

CORE STRATEGY

TOPIC PAPER

Wind Energy

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1.0 INTRODUCTION

- 1.1 The Government has a clear policy agenda across a number of areas of its responsibilities, including planning, to increase the amount of energy produced from all forms of renewable technology. The Council is aware of its role in helping to meet national aspirations in providing a greater level of energy production from renewable and low carbon sources. However, within this national framework, a balance needs to be struck with the local circumstances of East Lindsey in terms of its landscapes, communities and environment. Different forms of energy production have different types of impacts and the scale and location of proposals will be significant factors.

Overarching National Planning Statement for Energy (EN-1), Renewable Energy (EN-3) and Energy Networks Infrastructure (EN-5)

- 1.2 The above suite of documents set the context for consideration of energy related development at a national level, however, they are also considered helpful to Local Planning Authorities (LPAs) in their own assessments and they address a wide range of generic and technology specific impacts of energy development.
- 1.3 Across the documents, these impacts cover a range of issues including: air quality; biodiversity and geological conservation; Civil and Military Aviation and defence interests; coastal change; dust, odour, artificial light, smoke, steam and insect infestation; design; historic environment; landscape and visual impact; amenity; land use; noise and vibration; shadow flicker; separation distances; access; socio-economic factors; traffic and transport; availability of fuel sources; waste management; water quality and resources; and grid connection. EN-1 also reflects the urgency to increase generating capacity from a range of sources.

The National Planning Policy Framework (NPPF)

- 1.4 The National Planning Policy Framework (NPPF) was published in March 2012 and requires a positive strategy to promote low carbon and renewable energy, but recognises the need for policies to address potential adverse impact, including cumulative and visual impact of development. It also states that Councils should consider identifying suitable areas for renewable and low carbon energy sources, although applications outside of these areas may still be acceptable if they meet the same criteria used in identifying the policy areas. Encouraging the development of renewable energy forms part of one of the 12 core principles in the National Planning Policy Framework (NPPF) which was published in March 2012. Paragraph 93 of the NPPF goes on to say that supporting the delivery of renewable and low carbon energy and associated infrastructure is central to the economic, social and environmental dimensions of sustainable development.

Ministerial Statement June 2015

- 1.5 Subsequent to the publication of the NPPF, a Ministerial Statement on Wind Energy was released in June 2015. This sets out further considerations to be applied to wind energy development and states :

“When determining planning applications for wind energy development involving one or more wind turbines, local planning authorities should only grant planning permission if:

- the development site is in an area identified as suitable for wind energy development in a Local or Neighbourhood Plan; and
- following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing.

In applying these new considerations, suitable areas for wind energy development will need to have been allocated clearly in a Local or Neighbourhood Plan. Maps showing the wind resource as favourable to wind turbines, or similar, will not be sufficient. Whether a proposal has the backing of the affected local community is a planning judgement for the local planning authority.

Where a valid planning application for a wind energy development has already been submitted to a local planning authority and the development plan does not identify suitable sites, the following transitional provision applies. In such instances, local planning authorities can find the proposal acceptable if, following consultation, they are satisfied it has addressed the planning impacts identified by affected local communities and therefore has their backing.”

2.0 EAST LINDSEY LOCAL PLAN POLICY FRAMEWORK

- 2.1 Local policies should comply with National guidance set out in the relevant policy documents, while reflecting the particular circumstances in the local area. The District has a number of areas identified for nature conservation, including at an international level; historic environment; landscape quality; defence; water quality etc. The District also has a long history of interest in renewable energy proposals and a number of operational installations including three on-shore wind farms as well as a number of individual turbines and an off-shore wind farm off the coast at Skegness. All this means that East Lindsey is not a blank canvas, but has many considerations that have to be factored into its decision making across the spectrum of renewable energy, and especially with regard to wind energy.
- 2.2 Proposals for wind turbines vary significantly in their scale and size. Impacts will also vary considerably depending on the location, siting and layout of the proposal. The Council recognises that households and business may wish to develop small scale proposals. Although they still have to be assessed to ascertain their impact on the local area, the Council will take account of their scale and the positive contribution they can make to local communities in making its assessment. However, the greater interest in the District has historically been for commercial scale operations, generating power to the grid.
- 2.3 The Council acknowledges the Ministerial Statement on Wind Energy requires the identification of sites for wind energy and that maps showing the resource for wind in an areas will not be sufficient in meeting the expectations of the Government. However, Council has looked at this issue very carefully in formulating its planning policies. From its extensive experience of considering a number of applications for commercial wind energy in the District, and from a number of these applications being taken through the appeals process, it is clear that the selection of sites for such an energy source is a complex and detailed exercise. The impact of the proposal is greatly affected by the size and type of turbine as well as their layout in respect of their surroundings; the extent of

which can stretch a considerable distance from the site. The Council does not believe that, in advance of the level of detail provided with an application, it is in a position to determine whether or not a site is appropriate in principle. As well as the difficulty of assessing the landscape impact of a proposal without knowing the appearance (height, blade length, size of the hub etc), there are also the issues that require much more localised scrutiny; such as the presence of protected species within the site in boundaries or adjacent land and the location of and significance of historic assets and their setting.

2.4 Additionally, the Ministerial Statement refers to applications for one or more turbines and makes no reference to the size or generating capacity of that turbine. The difference in impact between an application for one small, say 15 metre, turbine on a farm or other business, as opposed to an application for several turbines of up to, or in excess of, 100 metres is significant. The acceptability of these very different proposals in terms of both environmental impacts and public perception is very different. The likely suitable sites for these different types of wind energy developments are not necessarily interchangeable. In setting search parameters and allocating areas for wind energy that are deemed suitable for large scale wind farms, to the exclusion of any other areas of the District, may mean that smaller scale development proposed elsewhere, which will contribute in its own localised way to the renewable and low carbon energy agenda, would not be forthcoming.

2.5 The Council has therefore resolved to proceed with a criteria based policy, so that all applications for wind energy can be judged on their own merits, taking into consideration the detailed aspects of each site and each proposal. However, in order to satisfy some of the requirements of the ministerial statement, this paper sets out the broad constraints that will affect the choice of site for wind energy, taking into account the requirements of legislation and the industry, and has mapped these constraints. Areas that are outside the mapped constraints should not be perceived as allocated, as there may be significant site specific issues when a particular site is selected. Also, as the impacts of a proposal can reach for many kilometres, its impact on matters such as landscape character or heritage assets may be such that a proposal is considered inappropriate. Similarly, areas identified as being within an area of constraint may still be suitable as some of the constraints (such as air traffic control) do not carry a blanket exclusion of wind turbines, it may be that through changes to design, scale, siting or technical aspects of a proposal, some of the constraints can be overcome or moderated; or the proposal may be of a small scale whereby the constraints do not apply.

3.0 THE CONSTRAINTS

3.1 There are a number of key considerations for a developer in bringing forward proposals for wind energy. These include availability of wind resource; availability of grid connection; access during construction; suitability of ground conditions; and willingness of landowners to enter into an agreement with the developer.

3.2 As the purpose of wind turbines is to harness the wind's energy, so the starting point will always be the availability of a wind resource. According to the NOABL database, at 45m above the ground all areas of the district have wind speeds of above 6m/s. At lower heights, the wind speed is still generally sufficient for the needs of smaller turbines. Some pocket within these 1km squares may have lower or higher average speeds as a result of localised factors, so some sites

may have better commercial potential, this also depends on the individual type of turbine selected by the operator. Overall there are no clear areas where wind resource is a constraining factor. Interest has been shown in development of wind turbines in most areas of the District over recent years thus reinforcing this. The type and size of turbines as well as local topography and landscape feature will all have a bearing on viability of proposals.

- 3.3 **Grid connection** - This has generally not been perceived as an issue with previous applications, although this will have to be investigated on a site by site basis. Again, proximity to access roads has not previously been an issue. Existing wind farms in the District are served off narrow rural lanes and, although some minor improvement has had to be made by the developer on occasions, this has not been sufficient to render the scheme unviable. The suitability of ground conditions for the construction of turbines in individual locations is not something that the Council can investigate in advance, not knowing the construction requirements of an individual proposal. Finally, is the interest of landowners in seeing their land developed. Unlike housing, where the Strategic Housing Land Availability Assessment ascertains that landowners are willing to bring their land forward before a site is allocated, there is no such information about wind energy. There are many factors that may influence a landowner's decision to enter into an agreement with a wind energy provider, which may change over time, and this is not something the Council can ascertain.
- 3.4 The constraints that are more likely to affect the suitability of a site in planning terms relate to the potential impact that a development will have. A sieving exercise of this nature will be carried out by developers when they are selecting sites for development and so there is general consensus over the types of issue that need to be considered. The constraints below have all been plotted on the accompanying map.
- 3.5 **Landscape designations** - While there are no designations that would lead to a blanket rejection of wind energy proposals there are some areas that are more sensitive to change and are less likely to be able to accommodate such proposals, especially on a commercial scale. The Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB) is the only such protected landscape in the East Midlands. As AONBs are protected for their landscape quality they, and their setting, are more sensitive to change than some other areas and so they will influence the decision of wind energy operators in selecting sites. The Lincolnshire Wolds AONB is shown as a dark green band running diagonally through the centre of the District. The Council commissioned a Landscape Character Assessment in 2009. This identified 13 character areas and includes an assessment of landscape character sensitivity in each area. The Donna Nook to Gibraltar Point Naturalistic Coast (K1) Character Area is the only part of the district identified as having high landscape character sensitivity; though a number of others are classified as moderate to high. Therefore, it is considered that this area, and its setting, should also be viewed as a constraint in considering wind turbines. The fact that Character Area K1 is closely aligned to the internationally designated sites for biodiversity along the coast is also another factor (see below) that raises the sensitivity of this part of the District. This area is shown as a khaki band along the northern third of the District's coastline and a smaller area to the south of the coastline.
- 3.6 **Historic Environment** - As with the landscape, there are no designated historic assets that completely preclude wind energy, however, they (and the

contribution that their setting makes to their significance) are important considerations in the suitability of sites for development. Designated Historic assets include listed buildings, conservation areas, scheduled ancient monument, registered parks and gardens and registered battlefields. There may be non-designated heritage assets that come to light, but these have not been included in the constraints mapping. The listed buildings are shown on the map in red, although many of them are obscured as they are very small, being only the size of a single property. The conservation areas are shown as a dark blue outline and are located at Alford, Binbrook, Burgh le Marsh, Horncastle, Hundleby, Louth, North Thoresby, Old Bolingbroke, Raithby by Spilsby, Revesby, South Willingham Spilsby, Tattershall, Thimbleby, Wainfleet, Woodhall Spa, and Wragby. Scheduled ancient monuments are shown as a red diagonal hatching. The Registered Parks and Gardens are shown in dark green and the Registered Battlefield at Winceby is shown in red.

3.7 **Biodiversity** - The District is home to nine sites protected for their international importance for biodiversity. These are all along the coast and include wetlands of international importance (Ramsar sites) which are protected for their bird life, which is a key consideration for wind energy development. There are also 46 Sites of Special Scientific Interest, four national nature reserves, a local nature reserve as well as a significant number of Lincolnshire Wildlife Trust Reserves and Local Wildlife Sites through out the District. These have been included on the mapping. The protected areas also the coast largely coincide with the khaki of the K1 Landscape Character Area, so are not seen in a different colour, however, to the south, around the Wainfleet and Friskney area, these can be seen beyond the Landscape Character Area as a pale yellow hatching. The other Sites of Special Scientific Interest are also shown in yellow and the remaining Sites of Nature Conservation Importance (that have not yet been assessed against Local Wildlife Site criteria) are in pale orange. Local Wildlife Sites are shown in pink. National Nature Reserves are shown in a brown diagonal hatch and Local Nature Reserves in a green diagonal hatch.

3.8 **Aviation, Air Traffic Control and Military Operations** - The District has a number of areas of constraint relating to the operations of the National Air Traffic Control Service (NATS) which have been included on the constraints mapping. They are shown as a blue dotted line and are principally a diagonal line going north west to south east across the district and a large arc in the north west of the district pertaining to Humberside Airport which lies just outside the Council's boundary. Local aerodrome operations are shown in a variety of notations. North Coates airfield is represented by a square pattern of dotted lines on the north east coastline. The mix of dotted lines of different colours inland from Mablethorpe reflects the consultation areas for Strubby Airfield, all of which will affect wind turbines. The blue circles on the coast near Skegness relate to Ingoldmells airfield and the yellow circle closeby is for Croft airfield. These areas do not necessarily preclude development, but there will require consultation with NATS or the respective airfield at an early stage. The other aviation related issue is the presence of the Royal Air Force and its operations within the District. The District is home to RAF Coningsby which is an operational airbase and has its own consultation zones around it. In addition, RAF Donna Nook, on the northern part of the coastline, is an RAF bombing range which has its own requirements in term of surrounding development, both in terms of its immediate operations and the approach of aircraft to use the facility. Around RAF Coningsby, in the south west of the District a variety of different consultation zones exist and are show in a variety of colours and these will require further investigation if a developer is wishing to propose wind turbines in this area. A

“bullseye” notation on the north eastern part of the coast denotes the safeguarding area for RAF Donna Nook, along with an associated pale green hatching. On the coast, a blue dotted circle at Mablethorpe shows the presence of the Humber Radio where height restrictions are imposed.

3.9 **Residential Properties** - There are no prescribed distances for the siting of wind turbines in relation to residential properties. Various distances are cited but there are no formal requirements. Clearly distances between small domestic turbines or those associated with a business will differ from the large commercial wind farms. It may be that a shorter or greater distance is more appropriate for an individual proposal. The map includes an indicative 750m buffer around residential properties in order to represent the spread of residential development and to show where the less populated parts of the District are. This appears in grey which creates an almost bubble effect on the map. Individual schemes will have to ascertain the appropriate distance in relation to noise and other impacts on neighbouring properties.

3.10 **Transport Network** - There are no formal separation distances between wind turbines and the road and rail network. However, the Government’s Planning Practice Guidance states that the Highways Agency will seek a minimum setback from the highway boundary of height + 50 metres or height x 1.5, whichever is the lesser. While the Council does not have any roads maintained by the Highways Agency, this would seem an appropriate starting point for constraints mapping and would seem appropriate for railway lines too. As the Council does not know the heights of any turbines prior to an application being received, the height chosen reflects the current largest schemes being submitted on-shore. Applications are currently for turbines of 115m to tip height, so this would indicate a distance of 165m. A 200m buffer has been added to the mapping, to accommodate any increase in turbine size, which appears as a black line around these road features. In practice, as is shown by wind farms currently operating in the District, most commercial wind farms will locate themselves further from a highway than the distance above.

N.B. the buffers around linear sites contain loops which is a technical issue of the software used by the Council. However, the buffers are otherwise accurate and useable for this indicative purpose.

3.11 **Energy Infrastructure** - The National Grid advise that a 1.5x hub height exclusion zone around pipelines carrying hazardous fluids. In practice this is going to have little effect in East Lindsey as, although there are a number of such pipelines, the small size of the exclusion zone (in the region of 105m) means that there will be sufficient opportunity to change the layout of sites to accommodate the needs of pipelines. These are shown as thick blue and black lines on the map. The existing wind and solar farms are plotted in a blue diagonal hatch. These do not prevent extension to existing farms or other operators being in close proximity (providing this does not interfere with the operation of another energy generator) however, cumulative impact will have to be assessed as this is likely to be a factor.

4.0 CONCLUSION

4.1 The attached map has been prepared in response to the ministerial statement of June 2015. It does not allocate sites for wind turbine development, as without details as to the scale, size, layout and type of turbines this is not felt appropriate. However, the map does set out the constraints that will shape the potential location of development, particularly pertinent to commercial scale operations. Areas that are outside the mapped constraints should not be

perceived as allocated, as there may be significant site specific issues when a particular site is selected. Similarly, areas identified as being within an area of constraint may still be suitable for wind turbine development as through changes to design, scale, siting or technical aspects of a proposal, some of the constraints can be overcome or moderated, or a development may be of such a small scale that not all the constraints apply.