

NORTH YORKSHIRE COUNTY COUNCIL

TRANSPORT, ECONOMY, ENVIRONMENT OVERVIEW & SCRUTINY

7 November 2012

RENEWABLE ENERGY POLICY: PROXIMITY OF DWELLINGS TO WINDFARMS

Report of the Corporate Director – Business and Environmental Services

1.0 PURPOSE OF REPORT

- 1.1 Overview & Scrutiny is asked to consider this draft report for Executive, as the basis for agreeing a policy position on Proximity of Dwellings to Windfarms across North Yorkshire.
- 1.2 Overview & Scrutiny has hitherto anticipated that the position may be employed by North Yorkshire districts in policy-making and determination of planning applications.
- 1.3 The report is a response to Executive, 22 May 2012, and contains the next steps that were discussed and agreed at that session.

2.0 BACKGROUND

2.1 On 22 May 2012 a report on Proximity of Homes to Wind Turbines was taken before Executive, and is appended here for reference. Executive, on 22 May, generally felt that the North Yorkshire position should be based on paragraph 2.1 within that report.

2.2 In addition the 22 May session identified the following as integral next steps:

- That tighter definitions were applied to ‘Homes’ and ‘Wind Turbines’;
- That North Yorkshire District Councils and National Park Authorities be consulted upon the proposed position, since that is the level at which the majority of renewable energy schemes are assessed county-wide¹;
- That the NYCC Transport, Economy and Environment Overview & Scrutiny Committee have the opportunity to comment upon this matter prior to its return to Executive.

¹ The County Council has statutory planning functions in respect of Minerals & Waste and Nationally Significant Infrastructure Projects for energy whose generation exceeds 50MW

2.3 It is understood that a presumption against commercial-scale onshore wind energy development exists in respect of National Parks and Areas of Outstanding Natural Beauty, and that this is enshrined within paragraph 115² of the *National Planning Policy Framework* (NPPF) as published in its final version by government on 27 March 2012.

3.0 DEFINITIONS

'Wind turbines'

3.1 The discussion for North Yorkshire has always been about 'commercial-scale windfarms'³ and 'large-scale wind turbines that are generally constructed as part of a windfarm'⁴ (hence more than one turbine). This position does not therefore cover 'small-scale' or individual wind turbines.

3.2 National Policy Statements have been devised by government to define policy in respect of energy infrastructure. The *National Policy Statement on Renewable Energy*⁵ (NPS EN-3) states at para 2.7.7 that 'commercial-scale wind turbines are large structures and can range from tip heights of 100m up to 150m'.

3.3 As regards capacity NPS EN-3 at para 2.7.3 states that 'onshore wind farm proposals are likely to involve turbines from around two megawatts (MW) of generating capacity and up to three and a half MW, but as technology develops this could increase'.

3.4 A precautionary approach for North Yorkshire would consequently define 'commercial' or 'large-scale' turbines to be deployed on windfarms as having a vertical tip height of at least 100m and a generating capacity of at least 2MW.

'Homes'

3.5 In planning terms the issue ought most reasonably be about 'residential amenity', i.e. the 'homes' in question must be more or less continuously occupied ('dwellings').

3.6 This definition should most reasonably constitute the basis for the North Yorkshire County Council position.

4.0 UPDATING THE EVIDENCE

4.1 The most significant policy and related developments since Executive last considered this matter in May 2012 are summarised in the paragraphs that follow.

² Great weight should be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to landscape and scenic beauty. The conservation of wildlife and cultural heritage are important considerations in all these areas, and should be given great weight in National Parks and the Broads.

³ Report for Executive, 22 May 2012, para 3.1

⁴ Report for TEEOSC, 4 April 2012, para 5.2

⁵ *National Policy Statement for Renewable Energy Infrastructure* (EN-3), DECC (2011)

4.2 In May 2012 the parliamentary Committee on Climate Change issued a report⁶ stating how local authorities have an ‘important role’ in supporting power sector decarbonisation through granting planning approval for onshore wind projects and ensuring that these are designed to benefit local communities. Such benefits would include government’s plans for local authorities to retain the business rates income from renewable energy projects (i.e. the planning authority within whose jurisdiction such schemes are located). Government intends to make its *Local Government Finance Bill* an Act so that relevant provisions can be brought into force in April 2013.

4.3 In June 2012 the government resisted parliamentary calls to impose minimum distance requirements between wind turbines and homes⁷. The Planning Minister stated: “Planning policy does not include an exclusion zone between wind turbines and dwellings. Rather, impacts should be assessed on a case-by-case basis taking into account the context, such as the local topography”. The final version of the NPPF continues to be supportive of renewable energy development, including onshore wind⁸.

4.4 In June 2012 Lincolnshire County Council voted⁹ that, amongst other criteria, no wind turbine should be erected within 2km of a single residential property, and no windfarms constructed within 10km of a village having more than 10 properties. It is unclear whether this vote has had any significant impact upon relevant district planning policies in Lincolnshire.

4.5 In July 2012 a working group for the Institute of Acoustics (IoA) published a discussion paper¹⁰ to finalise a *Good Practice Guide to the Application of ETSU-R-97* (see also below at 5.5). The authors stated that “it is the working group’s opinion there are difficulties in providing a prescriptive approach to determining fixed limits” (i.e. between turbines and dwellings).

4.6 In September 2012 solicitors acting for energy firm RWE npower renewables wrote to Milton Keynes Council to warn that the company may commence legal proceedings if the Council refuses to withdraw a new planning document on wind energy. Milton Keynes adopted a supplementary planning document (SPD) in July relating to MSD¹¹. RWE npower renewables state that the coalition government has rejected the idea of a separation distance between turbines and residential dwellings for England, and that there is no minimum separation distance in English planning law or guidance. The firm could also commence judicial review proceedings against the Council if the document is not withdrawn¹². It is not known whether this will have any effect upon the SPD.

⁶ *How Local Authorities can Reduce Emissions and Manage Climate Risk*, Committee on Climate Change, May 2012

⁷ *Commons Hansard*, 18 June 2012: column 695W

⁸ *National Planning Policy Framework*, Communities & Local Government (March 2012) paragraphs 96-98

⁹ *Lincolnshire County Council Executive Meeting*, 6 June 2012

¹⁰ <http://www.ioa.org.uk/pdf/ioa-discussion-document-july-2012.pdf> (para 3.3.8)

¹¹ For turbines of 100m the minimum distance requirement is 1000m ; at greater than 100m the policy is less clear

¹² <http://www.planningresource.co.uk/news/1149243/energy-firm-warns-councils-wind-turbine-policy>

District & National Park considerations

4.7 In the autumn of 2012 views were duly sought from the North Yorkshire Districts and National Parks¹³. In synthesis it was held that the proposed NYCC position:

- would be in conflict with the NPPF and could not be recommended as an approach to Members for inclusion in development plan documents;
- conflicted with local policy which deals with such applications on a case-by-case basis;
- is already contained within the EIA process for identifying impacts in respect of individual applications;
- would also replicate relevant SPDs or draft SPDs that local authorities already have;
- would have little weight and raise public expectations where there is local opposition to such developments; and
- could risk leaving no sites available across North Yorkshire for such development.

5.0 KEY DETERMINANTS: NOISE AND SHADOW FLICKER - SUMMARY

5.1 Whilst draft options for North Yorkshire have hitherto encompassed noise, shadow flicker and visual impacts it is in effect only the first two of these – noise and shadow flicker – that are sufficiently objective as quantifiable parameters to be included within this position.

5.2 It is deemed that visual impacts are too subjective to be reasonably covered by a NYCC position.

Noise

5.3 Noise impacts from wind turbines are typically related to Amplitude Modulation (AM) and low-frequency noise ('infrasound').

5.4 Those living near windfarms claim that the noise experienced disrupts their sleep, leading to stress and depression. The *British Medical Journal* published an article on wind turbine noise¹⁴, which stated: "shortly after wind turbines began to be erected close to housing, complaints emerged of adverse effects on health. Sleep disturbance was the main complaint. Such reports have been dismissed as being subjective and anecdotal, but experts contend that the quantity, consistency, and ubiquity of the complaints constitute evidence of a strong link between wind turbine noise, ill health, and disruption of sleep".

¹³ *North Yorkshire Development Plans Forum*, 7 September 2012 and *North Yorkshire Planning Officers' Group*, 21 September 2012 (paper circulated in spite of meeting being cancelled)

¹⁴ *Wind Turbine Noise*, Hanning, Christopher and Evans, Alun in *British Medical Journal* (8 March 2012)

5.5 ETSU-R-97 guidelines, *The Assessment and Rating of Noise from Windfarms* (1996) - current best practice - set out the noise levels within which a turbine must operate in order to protect public health. The IOA has been leading a working group on establishing Good Practice Guidance to accompany the 1996 guidelines (see 4.6 above) to be published in 2013.

5.6 The concern with blanket advisory guidance – e.g. a 2km separation distance – is that it would reduce the capacity for energy generation and cover areas where communities do not experience problems with noise. Where the issue is evident planning conditions controlling noise can be attached to consent, and permission can be refused if it is felt that noise will be a problem.

5.7 It is also important that the cumulative effect of all wind turbines in an area be taken into account in decision-making. This is especially important when windfarms are being planned in areas that already have turbines in operation.

Shadow flicker

5.8 Shadow flicker is especially associated with the winter months when the sun transits low in the sky. The means of determining the impact on a locality requires specific site orientation and turbine technology calculations that need to be made on a site-by-site basis. Shadow flicker can have an impact within 130 degrees either side of north and may occur within ten times the rotor diameter of a turbine.

5.9 Modern turbines tend to have rotor diameters that average 70-100m, which would imply a partial minimum separation distance for flicker of 700-1000m – but only in that zone between 230 and 130 degrees of north, going clockwise (the ‘potential shadow flicker zone’).

6.0 PROPOSAL

6.1 With reference to the above Overview & Scrutiny is requested to consider and comment upon the following as the basis for a position across the county to be put as soon as possible before Executive:

The North Yorkshire County Council policy position is predicated upon a two-kilometre minimum separation distance (MSD) between dwellings and windfarms which, to be consistent with national policy, nonetheless places the onus upon the scheme proposer to provide evidenced reasons for reducing MSD. The fundamental criteria within this position therefore are:

- That the scheme proposer, on a case-by-case basis, prove that MSD between dwellings and a windfarm may be reduced to a distance less than 2 kilometres;
- That reduced MSD nevertheless assures the integrity of residential amenity and public health;
- That the primary determinants of MSD be shadow flicker and noise, which are objective factors requiring independent assessment;

- That shadow flicker, unless negated by local topography, is known to be determinable according to turbine rotor-blade diameter;
- That noise has to be determined locally owing to place-specific, generation, and atmospheric variables.

6.2 It is important to remember that, as pointed out by North Yorkshire districts (4.7 above) the proposed position would have little or no weight in the planning process.

6.3 A further option for the NYCC policy position could be that any such planning application that caused County Council concern – on grounds relevant to County Council business - would merit a full and robust response, notably by the service(s) concerned. Such a proposal would obviously need to be discussed more deeply with potentially affected departments.

7.0 RECOMMENDATION

7.1 Overview & Scrutiny is asked to comment on this draft report to Executive, as a basis for agreeing a position on Proximity of Dwellings to Windfarms in North Yorkshire.

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Background Documents:

- Report to NYCC Executive 22 May 2012 (with accompanying report 4 April 2012) *Proximity of Homes to Wind Turbines*
- *National Planning Policy Framework* (CLG, March 2012) – for reference