

Summary Proof of Evidence - Bats

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Llandinam Repowering and Extension
Conjoined Wind Farm Inquiry (Powys)

Session 1: SSAC

BERR/2008/0003

On behalf of CeltPower

Introduction

1. My name is Dr Stephen Holloway BSc PhD MCIEEM CENV, a principal ecologist working for SLR Consulting. I have worked as a professional ecologist for over 20 years.
2. I have been retained by Celtpower to review the application with respect to bats.

Background to Project

3. This proof draws on the evidence presented within the:
 - original ES
 - 2011 SEI
 - 2013 SEI
 - 2008 Churton Ecology report
 - 2008 Wildwood Ecology report
4. My evidence should be read as including:
 - The additional note to the Churton Report (CPL-BAT-007)
 - The addendum to the Churton Report (CPL-BAT-008)

Framework and Scope of Evidence

5. My evidence presents a summary of the findings of the bat surveys and assessment. The evidence considers impacts relating to:
 - decommissioning;
 - construction; and
 - operation.
6. NRW (May 2013) requested that additional bat data was made available so that appropriate evaluation and conclusions could be drawn from the 2013 SEI. This information has been provided to NRW.
7. Bats were not raised as an issue of concern by any other statutory or non-statutory organisation.
8. Letters of representation included bats as a general cause for concern.

Potential Effects

9. There are two main potential impacts of wind farm developments on bat populations:
 - indirect impact on available foraging habitat and the severing of commuting routes; and
 - direct mortality.
10. Information pertaining to bat mortality in relation to wind turbines has principally originated from outside the UK. There is currently no research providing evidence of bat mortality associated with wind farms.
11. Impacts must be assessed in relation to maintaining favourable conservation status rather than conserving individual bats. The level of risk of bat species to wind turbines is evaluated using guidance produced by Natural England (2012). The most common bat species recorded at the site, Common Pipistrelle and Soprano Pipistrelle, are species whose favourable conservation status is at low risk from collisions with wind turbines.
12. The Application Site is classified, due primarily to habitat characteristics, as being of low risk in accordance with Bat Conservation Trust (2012) guidelines.
13. The potential for risk to bats associated with the proposed repowering of the Llandinam wind farm must be placed in the context that there is an existing 102-turbine wind farm which has been operational for some 20 years. It appears that local populations are habituated to or have not been significantly affected by the present of a wind farm. The overall reduction in the number of turbines inherent in the repowering, and the raising of the lower level of turbine sweep, is considered to represent a material improvement in conditions for bats.

Bat Survey

14. The survey methodologies proposed for the site were correctly undertaken in accordance with the relevant guidelines at the time. They were done before publication of specific guidelines on bat survey for wind farms. The level of survey effort employed, given the guidance available at the time, was appropriate. The information gained provided adequate information upon which to assess potential ecological impacts of the proposed development on bats.

Ecological Evaluation

15. The Application Site primarily consists of a large upland area of grassland with no roosting opportunities. There are no nearby designated sites for bats. Bat activity would be expected to be low with potential concentrations of activity occurring within gullies and other sheltered features. Applying Bat Conservation Trust guidance, the importance of the site for bats is classified as 'Parish' and the potential risk posed by the development as 'Low'. Given the site value for bats, it is my opinion that an appropriate level of survey effort was employed.

Survey Results

16. There are no nearby statutory nature conservation sites designated for bats.
17. The diversity and activity levels of bats found within the Application Site are considered to represent a modest assemblage of species and a low level of activity. Activity tended to centre on watercourses which, in turn, were likely to relate to elevated prey availability. At least four

species of bat were confirmed within the Application Site: common pipistrelle, with lesser numbers of calls of soprano pipistrelle and low numbers of *Myotis* sp., and common noctule recorded. There are no roost sites within the Application Site.

18. The majority of calls related to species whose populations are considered to be at low risk from wind turbine developments. Only one species considered at high risk, noctule, was recorded. However, the levels of activity were negligible.
19. The proposed Llandinam wind farm will consist of substantially fewer turbines with an elevated above ground lower sweep compared to the turbines currently within the site. Given the height at which bats, including noctule, are likely to fly over the site, the risk to bat species is likely to decrease following the repowering.

Assessment of Effects

20. A low level of bat activity was found within the Application Site Boundary. Most bat calls recorded originated alongside wetland associated habitats. Most registrations recorded were those of the common pipistrelle with lesser numbers of soprano pipistrelles and *Myotis* sp. These species are at low risk with respect to their populations. The operation phase will result in minor residual collision risk effect to a low number of bats. This is not significant.
21. Noctule bat was the only species recorded on-site which is considered to be at high risk with respect to wind turbines. The number of noctule registrations recorded over the Application Site was very low with no definitive flight-lines recognised. The number of noctule calls recorded over the Application Site concluded that effects would be non-significant with a minor residual effect during the operational phase to a low number of bats.

Foraging and commuting habitat impacts

22. The Original ES concluded that the total area of land take from the areas of hard standing associated with the decommissioning of the current wind turbines, and construction of the proposed Llandinam wind farm, would be modest.
23. The amount of habitat to be affected during decommissioning and construction is negligible and will not significantly impact on local bat populations or their movements.

Cumulative impacts

24. The majority of the species recorded within the Application Site are relatively sedentary in their behaviour reducing the potential for cumulative impacts associated with other wind farm developments to non-significant levels.
25. A low level of noctule activity was recorded within the Application Site. This is typical of such an upland site. The noctule population has been sustained despite any risk posed by the current 102 turbine wind farm. The reduction in turbine numbers is likely to reduce collision risk. Even assuming a negligible negative effect as a worst case, there will be no material difference even with other schemes that come into contemplation (Hirddywel and Llaithddu) to the impact they have on the favourable conservation status of noctule bats.

Mitigation

26. All proposed turbine locations have been located over 50 m distance from those features identified as attracting higher levels of bat activity e.g. Mochdre Brook, in accordance with current statutory guidance.
27. A flight corridor between Mochdre Brook and Nant Penrhuddlan, has been maintained and enhanced through the proposed reduction in turbine numbers along the ridge between the two incised valleys.

Concluding Comments

28. I consider the appraisals of the proposed Llandinam Wind Farm, with respect to bats, to be a fair and accurate account of species use of the Application Site and potential impact.
29. It is my professional opinion that the proposed Development would:
 - not result in any significant residual impact on favourable conservation status of any bat species regardless of incidental mortality to individuals;
 - would not contravene current wildlife legislation; and
 - complies with current national, regional and local policies.