

Galsworthy Wind Park



Briefing Notes

Site details:

- The site is based within the Parish Boundary of Buckland Brewer near Bideford, Devon.
- Galsworthy Wind Park will be a 4 turbine layout generating approximately 22.3 GWh/yr¹
- The Galsworthy Wind Park will offset at least 8,266 tonnes of carbon dioxide per year².
- The Galsworthy Wind Park 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 Galsworthy Wind Park will provide enough energy for approximately 6,770 homes³

What size will the turbines be?

- The Galsworthy Wind Park turbines will be 65m to the hub and 100m 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.

¹ This figure is based on the average performance (capacity factor) between 2002 and 2006 of UK onshore wind park performance deduced from the "onshore wind" "load factors on an unchanged configuration basis" in table 7.4 of the Digest of UK Energy Statistics 2007, from the Department of Business, Enterprise and Regulatory Reform (BERR, formerly DTI). Please note that the actual performance of the Galsworthy Wind Park may vary.

² This figure is based on an assumption that the proposal would offset only gas-fired electricity generation and is therefore conservative; the offset figure is derived from the BERR document Digest of UK Energy Statistics 2007, table 5C @ 370gCO₂/kWh for gas-fired generation. However, it should be noted that future changes in the power generating mix and fuel costs in the UK over the life of the wind farm means this figure may change over time.

³ This figure is based on a "medium" UK domestic electricity consumption of 3,300kWh/pa used by OFGEM and Energywatch. Future changes in average domestic electricity consumption means this figure may change over time.

Will they still move if there is no wind?

- The Galsworthy Wind Park 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 1,320 MW. Therefore slight gaps in generation of energy by the turbines will pose no problems.

Is there any danger if there are strong winds?

- The Galsworthy Wind Park 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 Galsworthy Wind Park 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 | - Torridge District Council | - RSPB |
| - Natural England | - Ofcom | - Crown Castle |
| - Orange | - T-Mobile | - CSS |
| - Devon County Council | - BBC | - Devon Wildlife Trust |
| - BT | | |

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 4 new turbines spoil the landscape?

•The proposed land site is outside any area designated by the LPA as an Area of Important Landscape Quality, and some 7km from the nearest Area of Outstanding Natural Beauty (Devon Heritage Coast).

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 within the site of the application.

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 Galsworthy is from the minor road that runs between Stibb cross and Collingsdown Cross.

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, although there will be a slight widening of the existing farm access point.

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

A survey undertaken by **ecotricity** and Enercon, has confirmed that all the roads along the proposed route will be viable for the delivery of all the turbine components, as all the roads have a width no less than 4m.

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 factor is that if you have a problem with the turbine and it has to be shut down then you may need to gain access, if there are rough seas then it can take days or weeks to get out there.

Where can I view copies of the application?

• Copies of the application will be on display at Torridge District Council, Riverbank, Bideford for a 16 week period after submission.

• 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