

## **Potential Wind Generation at Weston Estate, Shropshire.**

The Trustees of the Weston Estate (as opposed to Weston Park house) have been asked to summarise the thinking that has led to their agreeing to explorative work being undertaken in respect of a possible wind farm on the estate; also in respect of their indication that, should a suitable site be agreed under the planning regulations, then they would be minded to permit it to be installed. There are two issues to consider. Firstly the need for wind generation, and the second the suitability of the proposed installation.

With regard to the first, there is now almost universal agreement that the present systems for generating the electricity needed in the UK are not sustainable. Firstly they are primarily based on fossil fuels which are major contributors to the accelerating rate of climate change; second many of them are ageing and have to be replaced.

Consideration has therefore to be given to how the UK is going to generate clean energy by new methods. Several technologies exist, and a number more are in developmental stages. There is significant opposition to all the existing technologies, the principal of which being wind, tidal/dams, and nuclear. [Solar is a competitor in many hot countries, but not yet in the UK; biofuel cannot produce a significant proportion of the required electricity supply without severely impacting on food prices at a time of growing world population, and other developing technologies are unable to provide bulk energy in the timescale required.]

Nuclear has many advantages such as the fact that generating sites can be highly concentrated and the fuel volumes are tiny thus minimising numbers of locations and transport. However many believe extremely strongly that nuclear is wrong in principle, owing to the long term toxic waste disposal question, the risk of leakage or explosion, and the general security risks associated with nuclear power. Tidal/dams remove all the concerns about nuclear, but have huge environmental impact over wide areas, affect transport and shipping, only generate at certain times of day or year, and those times vary according to the lunar cycle.

Both nuclear and tidal/dams also have the drawback that they are highly capital intensive and cannot deliver in the short term, as their lead-in times are measured in years, often a decade or more. Their costs have a habit of escalating wildly, and in the end it is the taxpayer who has to meet the bill as they would never get built without some form of government guarantee.

Nobody pretends that wind generation is perfect either. It only generates when the wind blows, and no one can predict that. It also involves installations on far more sites than either of its main competitors, as does solar overseas. However it does have the massive advantage of being able to be installed in 'bite sized' units, so that capacity can be built by normal commercial companies.

It has the second huge advantage that the technology is proven and its efficiency is being improved all the time. At present it still requires government support to make the electricity generated price competitive with fossil fuels. However many consider that fossil fuels are under priced given their environmental impact. Moreover recent years indicate that their availability may have peaked, and that any decline in the value of sterling will continue to increase the cost of the ever growing fraction of fossil fuels that has to be imported.

The advantages of wind power have resulted in the government deciding to endorse significant wind energy development, with more nuclear to follow, tidal possibly after that, and even some new fossil fuel generation to plug the short term gaps. The very fact that the government have found it necessary to encourage all four major systems, simply goes to demonstrate what a huge problem exists in the UK, both immediate and long term. A number of senior analysts are predicting that the UK will in any event suffer power shortages from 2017 – 2025 because of the delays in determining new generating capacity. Even if the environmental impact of fossil fuels is ignored, increasing reliance on Russia and others for the UK energy hardly seems a prudent strategy in the long term.

Given the government endorsement of wind power in principle, that leads to the consideration of the second aspect noted at the beginning – the suitability of a location on the Weston Estate.

Once wind generation is accepted in principle at national level, certain consequences automatically follow. It is not possible to generate major wind power in urban areas because of the effects of buildings and heat generation - a few sites will be installed, but they will be more symbolic than significant. It therefore follows that the vast majority of the wind installations will be in rural or coastal areas – floating turbines sited in deep water are not yet viable. Given that they are physically large, and that frequently nothing else comparable exists in the landscape, it is not surprising that they cause opposition.

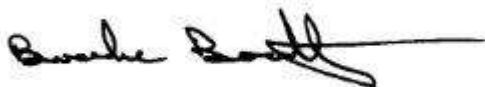
However the alternatives are no better – would anyone be happier for a nuclear station to be built near their homes, or large parts of their local area to be flooded including inundation of many rural homes and villages. The urban population, who are in a great majority, are not going to accept the lights going out for hours every day, as already happens in some countries. If urban man and woman understand that one thing the countryside can do for them is to generate their electricity in an environmentally clean manner, they are going to demand that the owners of the countryside allow it to happen. Even many of those who live in the countryside rely on jobs that are based in an urban location, so they too have an interest in ensuring the lights stay on. Meanwhile the social disruption that will be caused if global warming makes cities too hot to live in and rising sea levels force huge numbers to relocate, scarcely bears thinking about.

So wind installations are going to be made, and they are going to be made in the countryside, and in large numbers. The exact impact will vary from location to location, as did the installation of the high voltage pylons several decades ago, which caused exactly similar protests but which in the end everyone had to accept as necessary, and with which many of us have lived ever since without experiencing any real diminution of quality of life. It is simply not possible for rural communities all over Britain to say “We accept generating capacity is running out and we accept global warming is a threat, but we do not want nuclear on our patch, we do not want dams and thus flooding on our patch, and we do not want wind turbines either.”

So when the Trustees of the Weston Estate were approached by Wind Prospect we were aware that similar proposals are being made all over the country and we felt it would be wrong to simply reject it out of hand. The question for this proposal by Wind Prospect is “Does it meet the criteria set down in planning regulations as being appropriate?” We know that the planning considerations have been formulated to avoid excessive impacts on localities and their residents. If that proves to be the case in this instance, the proposal will be turned down. If this site is seen as appropriate, then it is right and proper that it is used to make its contribution to UK energy provision, and clean provision at that.

One final point concerning wind energy installations is that they are extremely easy to remove if no longer required. Should some technology emerge, as yet unknown or unproven, that allows cheap energy to be created cleanly, and in a less obtrusive manner, then we have no doubt the government of the day would rapidly remove any support for wind generated energy and the turbines would disappear as surely as trams and steam locomotives – except no doubt for a few ‘turbine preservation trusts’. Compared with dams/barrages, and even more so compared with nuclear, the impact of wind installations is a quantum level easier to reverse.

Hence we believe that we have taken the correct action in allowing Wind Prospect to explore the possibilities, and to make application for planning if they think those possibilities meet the criteria set down in law. We also believe that should any application be found to meet the planning criteria, then we should allow the development to take place.



Sir Brooke Boothby – for the Trustees of the Weston Estate