

Scottish Badgers - Wind Farms – Policy Statement

There are a large number of planning applications in the pipeline for wind farms to be built in many parts of Scotland. In principal Scottish Badgers is not opposed to the building of wind farms as a means of producing renewable energy. There are a number of measures which we would propose as a basis for our advice to developers, planners and in some cases at Public Enquiries. Needless to say the rules that apply to any development still apply to wind farms and licensing procedures will still be followed. There are however some unique circumstances associated with wind farms and these need to be addressed and it is our best practice advice that no turbine should be sited closer than 500 metres from a badger sett.

The distance from a turbine tower to the entrance of a main sett can currently be as little as 30 metres although in some instances this has been recognised as being too close and a 50 metre stand off has been agreed. There is however the remote possibility that a turbine could collapse and fall onto a badger sett. It has to be stated that it is extremely unlikely but never the less is possible. The Highways Authority and Transport Scotland have recognised that there is a remote possibility that a tower could fall and recommend in Planning Policy Statement 22 *“Although a wind turbine erected in accordance with best engineering practice should be a stable structure, it may be advisable to achieve a set back from roads and railways of at least fall distance (Height measured to blade tip) to achieve maximum safety.”* Presumably this is to prevent road/rail accidents in the remote instance that a tower should fall over. There are recorded events involving structural failure of the turbine. From the data obtained, this is the third most common accident cause, with 60 instances found. “Structural failure” is assumed to be major component failure under conditions which components should be designed to withstand. This mainly concerns storm damage to turbines and tower collapse. However, poor quality control, lack of maintenance and component failure can also be responsible. While structural failure is far more damaging (and more expensive) than blade failure, the accident consequences and risks to human health are most likely lower, as risks are confined to within a relatively short distance from the turbine. This bolsters our case for our request for a minimum standoff of 30 metres plus tower height. There has been a sharp rise in structural failures in the latter part of 2007 continuing into 2008. We too are looking at the worst scenario and advise planning for what are often called “100 year events” therefore it is our advice that a turbine tower should be placed no nearer than our best practice guideline but in any case no nearer than the height of the tower (height measured to blade tip) plus thirty metres to prevent damage to a sett in the unlikely event that a turbine tower should topple over.

There are other circumstances that might cause damage to badgers setts during the operation of the wind farm and a much more likely event is the failure of a blade. By far the biggest number of incidents found was due to blade failure. “Blade failure” can arise for a number of reasons and results in either whole blades or pieces of blade being thrown from the turbine. A total of 139 separate incidences were found. Pieces



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of blade are documented as travelling over 400m, typically from much smaller turbines than those proposed for use today. In Germany, blade pieces have gone through the roofs and walls of nearby buildings. However given that there is documentary proof that blade failure could lead to damage up to 500 metres from the turbine tower we would state that best practice is not to build a turbine any closer to a sett than 500 metres.

Currently it is often claimed that noise and vibration are a problem but developers will cite many instances where badgers have continued to live under roads and beside railways where the noise and or vibration have not disturbed them enough to make them move out. The source of those noise/vibration pollutants is not constant and will occur only when a vehicle or train passes the sett; on the other hand when the turbines are in operation there is a constant background noise and some vibration transmitted through the concrete deck into the surrounding soil. Because there is no robust proof one way or another developers have latched on to the idea that noise and or vibration does not affect badgers. Our current policy is to ask for pre and post development monitoring to see if indeed there is a problem given the situation that rural badgers are far more likely to be disturbed by unknown noises or disturbance than urban badgers. It is therefore our advice that a condition of any planning consent should be that both pre and post development monitoring should be carried out until such time as robust proof has been gathered to confirm that badgers are either not disturbed or that indeed they are disturbed by the presence of wind turbines.

A common factor in planning applications is that rarely does the applicant indicate by what means electricity produced will be extracted from the site, overhead or underground cable. Once more we are faced with the question about micro siting pylons from a sett or the disturbance factor involved in digging a trench to receive the underground cable. It is our advice that pylons should be sited no closer than the height of the pylon plus thirty metres from a badger sett. The normal best practice guideline should be followed in relation to open trenches should the electricity be extracted through underground cables.

The normal stand off distance of thirty metres from a sett is acceptable for the placement of roads to the site during construction and for future maintenance although best practice would suggest that these access routes be placed as far away as possible from the setts.

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