Campaign to Protect Rural England
HAMPSHIRE

Campaign to Protect Rural England
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**PROPOSED WIND TURBINES AT WETHER DOWN, EAST MEON**

A CRITIQUE OF DESIGN, LOCATION AND PLANNING POLICY BY CPRE AND CPRE HAMPSHIRE

This critique concerns a proposal by Mr George Atkinson, landowner, in conjunction with a company known as Volkswind based in Germany to place two wind turbines on the top of the South Downs at Wether Down, close to what was HMS MERCURY, near East Meon. It is understood that a planning application may be made in the Summer of 2009.

National CPRE and CPRE Hampshire have extensive knowledge and experience in planning policy, development control, and windfarm applications across the country. CPRE has been a leading figure in the concept and development of national parks and Areas of Outstanding Natural Beauty (AONBs), and notably in the designation of the South Downs National Park

*CPRE Policy on wind turbines*

CPRE is supportive of the Government's policy to promote the growth of renewable energy, since climate change is a major threat to the global environment, and to the character and quality of England's countryside. We therefore recognise the need to exploit the potential of a range of renewable energy sources to meet Government targets.

While wind energy can make an important contribution to tackling climate change, CPRE believes that this should not come at the expense of the beauty, character and tranquillity of rural England. Intermittency and major visual impact limit its potential contribution. Their location needs to be carefully controlled. We assess wind turbine proposals for their potential impact on the landscape and strongly resist those whose impact we consider to be unacceptable. Cumulations of wind turbines in the same area are increasing their adverse impact on the landscape. CPRE now favours considerable greater emphasis on the development of windfarms offshore.

It is important that national parks and AONBs contribute to the generation of renewable energy, but this must be in ways that will not damage the landscape or enjoyment by the public of their special qualities. This requires using means of generation that are appropriate to the landscape. In the South Downs, for example, where there are considerable areas of largely unmanaged woodland, woodland

biomass schemes would be appropriate, as might anaerobic digesters or geothermal plants. The erection of wind turbines which affect nationally designated areas are unlikely to be acceptable to CPRE save in exceptional circumstances where the scale of development is small and appropriate to the local environment. CPRE will vigorously oppose proposals for large-scale[1] wind turbine development in National Parks and AONBs where these are judged to have an unacceptable impact on the landscape.

To help tackle climate change CPRE is also campaigning for significant reductions in energy consumption, especially through improved transport policies, better planning and design of new development, and greater energy efficiency in existing buildings.

Against this background, and based on established planning law, development plans and guidance, CPRE and CPRE Hampshire have very grave concerns about the suggestion that two very large wind turbines should be installed on top of Wether Down, East Meon.

*The Proposed Location*

The Volkwsind website[2] and leaflet distributed to local villages states that it is "proposing a windfarm of 2 turbines near the village of East Meon, close to the M3 and A3 road networks."

In fact the site (at about OS675196) is some 4 km from the A3 and some 22 km from the M3. To state that it is "close to" the M3 and A3 road networks is misleading.

No mention is made in the leaflet of the national landscape designation. The website does not mention the national park. In fact the site is situated almost in the centre (north/south) of the East Hampshire AONB and South Downs National Park (as announced on 31 March 2009) and some 22 km into the AONB / SDNP from the western end. It is hard to think of a more inappropriate location for any development that would have adverse impact on the landscape. Because of landscape impact, there are no large wind turbines in any national park, and it is hard to understand how this has come to be contemplated.

Nor is any mention made of the South Downs Way national trail, which is one of the most important and well used in the country and which is an essential element of recreational access to the South Downs National Park. Yet at least one of these turbines would be in very close proximity to the South Downs Way, which carries physical risks[3] as well as severe impacts on the recreational experience.

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[1] In view of the height and scale of the proposed wind turbines in the landscape, this windfarm cannot be considered a small-scale project

[2] http://work.2cs.com/volkswind/mercury/about-mercury.asp

[3] The maintenance manual for workers on the Vestas V90 – 3MW turbine recommends "technicians do not stay within a radius of 400 metres (1300 foot) from the turbines unless it is necessary" and recommends that "children do not stay by or play nearby the turbine". This is understood to be due to the risk of the turbine throwing a blade (which can be thrown up to 400m) or ice shards.

*The Design*

The Volkswind website and leaflet states that each turbine will have a rated power supply of 2.5 MW (megawatts) with hub heights of 80m (262 feet) and rotor diameters of 90m (295 feet), achieving a maximum height of 126.5m (415 feet).[4]

To put these figures in context, the summit of Wether Down close to the site location is 234 metres (767 feet) above sea level. The total height of St Paul's Cathedral is 108 metres (356 feet). Thus, this development would impose an industrial structure some 50 feet taller than St Paul's Cathedral on the summit of a hill in one of the most sensitive landscapes in England, enjoying the highest possible level of protection.

The Volkswind website and leaflet also states that the windfarm will generate 17,000MWh per year for the next 25 years, the equivalent of 3700 households per year, and would save up to approximately 7,400 tonnes of CO2.

These figures appear to be based on an annual load factor of about 38.8%[5], which considerably exceeds measured results in any onshore site in the United Kingdom, and even exceeds results from offshore (32.6%). Two 2.5 MW turbines would have theoretical capacity of 43,800 MWh[6] per year, but at an annual load factor of 23.76% would in practice generate 10407 MWh per year[7]. Average annual domestic consumption per home is 4700KWh (4.7MWh) per year, and so the number of homes supplied would be 2214[8]. Based on a figure of 0.37 tonne of CO2 saved for every MWh generated[9], which is the figure now used by BERR as confirmed in replies to questions in the House of Commons, 3850 tonnes of carbon dioxide would be saved each year[10].

This is much less than claimed by Volkswind. It is important when weighing the benefits of the scheme against the harm it would causes to the landscape that a realistic and accurate assessment of the benefits should be made.

As it is proposed that the electricity generated would be delivered to the national grid, there would be no direct supply to any local homes, or any other local benefit from the supply.

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[4] The average height of a high voltage electricity pylon is 50m (164 feet). The height of East Meon church is about 25m (82 feet). The tallest cathedral in the country, Salisbury Cathedral, is 123m (403 feet). The average house is about 7m (23 feet) high.

[5] The annual load factor is a consequence of the intermittence of wind supply to the turbines. There are no large wind turbines in Hampshire to provide an annual load factor. The measured annual load factor for the South West quoted in BERR Energy Trends September 2008 is 23.76%, and this figure has been used in the following calculations

[6] 2.5 x 2 x 24 hours x 365 days = 43800 Megawatt hours per year.

[7] 43800 x 23.76% = 10406.88 Megawatt hours. This is equivalent to 1/ 39,000 of the annual UK output.

[8] 10407 MWh divided by 4.7MWh per home = 2214 homes

[9] Volkswind appear to be using a figure of about 0.43 tonnes of CO2 saved per MWh, which complies with advice given to its members by the British Wind Energy Association (BWEA) (0.43t/MWh)

[10] 10407 MWh x 0.37 tonnes of CO2 saved per MWh = 3850 tonnes of CO2 saved.

*Landscape Impact*

Two wind turbines of the size envisaged on the second highest point in the western part of the South Downs would be extremely prominent, dwarfing the much smaller yet unsightly radio masts that are on Wether Down.

While some people may find wind turbines aesthetically pleasing, others do not. Being large industrial structures at a high point of the South Downs, they would stand highly prominent in what is a celebrated and nationally recognised as a landscape of the greatest natural beauty. As they move, they would draw the attention of the eye away from the special natural qualities of the landscape.

From Wether Down it is possible to see very long distances in all directions, and even more so at 126 metres above ground, which is the height of the proposed turbines. Whilst no Environmental Impact Assessment is yet available to allow detailed analysis of impact on views, it is obvious that this windfarm would be visible across large swathes of the South Downs National Park, and beyond. It would have a severely adverse impact on views all around, and notably on the exceptionally high quality views from the other high points, such as Butser Hill, Old Winchester Hill and Beacon Hill. It is very likely that the turbines would need to be lit at night with red lights to ensure aircraft safety.

The local and surrounding landscape is of classic chalk hills character and is very open. It is exactly the landscape type that is especially prized within the South Downs. Because of its openness and the height of the proposed turbines, no mitigation of landscape impact would be possible.

The impact on the South Downs Way, which adjoins the site, would be very severe. Again, Environmental Impact Assessment is necessary to establish the exact impacts, but structures of that height are bound to be visible for miles as the South Downs Way approaches from the north and south, becoming increasingly dominant until the closest point is reached. Yet the special quality of the South Downs Way is that it allows open, unobstructed views of open downland and views beyond. The markedly superior recreational experience, which is a special quality of a national park, would be seriously eroded over a long distance.

Wether Down lies in Character Type D2, the Downland Mosaic, within the South Downs Integrated Landscape Character Assessment. This Assessment identifies the Meon anticline, on which Wether Down is the second highest point, as a prominent ridgeline with a relative absence of overt human influence. This ridgeline is described as a key landscape sensitivity and its maintenance as an open and undeveloped skyline is regarded as a major land management consideration within the landscape character area. Of relevance too are the development considerations for this character area, which require the maintenance of a clear, undeveloped ridgeline and the avoidance of tall structures.

The Guidelines for the South Hampshire Downs landscape character area set out in the Hampshire Landscape Strategy refer especially to the need to maintain and enhance the spectacular panoramic views provided by the domed hilltops and

sweeping contours of the prominent ridge line as part of the distinctive sense of place within and around the South Downs.

The East Hampshire Landscape Character Assessment places Wether Down in Character Type 3A, the Clanfield Downland Mosaic. This assessment largely reflects that of the South Downs Integrated Landscape Character Assessment but adds that the skyline ridge is visible as a backdrop from a wide area to the north.

Then there is the question of how and where the turbines are to be connected to the National Grid. The Volkswind leaflet refers to "nearby grid connection" but we understand that in its presentations Volkswind envisaged that an underground cable would be laid to Midhurst, some 20 kilometres way. That would be a major operation in itself, which would have landscape impact. At a time when the advent of the South Downs National Park brings with it the prospect of placing existing high tension pylon-borne power lines underground, the alternative of an above-ground cable to whatever turns out to be the appropriate connection-point would be totally inappropriate.

It has been discovered in other locations that it is extremely difficult to transport blades of this size to what are quite remote rural locations, resulting in significant damage to rural roads, including removal of hedgerows and other rural features.

*Impact on Tranquillity*

Tranquillity is the quality of calm experienced in places with mainly natural features and activities, free from manmade ones and general disturbance. Tranquillity is accepted as being an important reason for visiting the countryside. Taking account of tranquillity adds an experiential perspective to landscape and natural beauty.

An extensive public consultation process conducted by CPRE and 2 universities established 44 factors affecting feeling of tranquillity, 21 positive and 23 negative. Seeing a natural landscape, seeing wide-open spaces, and hearing peace and quiet were found to be strong positive factors. Seeing wind turbines (even at a distance), hearing non-natural sounds, and seeing light pollution (night time) were found to be negative factors. No indication whatever was found that seeing wind turbines contributed positively to an experience of tranquillity, even amongst those who considered them attractive in design.

Loss of tranquillity is cumulative. So, the fact that other factors, such as seeing pylons or radio masts, detract from tranquillity does not diminish the adverse impact on tranquillity of adding wind turbines to the scene.

Tranquillity is mapped nationally by CPRE in 500m squares, based on the positive and negative factors present within the square or in the vicinity of the square. National parks score highly, and are an essential source of tranquillity for the well being of the nation. The area proposed for these turbines is shown on the CPRE maps as having the highest degree of tranquillity[11]. This is hardly surprising as the special qualities of the South Downs National Park in this location include a superb natural landscape,

[11] www.cpre.org.uk and search for Tranquillity Map

wide open views, and peace and quiet. To impose the visual and noise impacts of the proposed wind turbines would bring a devastating loss of tranquillity over a wide area of the new national park, to the detriment of the nation.

*Planning Policy*

The windfarm would be located within the East Hampshire AONB and the South Downs National Park, as announced.

The National Parks and Access to the Countryside Act 1949[12] sets out the statutory purposes of national parks, which are

(a) to conserve and enhance the natural beauty, wildlife and cultural heritage of the national park area[13], and that

(b) to promote opportunities for the understanding and enjoyment of the special qualities of the national park.

In carrying out these purposes there is a duty also to seek to foster the social and economic well being of local communities, although the statutory purposes must prevail in the event of conflict.

As the South Downs National Park boundary has now been announced, these statutory purposes must from now on be given great weight in planning decisions affecting the national park area[14].

These comments of CPRE are restricted to natural beauty aspects, especially landscape, as we do not have special expertise in wildlife or cultural heritage.

PPS22 deals with renewable energy developments. It states 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 satisfactorily addressed, and that the wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that should be given significant weight in determining whether proposals should be granted planning permission. Small-scale projects can provide a limited but valuable contribution to overall outputs of renewable energy and to meeting energy needs both locally and nationally, and planning authorities should not therefore reject planning applications simply because the level of output is small[15]. As general policies applying to all types of renewable energy (and not just wind turbines, as is often thought), CPRE supports these broad principles.

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[12] Section 5(1)

[13] The fact that some people find wind turbines aesthetically pleasing, or that some people support the generation of renewable energy, does not affect the duty on authorities to conserve and enhance natural beauty imposed by the statutory purposes

[14] See PPS7 paragraph 21 ("Nationally designated areas")

[15] So, small output from a "small-scale" project cannot (by itself) be a reason for refusal, but a project which is not "small-scale" can be refused on the basis of small output

However, as it must at law, PPS22 (Renewable Energy) supports the statutory purposes for national parks in providing[16] that in National Parks (and AONBs) planning permission should only be granted where it can be demonstrated:

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

It also states that small scale developments should be permitted within areas such as national parks and AONBs, provided there is no significant environmental detriment to the area concerned.

Within the South East Plan Regional Spatial Strategy, Hampshire and the Isle of Wight are (subject to any changes to be made by the Government) given a target of 115MW as a sub regional target for land based renewable energy[17], but the policy is not specific as to the means by which this target is to be reached, and it is envisaged the region's potential will most likely be realised through a mixture of developments of different types and scales, and integration of technologies into buildings.

CPRE accepts that across the South East Region onshore wind may have a place within this mixture. However, the South East Plan states that renewable energy development, particularly wind and biomass, should be located and designed to minimise adverse impacts on landscape, wildlife and amenity. Outside urban areas, priority should be given to development in less sensitive parts of countryside and coast, including on previously developed land and in major transport areas. Further, the location and design of all renewable energy proposals should be informed by landscape character assessment where available. Within areas of protected and sensitive landscapes, including AONBs or national parks, development should generally be of a small scale or community based. Proposals within or close to the boundaries of designated areas should demonstrate that development will not undermine the objectives that underpin the purposes of designation.[18]

The South East Plan does not yet have a specific policy for the South Downs National Park but the announcement of 31 March 2009 that a South Downs National Park will be designated is referred to, and it is stated that the purposes of designation should be a material consideration in the making of any planning decision which may significantly affect the Park[19]. By analogy, in relation to the New Forest National Park Policy it is stated[20] that high priority should be given to conserving and enhancing land within the New Forest National Park. This complies with the statutory purposes of a national park. In relation to AONBs, the Plan provides[21] that high priority should be given to conservation and enhancement of natural beauty in the region's AONBs, and planning decisions should have regard to their setting. Proposals for development should be considered in that context.

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[16] Paragraph 11
[17] Policy EN4
[18] Policy EN5
[19] Policy C2
[20] Policy C1
[21] Policy C3

Again, these principles are supported by the East Hampshire District Local Plan, Second Review, which states[22] that proposals for energy generation from renewable sources will be permitted if the development will not harm the special landscape quality of the AONB, or views into or out of it. The need to protect the attractive countryside of the District is stated to be of paramount importance.

The South Downs Management Plan (SDMP) and Planning Guidelines are not statutory development documents, but are approved and endorsed by all local planning authorities and County Councils within the East Hampshire and Sussex Downs AONBs. The South Downs National Park Authority, when it comes into being, is likely to adopt these documents initially as their own statutory Plans, as happened in the New Forest. Indeed they were designed for that purpose. The SDMP supports the same principles in its "policy response to celebrating and reinforcing landscape character and local distinctiveness" by adopting a policy[23] to ensure all land management and development control decisions conserve and enhance landscape character. The SDMP seeks to promote renewable energy schemes (especially micro technologies) to meet identified community needs where these can be accommodated without detriment to the landscape or cultural heritage[24]. It is expressly stated that it is anticipated that there will be no areas within the South Downs that can accommodate even so called "small scale" wind turbine developments without detriment to the natural beauty of the South Downs. The SDMP seeks to promote the use of wood heat and wood energy options linked to the sustainable management of woodlands.

The SDMP seeks also to ensure that no future developments affect the peace and dark night skies[25]. These turbines would cause noise adversely affecting the South Downs Way and other local rights of way, and red lighting on the turbines would add high point lighting to a dark area of the national park at night.

The approval on appeal[26] of a wind turbine at Glyndebourne may be prayed in aid by Volkswind as a favourable precedent. However, this was a considerably smaller single turbine (total height 70m as compared to 126.5m with a fully underground cable to the opera house site), of limited adverse effect on the landscape (mainly away to the north of the national park / AONB and not in open downland). The Inspector and Secretary of State described it as a unique enterprise in a unique location. The Inspector did not consider that his recommendation would set a precedent for other wind turbines in the South Downs.

Accordingly, planning policy mandates that any application for these two wind turbines should be refused if their erection would:

- fail to conserve and enhance the natural beauty of the national park area (as announced), or
- compromise the objectives of designation of the area (as a national park or AONB), or

[22] Saved Policy E2
[23] Policy P1.1 (Ambition 1 – An unspoilt landscape of the highest quality)
[24] Policy P5.14 (Ambition 5 – Reduced CO2 emissions)
[25] Policy P3.1 (Ambition3 – A tranquil landscape with extensive dark night skies)
[26] APP/P1425/V/07/1201986

- undermine the objectives that underpin the purpose of designation (as a national park or AONB), or
- harm the special quality of the landscape of the AONB

Equally, refusal of any application for these two wind turbines would be fully justified if their erection would:

- be in conflict with the duty to promote the opportunities for the understanding and enjoyment of the special qualities of the national park area (as announced)

*Conclusions*

For the reasons stated above on landscape impact, it is our considered view that this proposal for a windfarm at Wether Down would be highly detrimental to the natural beauty of the designated landscape, would severely compromise the objectives of designation and would severely harm the special quality of the landscape. For the same reasons it would have a severe adverse impact on the opportunities for the understanding and enjoyment of the special qualities of the area, especially the South Downs Way. It would therefore contravene all the purposes and principles set out above.

In view of the height and scale of the proposed wind turbines in the landscape, this windfarm cannot be considered a "small-scale" project, yet the output of electricity (as set out above) would be small. This, by itself would justify refusal. Further, the small output would to no degree outweigh the harm that it and its ancillary works would do to the landscape.

Given that the power generated by the turbines would go directly into the National Grid, it is difficult to see how there would be any benefit to the well being of the local community, either economically or socially. In any event this could not outweigh the severe harm to the landscape.

If allowed, this development would open the door to other windfarm development in the South Downs, the cumulative impact of which would potentially destroy the special qualities of the national park / AONBs and would have very serious implications for other national parks in England and Wales.

Accordingly, if an application should come forward, its refusal would be fully justified on planning policy grounds. We have studied many recommendations by Inspectors on appeal from refusal for windfarm proposals and are confident that such a refusal would be upheld on appeal.

To CPRE and CPRE Hampshire, this proposal is totally unacceptable, and would be most vigorously opposed.

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