be pulled down?
- other countries are dismantling on-shore turbines and building at sea
- the distance of turbines from residential properties is stated by Ridgewind to be over 700 metres, this is disputed, roads in Burton are 65-70 AOD, the turbines would be at 80 metres, the upstairs of properties would be on the same level as the turbines, less atmosphere to dissipate the noise
- noise from turbines can be heard 7 miles away
- low frequency noise is used as a weapon
- the turbines would cause anger and frustration
- health impact upon children with health issues, including a child who has had heart operations
- spouse suffers with MS – very concerned about the effects
- a photograph with the turbines superimposed has been submitted to illustrate the impact
- the wind blows from the west so worst case scenario

- articles from newspapers referenced regarding the effect of wind turbines on autistic children
- a huge blot on our beautiful landscape
- birds and bats will fly west from the top of the ridge into the turbines, wildlife and birds in the adjacent SPA do not adapt well to turbine blades
- the noise survey was carried out in 2007 and was discredited at the public inquiry
- the turbines are equivalent to seven 40 metre high skyscrapers
- North Lincolnshire has met its targets for 2021, until progress is made in other areas of the country there should be no further wind farm development in North Lincolnshire, the intention of PPS 22 is that regional targets should be increased when the region has satisfied its target
- Scottish advice refers to 2 kilometres separation from cities, towns and villages
- raw noise data should be made available so an independent assessment can be made
- if the noise became unacceptable then what power is there to disable the wind farm?
- rather than the view by Ridgewind that the cumulative impact is ever diminishing, SPG 13 looks to offer increased protection as the number of turbines increase, with no respite, expect the council to avoid further blighting of our countryside
- marsh harriers and bitterns would be affected, the proposals would end any chance of them breeding
- within the area is a SSSI, SINC and SAC
- a video of shadowing has been submitted
- the AEAT report for the Government Office for Yorkshire and the Humber states that targets have greater value if they are owned and not imposed, this is core policy within SPG 13 and is not rescinded
- Flixborough is close to higher land and at least 50 metres below the village, the turbines will appear 'in your face' like the Bagmoor ones when seen from the A1077
- turbines are inefficient, electricity generation is only 25%

MP Andrew Percy has written to support objectors, stating that the council has a duty of care to the Glathorne children and that it is intended to scrap the Regional Spatial Strategy.

Support

- could provide significantly for the local area
- contracts for local companies
- significant finance securing jobs, consider this economic boost

- the project merits support with respect to the provision of green energy
- would provide over 9,000 homes with electricity
- the development will reduce harmful emissions and reduce the amount of finite resources used, the importance of securing indigenous energy must not be overlooked
- as long as swish noise is not too close, happy with the development
- given the semi-industrial backdrop, this location is ideal
- the development will have little impact upon Burton-upon-Stather

ASSESSMENT

Members should note that the developer has confirmed in writing that they will accept a condition which prevents the building of the nearest turbine to Burton which would give a distance of approximately 870 metres from the nearest dwelling in Burton to the nearest turbine.

As Members are aware, this application is accompanied by a full environmental impact assessment, a copy of which has been provided for or made available to all those people that have been consulted, whether they are statutory, non-statutory, third parties or members of the public. The environmental assessment is available in hard copy at the council's offices at Church Square House and also on the council's web site.

These proposals have been determined before: WF/2009/0573, which was refused permission; and WF/2009/0800, which was refused planning permission and dismissed at appeal by way of public inquiry.

The conclusion of the inspector's decision and the reason for dismissal of the appeal was:

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

The inspector's conclusion on the other main issues was:

'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.'

The determining issues in this case are:

- **whether the reason for dismissal of the previous refusal, determined at public inquiry, relating to the Glathorne family, has been overcome, and whether the objection relating to the impact upon the family living on Linton Rise, Burton carries material weight sufficient to refuse planning permission;**
- **whether the development fits national and local policy;**

- **whether the impact on the landscape and the visual impact of the development is outweighed by the benefits of providing renewable energy;**
- **whether the noise produced by the turbines is within acceptable limits according to the ETSU – 1996 guidance or can be mitigated by conditions; and**
- **whether any other issues, such as aviation, ecology, public rights of way, archaeology, cultural heritage or other issues of accepted importance, are harmed.**

The Glathorne family and the family at Linton Rise, Burton

WF/2008/0900 was refused permission by the Planning Committee and this decision was appealed by the developer. The appeal was determined by way of a public inquiry held at the Kingsway Centre, Scunthorpe in February and March 2010.

Evidence was presented by the council, the developer, BATS (Burton against Turbines) and Mr and Mrs Glathorne. The inspector ruled out all the evidence presented by the council and by BATS, but agreed with the evidence presented by Mr and Mrs Glathorne, that the impact upon their children would be so severe as to make the proposed development unacceptable. Evidence was presented that the children have autism spectrum disorder and that they are fixated by spinning objects, resulting in a serious impact in terms of their wellbeing. Evidence was given that the turbines at Bagmoor gave rise to problems for the children, and that turbines at the rear of the property would create a situation where turbines could be seen from the windows serving all the rooms which could be bedrooms for the boys. The turbines at Flixborough would only just project above the tops of the trees in Burton Wood in the summer, but the boys would see the blades spinning on all the turbines during the winter months when the trees have no leaves. The inspector felt this warranted dismissing the appeal.

The developer has now reached an agreement with the Glathorne family to provide mitigation if the turbines get permission and are built. This mitigation provides for alterations to the property and screen planting. If this fails to resolve the issue then the mitigation would facilitate the relocation of the family. The exact details are subject to a court order and will not be made public. Mr and Mrs Glathorne have made it clear that they do not object and are happy with the mitigation proposed. The person who was head of the department at North Lincolnshire Council which looks after autistic children (now retired) has confirmed that they have seen the details of the mitigation and are happy that the details are appropriate.

The reason for dismissal of the appeal is considered to have been overcome.

A family who live on Linton Rise have objected on the grounds that their two children have autism and would be affected in a similar way to the Glathorne children, and that they will be able to see several turbines fully.

However, despite being requested, no further evidence of any sort has been submitted and the objection is therefore unfounded and does not warrant refusal of the application.

It should be noted that another family have an autistic grandchild who regularly visits and who enjoys Burton Woods. However, as above, no corroborating evidence has been submitted. This objection would not justify refusal of the application.

Policy

The national policy framework cascades down into regional policy which sets clear targets for regions to produce energy by renewable sources within strict time parameters. In the latest Regional Spatial Strategy, which runs until 2026, the Yorkshire and Humber Plan sets challenging targets for the Humber region to achieve 124 megawatts by 2010 and 350 megawatts by 2021.

Additional policies interact with the principal policy thrust of national government and these are reported again in the policy section of this report.

At local level the North Lincolnshire Local Plan has supplementary planning guidance in the form of SPG 13 which includes a raft of policies against which wind turbine development needs to be considered. In terms of targets this document splits the targets into individual local authority targets and at Table 3 indicates that North Lincolnshire's target is 40 megawatts by 2010 and 100 megawatts by 2021.

In this regard it is important for Members to note that with the granting by the Secretary of State of the wind turbine development between Keadby and Crowle, together with the three turbines at Tween Bridge (which form part of a larger array of turbines in the adjoining Doncaster Metropolitan Council area), and taking account of the Bagmoor wind farm to the north-east of Scunthorpe, North Lincolnshire has approved within its boundaries the capacity to generate by wind energy considerably more than that 40 megawatt target set in SPG 13. Indeed the 2021 target is achieved also. In policy WIND1 in SPG 13 it is stated that the council will review its 2010 targets when met whilst having regard to progress elsewhere in Yorkshire and the Humber.

However, the RSS guidance relates to grid-connected renewable energy and the targets are: 2010 – 54 megawatts and 2021 – 112 megawatts. The current amount of grid-connected renewable energy in North Lincolnshire is 43.02 megawatts, which is below the 2010 target and less than half the 2021 target.

In any case, the issues of importance to note are that this local guidance has to be read in conjunction with national and regional guidance and in PPS 22, in respect of regional targets, at point 3, it says, 'Targets should be reviewed on a regular basis and revised upwards (if they are met) subject to the region's renewable energy resource potential and the capacity of the environment in the region for further renewable energy developments. The fact that a target has been reached should not be used in itself as a reason for refusing planning permission for further renewable energy projects.' Considering this statement of national policy, and in light of local policy in SPG 13, it is quite clear that this element of SPG 13 is exceedingly weak and the provisions of PPS 22, as detailed above within the quotation marks, is the correct procedure to adopt.

Additionally, the guidance relates to installed capacity, not potential sites, even if permission has been granted; therefore some of the potential sites should not be weighed in the equation at this stage.

By making reference to the policy section of this report it is clear that it is a primary concern of the UK to tackle climate change and reduce carbon emission levels to levels that will slow down the impacts of climate change.

Continuing with the local policy framework, included in the policy section is a summary of the policies contained in SPG 13 and each of those policies has to be considered against the proposal.

In conclusion, therefore, on the broad national policy there certainly is encouragement for the production of energy from renewable sources in order to reduce the harmful consequences of fossil fuel usage and to meet future demand for energy using diverse and secure supplies. This is encapsulated in modern national policies, some of which only received Royal Assent in late 2008 in the form of the Energy Act and the Climate Change Act.

PPS 22 makes it clear that even where targets exist, and are met, they should be revised upwards. The thrust behind PPS 22 is to encourage renewable energy and that remains the case.

Therefore it is considered that the proposals are in accordance with national and local policy and the application should be approved.

Landscape and visual impact

Landscape

The developer has confirmed in writing that they will accept a condition preventing the building of the nearest turbine to Burton. This will reduce the impact in terms of landscape, visual impact and the amenity of residents.

In the environmental assessment a brief description of the method of the assessment has been quoted. The assessment process has been based on the current published guidelines for landscape and visual assessment provided in the Guidelines for Landscape and Visual Assessment (2002) and the current published guidelines for character assessment provided in Landscape Character Assessment: Guidance for England and Scotland (2002). The assessment has been carried out in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 and takes into account advice in PPS 22 and its Companion Guide.

Furthermore the assessment has drawn on information provided within the local plans covering the study area which encompasses the North Lincolnshire Local Plan, the Beverley Borough Plan, the West Lindsey Local Plan First Review, the Boothferry Borough Local Plan and the Doncaster Urban District Plan. North Lincolnshire's SPG 13 relating to wind energy development and various landscape character assessments covering the study area have also been used, including the North Lincolnshire Landscape Character Assessment and Guidelines (1999). The study area is based on a 15 kilometre radius area from the outermost turbines of the proposal in all directions. This is why plans and guidance from neighbouring authorities has been interrogated.

In the environmental statement the three phases of the development are considered, that is the constructional phase, the operational phase and the decommissioning phase and the impacts on the landscape of each have been given due consideration.

The site itself is located on flat, low-lying arable land at an approximate level of 4 metres above Ordnance Datum. The River Trent runs immediately to the west of the site and a low ridge of land rises sharply immediately to the east of the site forming part of what is known locally as The Cliff. This low ridge begins to the east of the site and continues north in a

gentle curve rising to heights of approximately 67 metres above Ordnance Datum and eventually dissipating just north of Alkborough. The deciduous Burton Wood covers the ridge east of the site with Burton-upon-Stather village overlooking the ridge approximately 0.6 kilometre north-east of the site. Flixborough village is located approximately 0.9 kilometre south-east of the site.

Landscape designations

It should be noted that the turbine nearest to Burton (Turbine number 2) would be deleted by condition.

There are no national landscape designations within the 15 kilometre radius study area. However, there are areas where the landscape has protection policy, the most relevant one being the policy within the North Lincolnshire Local Plan at LC7. This policy does not have a specific designated area within the district but covers the entire district as a whole outside the large settlements. The general purpose of this designation is to protect the scenic quality and distinctive local character of rural settlements in the open countryside from development proposals which would not respect the character of the local landscape.

Turning now to the landscape character, the North Lincolnshire Landscape Character Assessment and Guidelines (1999) indicates that the area closest to the site is divided into two specific character areas: the Trent Levels (Humber Head Levels) and the Lincolnshire Edge (North Lincolnshire Edge with Coversands).

As a further layer of detail, each of these landscape character areas is then divided into a number of character types and described in more detail in that character assessment document. The environmental assessment goes on to consider the development and its impacts upon these character areas and character types as part of both a desk study and by carrying out field work assessing views into the application site from many viewpoints. The planning authority considers that the methodology adopted by the applicants in assessing landscape character is the correct method and satisfactorily assesses impacts.

Linked to and part of the landscape assessment is the visual analysis that has to be carried out of the turbines.

Indicative zones of visibility have been ascertained by using a computer-based intervisibility package to create a zone of theoretical visibility (ZTV).

Actual zones of visibility are not determined by topography alone, and the ZTV is based on topographical information only. No account in its preparation has been taken of the minor topographical features such as roads and rail embankments or the screening effects of vegetation and built structures. In reality the screening effects of local topographic and landscape features would fragment and reduce the extent of most of these zones of visibility and may also reduce the number of wind turbines visible from any one location. Therefore it must be appreciated that the ZTV tends to overemphasise visibility and the actual visibility from any one point is most accurately reflected in the viewpoint analysis. Accordingly a viewpoint analysis has been carried out on a selection of representative viewpoints to assess the likely magnitude of the effects of the seven turbines on the local landscape and visual amenity.

The very nature of the viewpoint analysis selects viewpoints which illustrate some of the most open and potentially significant views from within the study area. The viewpoints are also chosen to recognise locations of local and/or national value such as scenic viewpoints,

residential areas and major tourist routes and do not represent such locations where the proposed turbines will not be visible. Of the viewpoints assessed, a number were selected and considered representative of the main views and receptors in the study area and the applicants originally, in consultation with North Lincolnshire Council, agreed on these locations to be used in the volume of the environmental assessment that illustrates the photographs of existing and created photomontages and wireframes illustrating the predicted views.

It is clear from the information contained within the environmental statement that the wind turbines and the anemometry mast proposed on the site will become one of the defining characteristics of the local landscape. The turbines are large and will be visible from both near and far views and will have a large impact on visual amenity, particularly in the closer views of the wind farm. The assessment that needs to be made and the balance that has to be struck is would these structures, either as a single site or cumulatively, lead to unacceptable harm to both the visual amenity of the area or its landscape character.

The photomontages that have been produced from the agreed locations clearly show that visibility within the study area of 15 kilometres radius of the application site will be different when viewed from the west or east.

This is due to the fact that to the east of the site lies the rising ground of Burton Hills and Burton Wood and to the west of the site lies the flat open farmland of the Trent Levels. The magnitude of change that the wind farm exhibits ranges from substantial to slight with the overall level of significance of this change ranging from major to minor. What has to be concluded is whether or not, because of the magnitude of change and the overall significance, the character of the landscape or the visual amenity of the area would be so adversely impacted upon that it makes this development unacceptable for this reason alone. The area to the west of the site, which is predominantly flat in character, exhibits significant linear features within it constructed of the pylons and overhead transmission lines. Indeed the local power station at Keadby forms a significant feature in this open landscape. This area is in fact the area where the Secretary of State, in early 2008, confirmed the decision to grant permission for the construction of 34 wind turbines not dissimilar in size or appearance to those the subject of this application. The character of the landscape to the east of the application site is somewhat different. It consists of the urban area of Scunthorpe and then the rolling landscape running away east to the Lincoln Edge and further afield the Ancholme Valley. Viewed from the west, therefore, the wind farm will be visible against the backdrop of the deciduous woodland known as Burton Wood with the nacelle and blades visible above this woodland against the backdrop of mainly sky.

The maximum tower height of the turbines would be 80 metres with, on top of that, the nacelle and the blade of about 46 metres giving a total height of 126 metres to tip at maximum. The maximum height of the ridge at the top of Burton Wood at this point is about 67 metres. The woodland on top of this ridge is mainly deciduous and, whilst affording some screening of the turbine site from the village of Burton-upon-Stather, its effect would be less obvious in the autumn, winter and early spring.

From a purely visual perspective the most significant views of the turbines will be from the south and north of the site where the views from the north will be generally unobstructed but from the south will be with the tall structures and buildings of the Flixborough industrial estate in the foreground. Additionally, the cumulative impacts of the development considered against other approved developments need to be considered taking into account their location and scale. Not necessarily visible at the same time, depending on the

choice of viewpoint, the large 34 turbine site at Keadby can be viewed at the same time as the proposed development. Similarly, parts of the Bagmoor site are able to be viewed at the same time as the proposed site here at Flixborough Grange, particularly from the open farmland to the west of the application site.

There are a number of letters of objection which continue to raise the issue about visual disturbance from the proposed wind farm and proximity to residential properties in Burton upon Stather. This matter was a concern raised by members at previous Planning Committee meetings and remains a pertinent issue. The developers are aware of this issue and have proposed that one turbine be omitted from the overall scheme, should planning permission be granted. This would result in the nearest wind turbine being sited approximately 880 metres from the nearest residential property in Burton upon Stather. A condition will be imposed requesting that the turbine shown on the attached plan be omitted from the overall scheme. This will ensure that the visual impact of the scheme upon the residents of Burton upon Stather is reduced and the wind turbines are sited further away from residential properties.

In terms of the effects on landscape character, as has been said before, the wind turbines and met mast will become one of the defining characteristics of the site's landscape. None of the existing key characteristics of the landscape will be lost but the turbines will introduce tall moving structures which are not a characteristic of the current site landscape and as a result a significant change will occur. Therefore part of the Trent Levels character area will be changed to a limited extent significantly as a result of the proposal. Outside the site the landscape character of the local landscape will also be significantly changed. However, none of these significant changes to character would be limited to one particular character area and therefore their impact could be considered to be diluted. In terms of visual amenity the potential to affect the visual amenity of the receptors of the study area is high. Some residents within the north-west edges of Scunthorpe, with clear views of the turbines with the Flixborough industrial estate in the foreground, would experience a significant change. There would similarly be significant changes in the view for residents within parts of Flixborough, Burton-upon-Stather and Burton Stather with open clear views of the turbines and similarly residents within parts of Gunness, Luddington, Garthorpe, Adlingfleet and Amcotts on the western side of the application site would have significant changes in their views as a result of the proposed turbines.

Whilst the proposal would become a defining characteristic of the landscape of the site and immediate locality, wind turbines are a relatively recent addition to our environment and there is no consensus of opinion on the most appropriate types of landscape in which to site the various scales of wind energy development.

Landscape character is not a static picture but is ever evolving as a result of both man's influence and natural forces. There have been progressive changes to the character of this landscape over the last century as a result of changes in agricultural practices and other built developments such as housing and industrial developments. Indeed, we may see quite dramatic changes over the coming century as a result of climate change. Wind turbine developments are an open form of development, that is to say that whilst they are accepted as being highly visual structures they are open in that observers can see the landscape through the array of turbines and this is particularly relevant to small arrays of turbines such as are proposed here at Flixborough Grange. So, whilst the impact on the landscape and on the visual appearance and amenity of the area may be significant from many viewpoints, it is not considered to be unacceptably adverse and therefore on landscape and visual grounds, taking into account all relevant issues, survey work that has been carried out,

photomontage work and analysis of alternatives and options, there is no substantive reason to withhold permission for this wind farm development on landscape and visual grounds alone.

From a cumulative perspective, the additional impact on the landscape character and visual amenity of the area compared to that which the nearby approved Keadby wind farm will exhibit is considered to be additionally minimal and because of the limited number of turbines at the Bagmoor site that can be seen at the same time as the proposed turbines here at Flixborough Grange, the additional impact on the landscape and on visual amenity is considered also to be low. Therefore the additional changes to landscape character and views from a visual perspective that would cumulatively arise in considering the closest approved wind turbine sites are considered again not of such a significant nature to warrant resisting this proposal.

In conclusion, with regard to landscape, both on its own and cumulatively, all relevant information that has been submitted, both in the environmental statement and in supplementary information submitted giving more details in relation to the relationship of the turbines to the local topography, and particularly in relation to the settlement of Burton-upon-Stather, together with all other relevant information, facts and opinions that have been expressed, there are no reasons to substantiate a refusal of planning permission for this development on landscape or visual amenity grounds.

With regard to the inspector's deliberations on the issue of landscape and visual impact, the key passage in the decision notice is as follows:

- '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.'

Noise

It should be noted that the turbine nearest to Burton would be deleted by condition.

A section of the environmental impact assessment deals with noise and in particular assesses the noise potential of the wind farm against 'The assessment and rating of noise from wind farms' 1996 published by ETSU on behalf of the DTI. This document is the

industry standard document that is used against which all wind farms in the United Kingdom are assessed in respect of potential nuisance from noise.

In the light of this document assessments have been made by the council's experts on noise matters and whilst no objections are raised it is suggested a number of conditions be imposed.

The assessment criteria for dealing with noise and attendant issues for wind turbine developments in the UK are specific. They are from PPS 22 (Renewable Energy) and particular attention is paid to the ETSU-R-97 report, 'The assessment and rating of noise from wind farms' and cognisance must also be taken from the latest onshore wind energy planning conditions guidance note created by the Renewals Advisory Board and BERR (the Department for Business Enterprise and Regulatory Reform). The environmental assessment submitted with the application includes much information in the form of surveys that have been carried out locally at identified locations to assess background noise levels over the period of time advised by the ETSU guidance. Indeed, the whole assessment of noise contained within the environmental statement is based upon that guidance and the contents of PPS 22 and its companion guide.

The noise working group that produced the ETSU report considered that absolute noise limits, regardless of wind speeds, were not suited to wind energy schemes in the UK, and that it was more appropriate in the majority of cases to set noise limits relative to background noise. The background noise levels are to be measured over a range of wind speeds so the impact of turbine noise, which is also wind speed dependent, can be evaluated.

A methodology is provided for the measurement of background noise levels under various wind conditions. The report (ETSU) recommends that data which may be corrupted by extraneous noise sources, including periods when rain falls or when water courses have abnormally high flows, should be discarded. At all times the noise levels measured in the environment are to be correlated with wind speed measurements at the site at a reference height of 10 metres above ground. The exercise is carried out for 'quiet' daytime periods and night-time periods which are defined as follows:

- quiet daytime is from 6pm to 11pm on weekdays, 1pm to 11pm on Saturdays, and all day on Sundays;
- night-time is between 11pm and 7am daily;
- all other periods (weekdays and Saturday mornings) are defined as normal daytime when it would be expected that ambient noise levels must be somewhat elevated because of human activity, distant road traffic and natural noise sources.

The practice of controlling wind turbine noise by means of noise limits at the nearest noise sensitive properties is considered appropriate. Noise limits should be applied to external locations and should apply only to those areas frequently used for relaxation or activities for which a quiet environment is highly desirable. Noise limits should be set relative to the background noise at the nearest noise sensitive properties thus the limits reflect the variation in both turbine source noise and background noise with wind speed. According to ETSU and the Renewables Advisory Board of the Department for Business Enterprise and Regulatory Reform, separate noise limits should apply for daytime and night-time because during the night the emphasis should be on preventing sleep disturbance rather than

protecting external amenity. Absolute noise limits and margins above background should relate to the cumulative effect of all wind turbines in the area contributing to the noise received at the properties in question. Noise from the wind turbine or combination of turbines should be limited to 5 decibels above background for daytime and night-time remembering that the background level of each period may be different. The two nearest wind farms at Keadby and Bagmoor would have no cumulative impact with the subject site.

Providing the applicants, in preparing the environmental statement, accord with the provisions of ETSU and other relevant guidance in Government policy and guidance publications, there is no reason for this proposal to be treated any differently to that of any other wind farm and therefore appropriate planning conditions can deal with noise issues adequately.

If a turbine or a group of turbines singly or together exceed the noise limits as laid down by ETSU the local planning authority has the right, which is fully accepted by the applicants, to require the turbines to be turned off until such measures are taken that a remedy is sought. This remedy may be the removal of individual turbines from the site. In this case the applicants are prepared to accept conditions which require such action if nuisance from noise to nearby receptors is ever proven.

Similarly, as a result of consultation responses, low frequency noise and vibration have been mentioned as significant objections to wind farm development. In 2004 the DTI commissioned Hayes McKenzie to report on claims that infrasound or low frequency noise emitted by wind turbine generators were causing health effects. Hayes McKenzie reported to the DTI in May 2006. The report concluded that there is no evidence of health effects arising from infrasound or low frequency noise generated by wind turbines.

Following this report the Department for Communities and Local Government has written to all local planning authorities and the Planning Inspectorate to confirm that the advice in PPS 22 and its companion guide that ETSU-R-97 should be used for the assessment and rating of noise from wind farms should continue to be followed. In respect of vibration, the report 'Low frequency noise and vibration measurements at a modern wind farm' (ETSUW/13/00392/REP-1997) was produced to assess measured noise and vibration levels in relation to existing criteria and published data. At 100 metres from the nearest turbine a comparison with criteria for human exposure within buildings showed that measured vibration was a factor of 10 less than recommended. A similar comparison with recognised limits for avoiding structural damage showed that the measured velocities were a factor of 100 below recommended guidelines.

The report that Hayes McKenzie carried out and the DTI published in 2006 relating to low frequency noise went on to note that a phenomenon known as aerodynamic modulation (AM) was, in some isolated circumstances, occurring in ways not anticipated by ETSU.

Having taken the view that more work was required to determine whether or not AM is an issue that may require attention in the context of the assessment and rating advice in ETSU, the new Government commissioned Salford University to conduct further work. The objectives of this study were:

- to establish the levels and nature of the reported noise complaints received across the UK relating to noise issues from wind farms, both historic and current, and to determine whether AM is a significant effect; and

- to review and understand the level of knowledge/understanding that exists throughout the world on AM, and whether AM can be predicted.

The Salford University study has now been published and the study concludes that although AM cannot be fully predicted, the incidence of it occurring in the UK is low.

Based on the findings of the report, the then Government did not consider there to be a compelling case for further work into AM and did not carry out any further research.

Letters from objectors have been received stating that the environmental statement refers to noise gathering in wooded areas, and at times when rain fell, however the information submitted is acceptable and the environmental statement is still considered to be a sound document and the conditions recommended by Environmental Protection will protect the amenity of residential properties.

Therefore, because noise has been assessed using the correct methodology as spelled out in the ETSU guidance, together with other Government policy and guidance statements, the development is considered to be appropriate and because its results show that the guidance can be complied with and that the applicants are agreeable to accepting appropriate conditions which give the local planning authority an element of control thereby protecting the amenities of local residents and other receptors, there is no reason to withhold permission on the issue of noise.

With regard to noise, the inspector's view was as follows:

- '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".'

Aviation

No objections from any statutory bodies have been received. A condition would be imposed to require aviation lighting.

Ecology

The council's ecologist and Natural England do not object. There is no significant impact and an Appropriate Assessment is not required.

Public Rights of Way

Although no formal comments have been received from the British Horse Society to this resubmitted application a number of the letters of representation claim that the bridleway close to the site is too close to the turbines to be safe.

Referring again to the Companion Guide to PPS 22, where such matters are debated, at paragraph 56 it says, 'the British Horse Society, following internal consultations, has previously suggested a 200 metre exclusion zone around bridlepaths to avoid wind turbines frightening horses.' Whilst this could be deemed desirable, it is not a statutory requirement, and some negotiation could be undertaken if it is difficult to achieve this.

In the individual consultation response from the British Horse Society they previously suggested three times the maximum height of the turbine blade for any route used by horses as the minimum requirement.

The bridleway runs generally in a north-south direction at the foot of Burton Wood on land which is almost at the same level as the turbines. The four turbines closest to this bridleway are between 400 and 450 metres away. Taking the guidance in PPS 22 of 200 metres being the minimum distance it is well exceeded but considering the British Horse Society's consultation response, which is given without reference to any guidance, there is a marginal shortfall of between 50 and 80 metres.

Under the circumstances it has not been considered necessary to require the turbines to be located further away from the bridleway as the distance of the current design is considered acceptable.

Other matters

The potential for shadow flicker can be calculated and at paragraph 73 of the Companion Guide to PPS 22 this issue of shadow flicker and reflected light is addressed. Under certain combinations of geographical position and time of day the sun may pass behind the rotors of a wind turbine and cast a shadow over neighbouring properties. When the blades rotate the shadow flicks on and off. The effect is known as shadow flicker. It only occurs inside buildings where the flicker appears through a narrow window opening. The seasonal

duration of this effect can be calculated from the geometry of the machine and the latitude of the site. Although problems caused by shadow flicker are rare, applicants for planning permission for wind turbine installations should provide an analysis to quantify the effect. A single window in a single building is likely to be affected for a few minutes at certain times of the day during short periods of the year. The likelihood of this occurring, the duration and effect depends upon:

- the direction of the residence relative to the turbines
- the distance from the turbines
- the turbine hub height and the rotor diameter
- the time of year
- the proportion of daylight hours in which the turbines operate
- the frequency of bright sunshine and cloudless skies
- the prevailing wind direction

Only properties within 130 degrees either side of north relative to the turbines can be affected at these latitudes in the UK. Turbines do not cast long shadows on their southern side.

The further the observer is from the turbine, the less pronounced the effect will be. There are several reasons for this:

- there are fewer times when the sun is low enough to cast a long shadow;
- when the sun is low it is more likely to be obscured by either cloud on the horizon or intervening buildings and vegetation; and
- the centre of the rotor's shadow passes more quickly over the land reducing the duration of the effect.

At distance the blades do not cover the sun but only partly mask it, substantially weakening the shadow. This effect occurs first with the shadow from the blade tip, the tips being thinner in section than the rest of the blade. The shadows from the tips extend the furthest and so only a very weak effect is observed at distance from the turbines.

Shadow flicker can be mitigated by siting wind turbines at sufficient distance from residences likely to be affected. Flicker effects have been proven to occur only within 10 rotor diameters of a turbine. Therefore, if a turbine has 90 metre diameter blades, the potential shadow flicker effect could be felt up to 900 metres from a turbine.

Around 0.5 per cent of the population are epileptic and of these around 5 per cent are photosensitive. Of photosensitive epileptics, less than 5 per cent are sensitive to lowest frequencies of 2.5 to 3 hertz, the remainder are sensitive only to higher frequencies. The flicker caused by wind turbines is equal to the blade passing frequency. A fast-moving three-bladed machine will give rise to the highest levels of flicker frequency. These levels are well below 2 hertz. The new generation of wind turbines is known to operate at levels below 1 hertz.

Flicker can be controlled by a condition requiring turbine shut-down.

Turbines can also cause flashes of reflective light which can be visible for some distance. It is possible to ameliorate the flashing but it is not possible to eliminate it. Careful choice of blade colour and surface finish can help reduce the effect. Light grey, semi-matt finishes are often used for this.

The CO₂ savings are questioned by objectors. If wind power is compared to generation of electricity by coal, a higher saving is being made than if it is compared to power being produced by gas. If the comparison is made to nuclear or hydro-generated power the saving will be even smaller. Nevertheless, as outlined in the national policy section of this report, it is the UK's prerogative to encourage the production of electricity from renewable sources. Wind is one of those sources and therefore the savings made are incidental to the debate because it is the UK's intention to reduce our emissions to levels of former generations to slow down the process of global warming. Similarly, the level of electricity produced, whilst being small, looking at individual turbines, compared to the large fossil fuel-fed power stations, a start has to be made somewhere and wind energy is seen as being a major player in making that start of reducing CO₂ to slow down the process of global warming on an international scale.

A number of objectors refer to the distance from the turbines to residential properties and state that there should be a separation distance of 920 metres based on advice from AEAT. The full advice, when read in context, does not support this and instead states that 100 metres can be an acceptable distance **if** there is no unacceptable noise impact. However the developer has agreed to a condition omitting the nearest turbine to Burton. This would give a separation distance in excess of 800 metres. This is considered to be acceptable, and the objections are unfounded.

There are no substantive reasons to withhold consent for this development. It is in line with national, regional and local policy and is an appropriate site for a development of this type and of its proposed scale.

In his summing up, the inspector ruled that:

- '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 infrared (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 micrositing 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 [out] 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.'

Conclusion

The proposed scheme is of major significance for North Lincolnshire and will have impacts, particularly in terms of landscape and visual impact and the experience of people using roads, footpaths and bridleways in the wider area.

The impacts will, however, not be unacceptably harmful and a balance must be made between the harmful impacts of such schemes and the positive benefits of renewable energy which is a national priority.

In making a full and proper planning balance, the benefits of the proposed development, in terms of the significant level of power which would be produced, must be taken into account.

When Members determine the application they should keep the balancing of these factors at the front of the decision and give officers guidance on their thinking when the final decision is made.

RECOMMENDATION Grant permission subject to the following conditions:

1.

The development must be begun before the expiration of three years from the date of this permission.

Reason

To comply with section 91 of the Town and Country Planning Act 1990.

2.

This permission is for a period not exceeding 25 years from the date the development is first connected to the electricity grid, such date to be notified to the local planning authority not later than one month from the making of such connection.

Reason

Application has only been made for a 'life span' of 25 operational years.

3.

The development shall be for the construction of six wind turbines with associated tracks, hardstanding, anemometry mast, underground cables and switchgear house, and shall exclude the turbine which is shown as 'Turbine to be deleted from the application' on plan WF/2010/1242/1 attached to this planning permission.

Reason

In the interests of protecting the amenity of the residents of Burton-upon-Stather in accordance with policy DS1 of the North Lincolnshire Local Plan.

4.

Within 12 months of the end of the 25-year period pursuant to condition 2 above, all wind turbines, ancillary equipment and buildings shall be dismantled to below ground level (or as otherwise agreed in writing with the local planning authority) and removed from the site, and the land shall be restored in accordance with a decommissioning, restoration and aftercare scheme to be submitted for the approval of the local planning authority no later than 12 months prior to the expiry of the 25-year period referred to in condition 2 above. The decommissioning process shall proceed in accordance with the approved scheme unless the local planning authority gives its written consent to any variation.

Reason

Application has only been made for a 'life span' of 25 operational years.

5.

No development shall take place until details of the design and external appearance (including colour finishes) of all turbines and all other buildings and structures have been submitted to and approved in writing by the local planning authority. The development shall be carried out in accordance with the approved details and the colour finishes of the wind turbines shall not be changed without the consent in writing of the local planning authority.

Reason

In the interests of visual amenity in accordance with policy DS1 of the North Lincolnshire Local Plan.

6.

Notwithstanding the details submitted with the application, the centre of the tower of each wind turbine shall be sited within 50 metres of the location as shown in Figure 3 in the Environmental Assessment (Volume 3) unless the local planning authority gives written consent to any variation.

Reason

In order to allow some flexibility in foundation design/location.

7.

If any turbine ceases to be operational for a continuous period of 12 months, it shall be dismantled and removed from the site, and that part of the site shall be restored in accordance with details approved in writing in a scheme to be submitted to the local planning authority no later than 2 months after the expiration of the said period of 12 months.

Reason

In the interests of visual amenity.

8.

The wind turbines shall not be illuminated.

Reason

In the interests of visual amenity.

9.

The blades of all wind turbines shall rotate in the same direction.

Reason

In the interests of visual amenity.

10.

Prior to the commencement of the development, a scheme of investigation and alleviation of any electromagnetic interference to TV and radio reception, which may reasonably be attributable to the operation of the turbines hereby permitted, shall be submitted to and approved in writing by the local planning authority. The procedure in the approved scheme shall thereafter be implemented unless the local planning authority gives its written consent to any variation.

Reason

In order to ensure adequate mitigation of any impacts due to electromagnetic interference resulting from the turbines or their operation.

11.

Prior to the commencement of the development, a construction method statement shall be submitted to and approved in writing by the local planning authority. Such a scheme shall include details of all on-site construction, drainage, ecology mitigation, restoration/reinstatement work and timetables for all stages of the development. Specifically this method statement shall address the following works:

- public road works (widening/junction improvements/entrance works)
- site tracks
- watercourse crossings
- construction compounds
- crane hardstandings
- cable trenches
- foundation works
- substation and control building (including screening of substation with indigenous mix planting)
- anemometry masts
- pollution prevention and control plan
- cleaning of site entrances and the adjacent public highway
- post-construction restoration/reinstatement of the working areas
- the presence of an archaeological watching brief during soil stripping in the construction period
- site drainage plan
- use of box culverts and sediment control measures
- soil erosion control measures
- wheel-washing facilities.

Reason

To ensure best practices throughout the constructional phase of the development are used.

12.

Prior to the commencement of the development, a traffic management plan shall be prepared in consultation with the local highway authority and shall be submitted to and approved in writing by the local planning authority. Such plan shall include details of access routes for all vehicles carrying turbine parts and any alterations or improvements which may be required to the highway network along these routes, including advisory signs. During construction work all deliveries shall be undertaken in accordance with the approved traffic management plan unless the local planning authority gives its written consent to any variation.

Reason

In the interests of highway safety.

13.

No development shall take place until the applicants, or their agents or successors in title, have secured the implementation of the programme of archaeological work in accordance with the document 'Grange Wind Farm, North Lincolnshire, Written Scheme of Investigation for Archaeological Mitigation' prepared by Peter Cardwell, dated March 2009 (Report 28/4).

Reason

To comply with policy HE9 of the North Lincolnshire Local Plan because the site contains features of recognised archaeological importance.

14.

The archaeological mitigation strategies shall be carried out in accordance with the approved details and timings, subject to any variations agreed in writing by the local planning authority.

Reason

To comply with policy HE9 of the North Lincolnshire Local Plan because the site contains features of recognised archaeological importance.

15.

A copy of any analysis, reporting, publication or archiving required as part of the mitigation strategies shall be deposited at the North Lincolnshire Historic Environment Record within one year of the date of completion of the development hereby approved by this permission or such other period as may be agreed in writing by the local planning authority.

Reason

To comply with policy HE9 of the North Lincolnshire Local Plan because the site contains features of recognised archaeological importance.

16.

Prior to the commencement of the development hereby permitted, details of the make, model and sound power levels of the wind turbines to be erected shall be provided to and approved in writing by the local planning authority. The information provided shall be of adequate detail to allow proper comparison with the contents of the Environmental Statement.

Reason

To ensure that the turbines operate in accordance with the parameters set out in the Environmental Assessment and in accordance with ETSU-R-97.

17.

All cabling on the application site between the wind turbines and the site substation shall be installed underground.

Reason

In the interests of visual amenity.

18.

No development shall take place until a written scheme has been submitted to and approved in writing by the local planning authority setting out the protocol for the

assessment of shadow flicker in the event of any complaint, including remedial measures, and turbine shut-down where necessary. Operation of the turbines shall take place in accordance with the agreed protocol unless the local planning authority gives prior written consent to any variations.

Reason

In order to provide mitigation of the effects of shadow flicker, should they be evident to an unacceptable level.

19.

No development shall commence until appropriate survey and working methods have been agreed in writing with the local planning authority which will safeguard badgers, water voles and breeding birds prior to and during construction. The surveys will establish the breeding status of animals or birds at the time of the proposed construction and work may be delayed or rescheduled in order that animals or breeding birds are not disturbed. Site works shall be carried out in accordance with the working methods agreed. A designated member of the developer's staff shall be responsible to meet the requirements of this condition and carry them out as agreed.

Reason

To meet the requirements of policies LC5 and DS1 of the North Lincolnshire Local Plan and Planning Policy Statement 9.

20.

Appropriate surveys of protected species and appropriate protection of same shall be agreed in writing with the local planning authority prior to any works of decommissioning being commenced. The decommissioning shall be carried out in accordance with that agreement. The persons or body responsible for the decommissioning works shall designate a person or persons to ensure that all decommissioning work is undertaken in accordance with the terms of that agreement.

Reason

To meet the requirements of policies LC5 and DS1 of the North Lincolnshire Local Plan and Planning Policy Statement 9.

21.

Details of habitat enhancement, including the establishment of grassland strips, bird seed areas and restoration of hedgerows of suitable species, shall be submitted to and approved by the local planning authority in advance of the development. The work should be completed at the first available planting season after the development has commenced. Suitable establishment and maintenance methods should be included in the agreement and work should be carried out as agreed.

Reason

To further knowledge about the potential impact of wind farms upon nature conservation and to comply with Planning Policy Guidance Note 9.

22.

A monitoring programme for two years after construction of effects upon birds and bats shall be agreed in writing with the local planning authority. This survey shall be carried out as agreed and the information provided to the local planning authority.

Reason

To further knowledge about the potential impact of wind farms upon nature conservation and to comply with Planning Policy Guidance Note 9.

23.

The turbines shall be fitted with appropriate lighting in accordance with a scheme to be submitted to and approved in writing by the local planning authority.

Reason

In the interests of aviation safety.

24.

Development shall not commence until a surface water drainage scheme for the site, based on sustainable drainage principles and an assessment of the hydrological and hydro geological context of the development, has been submitted to and approved in writing by the local planning authority. The scheme shall subsequently be fully implemented in accordance with the approved details before electricity is first produced on site.

Reason

To prevent an increased risk of flooding and ensure future maintenance of the surface water drainage system and to comply with policy DS16 of the North Lincolnshire Local Plan.

25.

No development shall take place until a biodiversity management plan has been submitted to and approved in writing by the local planning authority. The management plan shall be carried out in complete accordance with the approved details and timings, and the approved features shall be retained thereafter, unless otherwise approved in writing by the local planning authority.

Reason

To provide landscaping and protect features of recognised nature conservation importance in accordance with policies DS1, LC5, LC6 and LC12 of the North Lincolnshire Local Plan.

26.

The development shall be carried out in complete accordance with the flood risk assessment dated October 2010, author H R Wallingford, unless otherwise agreed in writing by the local planning authority.

Reason

To reduce the risk and impact of flooding and to comply with policy DS16 of the North Lincolnshire Local Plan and PPS25.

27.

Access to the compound shall be adjacent to and not over bridleway 304 in accordance with details to be submitted to and approved in writing by the local planning authority, unless otherwise agreed in writing by the local planning authority.

Reason

To protect the public right of way.

28.

The rating level of noise emissions from the combined effects of the wind turbines (including the application of any penalty for tonality or amplitude modulation), when calculated in accordance with the attached Guidance Notes, shall not exceed the values set out in Tables 1 and 2 of the attached Guidance Notes.

Noise Limits for properties which lawfully exist or have planning permission for construction at the date of this consent, but are not listed in Tables 1 and 2, shall be those of the nearest location listed in these tables, unless otherwise stated by the local planning authority.

Reason

To ensure the turbines operate in accordance with the parameters set out in the Environmental Assessment and in accordance with ETSU-R-97, and to protect the amenity of residents in accordance with policy DS1 of the North Lincolnshire Local Plan.

29.

Prior to the commissioning of the wind turbines the wind farm operator shall submit a scheme for the measurement of noise emissions from the wind turbines to the local planning authority. This scheme shall provide for the measurement of background and specific noise source levels at those locations listed in Tables 1 and 2 of the attached Guidance Notes. Such measurements shall be undertaken in accordance with the procedure described in the attached Guidance Notes. This scheme shall be approved in writing by the local planning authority prior to its execution.

Except for the purposes of discharging this condition, the turbines shall not be permitted to commence operation to produce electricity until they are compliant with the noise limits stated in condition 28, including the application of any penalty for tonality or amplitude modulation.

Reason

To ensure the turbines operate in accordance with the parameters set out in the Environmental Assessment and in accordance with ETSU-R-97, and to protect the amenity of residents in accordance with policy DS1 of the North Lincolnshire Local Plan.

30.

Within 28 days from the receipt of a written request from the local planning authority, following a complaint to it, the wind farm operator shall, at its expense, employ an independent consultant, approved in writing by the local planning authority, to assess the level of noise emissions from the wind farm at the complainant's property following the procedures described in the attached Guidance Notes. If the result of this assessment shows that the noise levels in Tables 1 and 2 of the Guidance Notes are being or have been breached during the last 28 days that the turbines have been operating, then turbine operation shall be immediately suspended. A report of the assessment shall be provided in writing to the local planning authority within 56 days of the appointment of the independent consultant unless this period is extended by the local planning authority in writing.

Reason

To ensure the turbines operate in accordance with the parameters set out in the Environmental Assessment and in accordance with ETSU-R-97, and to protect the amenity of residents in accordance with policy DS1 of the North Lincolnshire Local Plan.

31.

Following the establishment of a breach of the noise limits in condition 28, the wind farm operator shall, within 28 days, submit a scheme to the local planning authority to mitigate the breach to prevent its future occurrence. This scheme shall include the timescales for the implementation of the mitigation works. Following the written approval of the scheme by the local planning authority the scheme shall be implemented forthwith. The operation of the turbines shall remain suspended, except for testing purposes as approved by the local planning authority, until such time as both written proof is submitted to the local planning authority that the wind farm is operating within the noise limits set out in condition 31 and written approval for the commencement of their operation has been given by the local planning authority.

Reason

To ensure the turbines operate in accordance with the parameters set out in the Environmental Assessment and in accordance with ETSU-R-97, and to protect the amenity of residents in accordance with policy DS1 of the North Lincolnshire Local Plan.

32.

Wind speed, wind direction and power generation data for each wind turbine shall be continuously logged and provided to the local planning authority at its request and in accordance with the attached Guidance Notes within 28 days of such request. The wind farm operator shall retain such data for a period of not less than 12 months.

Reason

To ensure the turbines operate in accordance with the parameters set out in the Environmental Assessment and in accordance with ETSU-R-97, and to protect the amenity of residents in accordance with policy DS1 of the North Lincolnshire Local Plan.

33.

No development shall commence until there has been submitted to the local planning authority details of a nominated representative for the development to act as a point of contact for local residents (in connection with conditions 28 to 32 and 34 to 38) together with the arrangements for notifying and approving any subsequent change in the nominated representative. The nominated representative shall have responsibility for dealing with any noise complaints made during the construction, operation and decommissioning of the wind farm and liaison with the local planning authority.

Reason

To ensure the turbines operate in accordance with the parameters set out in the Environmental Assessment and in accordance with ETSU-R-97, and to protect the amenity of residents in accordance with policy DS1 of the North Lincolnshire Local Plan.

34.

At the request of the local planning authority following the receipt of a complaint the wind farm operator shall, at its expense, employ an independent consultant, approved in writing by the local planning authority, to assess whether noise emissions at the complainant's dwelling are characterised by greater than expected amplitude modulation. In such circumstances the complainant(s) shall be provided with a switchable noise recording system by the independent consultant and shall initiate recordings of turbine noise at times when significant amplitude modulation is considered to occur. Amplitude modulation is the modulation of the level of broadband noise emitted by a turbine or turbines at blade passing

frequency. These will be deemed greater than expected if the following characteristics apply:

- (a) a change in the measured LAeq, 125 milliseconds turbine noise level of more than 3dB (represented as peak to trough difference in sound pressure levels each of more than 3dB) occurring within a 2 second period

and
- (b) the change identified in (a) above shall not occur less than five times in any one minute, provided the LAeq, 1 minute turbines sound pressure level for that minute is not below 28dB

and
- (c) the changes identified in (a) and (b) above shall not occur for fewer than six minutes in any hour

and
- (d) if, over a period of 28 days, the complainant fails to record five occurrences of amplitude modulation, as defined in (a), (b) and (c), then the existence of excessive amplitude modulation as a contributor to the noise complaint shall be excluded.

Noise emissions at the complainant's dwelling shall be measured not further than 35 metres from the relevant building, and not closer than within 3.5 metres of any reflective building or surface, or within 1.2 metres of the ground.

Reason

To ensure the turbines operate in accordance with the parameters set out in the Environmental Assessment and in accordance with ETSU-R-97, and to protect the amenity of residents in accordance with policy DS1 of the North Lincolnshire Local Plan.

35.

A penalty is to be applied if amplitude modulation occurs in accordance with condition 34. The penalty to be applied is 5dB. If the addition of this penalty results in noise levels exceeding those laid out in condition 28 then turbine operation shall be immediately suspended. Following the establishment of a breach of the noise limits in condition 28, the wind farm operator shall, within 28 days, submit a scheme to the local planning authority to mitigate the breach to prevent its future occurrence. This scheme shall include the timescales for the implementation of the mitigation works. Following the written approval of the scheme by the local planning authority the scheme shall be implemented forthwith. The operation of the turbines shall remain suspended, except for testing purposes as approved by the local planning authority, until such time as both written proof is submitted to the local planning authority that the wind farm is operating within the noise limits set out in condition 28 and written approval for the commencement of their operation has been given by the local planning authority.

The rating level at each wind speed is the arithmetic sum of the wind farm noise level, as determined from the best fit curve described in Note 2 of the attached Guidance Notes, and the penalty for greater than expected amplitude modulation.

Reason

To ensure the turbines operate in accordance with the parameters set out in the Environmental Assessment and in accordance with ETSU-R-97, and to protect the amenity of residents in accordance with policy DS1 of the North Lincolnshire Local Plan.

36.

Should a tonal penalty, according to Note 3 of the attached Guidance Notes, and penalty for greater than expected amplitude modulation, according to condition 35, apply the applicable penalty shall be the higher of the two.

Reason

To ensure the turbines operate in accordance with the parameters set out in the Environmental Assessment and in accordance with ETSU-R-97, and to protect the amenity of residents in accordance with policy DS1 of the North Lincolnshire Local Plan.

37.

Construction/decommissioning works, including deliveries to site, shall only be undertaken during the following hours:

Monday to Friday - 7.30am to 6pm; Saturday - 8am to 1pm

No construction/decommissioning works shall be undertaken on site outside of the above hours, or on Sundays or Public/Bank Holidays, without the prior written consent of the local planning authority.

Reason

To ensure the turbines operate in accordance with the parameters set out in the Environmental Assessment and in accordance with ETSU-R-97, and to protect the amenity of residents in accordance with policy DS1 of the North Lincolnshire Local Plan.

38.

Noise arising from construction/decommissioning works shall be limited to the following levels at the nearest sensitive receptor:

Period	Noise Level Limit
Daytime	(7am - 7pm) 65dB LAeq
Saturday	(7am - 1pm)
Evening	(7pm - 11pm) 55dB LAeq
Saturday	(1pm - 11pm)
Sunday	(7am - 11pm)
Night-time	(11pm - 7am) 45dB LAeq

(Measurements to be made in accordance with the procedural requirements of BS4142)

Reason

To ensure the turbines operate in accordance with the parameters set out in the Environmental Assessment and in accordance with ETSU-R-97, and to protect the amenity of residents in accordance with policy DS1 of the North Lincolnshire Local Plan.

39.

The development hereby permitted shall be carried out in accordance with the following approved plans: Figure numbers 3, 5, 8 and 9 within Volume 3 of the Environmental Statement.

Reason

For the avoidance of doubt and in the interests of proper planning.

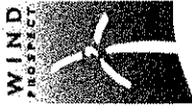


Figure 3
Grange
Wind Farm
 Site Design

Legend

- Planning Application Boundary
- Turbine Foundations, Swept Area and Crane Hardstandings
- Access Tracks
- Construction Compound
- Switchgear House
- Anemometry Mast

DEVELOPMENT CONTROL SECTION
 27 OCT 2010
 Notified To: PALEKSEVED

Scale 1:10,000 @ A3

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