

Swaffham Wind Park Extension



Briefing Notes

Site details:

- The site is based within the Parish boundaries of Swaffham. It is the third Ecotricity development in the area, Swaffham I at the Ecotech Centre has been online since 1999, Swaffham II has been online since 2003.
- Swaffham Wind Park extension will be a 6 turbine layout generating approximately 31.63 GWh/yr (Based on existing data for Swaffham II).
- The Swaffham Wind Park extension will offset 31,474 tonnes of carbon dioxide per year.
- The Swaffham Wind Park extension will repay the 'carbon debt' (i.e. the energy used during their life cycle - from production to maintenance and decommissioning) in approximately 3-6 months.
- The Swaffham Wind Park extension will provide enough energy for between 5,612 and 9,585 homes.

What size will the turbines be?

- The Swaffham Wind Park extension turbines will be 160m in height to the blade tip.

Does the electricity generated come directly to my home?

- No, the turbines are connected to the National Grid. Any electricity you receive will come from your current electricity provider who will supply you from their own preferred sources.

Will they still move if there is no wind?

- The Swaffham Wind Park Extension turbines are designed for a start-up wind speed (i.e. the minimum necessary) of 2.5 m/s (5.6mph).

If the turbines are not moving will my electricity supply be affected?

- If there is no wind and the turbine stops turning, obviously no energy is being generated. However, as the turbine feeds directly on to the National Grid, which supplies your home, there will be no disruption to your service as the Grid is designed to deal with fluctuations in demand. The Grid system is designed to withstand the loss of the largest operational unit (power plant), which currently equals 1320 MW. Therefore slight gaps in generation of energy by the turbines should pose no problem.

Is there any danger if there are strong winds?

- The Swaffham Wind Park extension turbines are designed to shut down in the event of mean wind speeds of 22 m/s (49mph) in order to protect the internal and external structure of the turbine. This shut down speed will not include gusty conditions where the mean wind speed is less than this value.

What happens if one of the turbines breaks down?

- The Swaffham Wind Park extension turbines are all remotely controlled, in the event of any technical problems we will be notified immediately via SMS/email. Alternatively, there will be an information board on site which will have all relevant contact details for Ecotricity.

How long do the turbines last for?

- The turbines are designed to be operational for at least 25 years. Wind turbines can be decommissioned quickly and easily at the end of their operational life span (1-2 days per turbine is required) so that the land can be returned to its original use.

Who has been consulted during the planning process?

- Throughout the planning process we have consulted any stakeholders who may be significantly affected by the proposed development, this includes:

- | | | |
|--------------------------|------------------------------|-----------------|
| - The Environment Agency | - Breckland District Council | - Anglian Water |
| - Natural England | - Ofcom | - Crown Castle |
| - RSPB | - Orange | - CSS |
| - Norfolk County Council | - BT | |
| - Norfolk Wildlife Trust | - BBC | |

How noisy will the new development be?

- Potential noise impact from the existing turbines and proposed turbines as well as the construction and decommissioning stages have been assessed.

The assessment shows that the predicted noise levels at the nearest residential locations to the site meet the night time limit under all conditions and operational noise from this site is not considered to be significant.

Noise from construction and de-commissioning stages will not be significant at any residential locations.

Will the construction of 6 new turbines spoil the landscape?

- The proposed land site has been assessed as having a high capacity to accommodate a small scale (2-12 turbines) wind farm. It is outside any area designated by the LPA as an Area of Important Landscape Quality, and some 18km from the nearest Area of Outstanding Natural Beauty.

The proposed development is not expected to have significant impacts on any of the nearby Conservation Areas or their settings, on nearby Scheduled Ancient Monuments or their settings, or on nearby Listed Buildings and their settings. There are no Historic Landscapes in the vicinity of the application.

The iterative Environmental Impact Assessment process has resulted in the adoption of a reduced size of scheme, from twelve turbines to six, which is considered to be appropriate to the landscape character and represent the best balance between energy yield and public amenity.

I have heard about 'shadow flicker', will this effect me?

- Shadow flicker is regular or semi-regular variation in light intensity caused when a light source is intermittently interrupted by an obstruction.

Mitigating measures can be implemented. These range from retrofitting a house or building with effective blinds or shutters if these are absent, to, in extreme scenarios, shutting the turbine down during potential flicker periods.

Ecotricity will monitor the situation carefully and if local residents' homes are affected by shadow flicker, a specific technical expert will be brought in to assess the impact and determine what mitigation strategy would be best to rectify the issue.

How will the lorries gain access to the site during the construction phase?

- Access on to the proposed site at Swaffham is from Sporle Road, which is adopted public highway and is maintained by the County Council.

Due to the nature and quality of the access route, it is not perceived that any permanent improvements will be needed for the delivery of the turbine components.

The transportation will be programmed to avoid rush hour traffic within the area.

A survey undertaken by Ecotricity and Enercon, has confirmed that the proposed route along the A47 and Sporle Road will be viable for the delivery of all the turbine components, as all the roads have a width no less than 4.5m.

Why not build offshore?

- The main problem is that it costs more money. So that we can continue supplying our customers with energy at the same cost as their regional supplier we need to keep our installation costs to a minimum.

You have to lay cables under the sea from the nearest sub station to the turbine(s) which will be some distance from the shore. It is a lot more complex to lay foundations, and erect the towers due to using different machinery. When you are digging the foundations it is also using technology that is typically used in the oil industry, which you would then be indirectly supporting. Another large problem is the fact that if you have a problem with the turbine and it has shut down you may need to gain access, if there are rough seas then it can take days or weeks to get out there.

Closing date of application:

- Friday 8th June 2007

Where can I view copies of the application?

- Copies of the application will be on display at the Ecotech centre in Swaffham, and Swaffham Town Hall in a public exhibition until 9th March.

There will be a link on the Ecotricity website to the non-technical summary as well as photomontages and a PDF feedback form for comments.

Should people wish to buy a copy of the application charges will be as follows;

Paper copy £150

CD copy £35