

Reducing uncertainty through a questions based approach for due diligence

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Abstract

A variety of methodologies are used for assessing impacts of wind energy projects to wildlife. When evaluating projects for due diligence it is critical to look beyond methodological variation and focus on the key receptors, the key impacts and the regulatory/permitting context. Published guidance varies based on national or local resources, concerns, laws and regulations.

While the availability of information on observed effects varies geographically, wind energy wildlife interactions have been studied for over 20 years and many stakeholders generally agree on the types and severity of effects which should be avoided, minimised or mitigated. Evaluating the underlying risks for such effects that could result from development or operation of a project forms the basis of due diligence, and such risks can be assessed irrespective of variations in impact assessment methods.



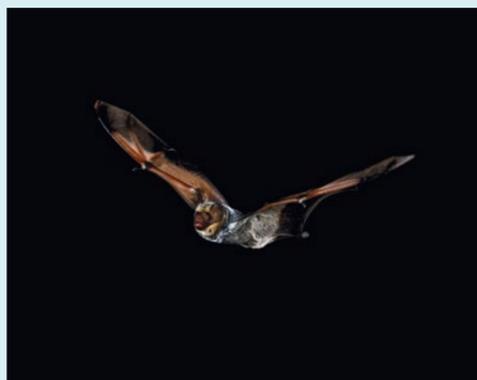
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Our questions-based framework is hierarchical and tiered on principal questions which aim to identify where the key risks lie.

- Step 1** Identify the principal questions before reviewing information to reduce uncertainty. e.g. was bird use and species composition evaluated at the site and/or was information from other sources evaluated?
- Step 2** Interpret the results from the available data to qualify key risks. Do the results suggest risk to species of conservation concern/protected status and/or have the potential to have population-level effects?
- Step 3** Were the methods used in conformance to published statutory guidance? (e.g. Portuguese Environmental Agency 2010), or whether methods met industry "good practice" (e.g. Strickland et al 2011).
- Step 4** Is the scope of the studies/available evidence of sufficient rigor to address the principal questions? It is at this stage where it is easy to become distracted from key risk assessment questions, and focus on nuances (e.g. study design, sample selection, etc).
- Step 5** Qualify and assign a risk level. e.g., a legally protected species, which is known to be vulnerable to collision and disturbance risk, was identified breeding at the site. Further, evidence exists which suggests the potential for population level impacts resulting from wind energy effects from the project or cumulatively.
- Step 6** Evaluate the avoidance, minimisation and mitigation measures proposed. Has the project sufficiently reduced risk for the key risk? What is the adapted risk profile?
- Step 7** Evaluate the inter-related risks to contextualise overall environmental risks. Individual components may have cumulative or additive effects.

- ← Why is this a principal question? Because direct and indirect impacts to birds are key wildlife risks for wind energy. Information on which species may be present, when, and to what extent, helps contextualise and qualify risk.
- ← Due diligence deliverables are oriented at identifying key risks, not on detailed analyses. Wildlife risks may negatively effect project permitting opportunities, have implications to/or consequences in respect to legal compliance, and affect public perception.
- ← Studies which failed to comply with guidance should provide supporting evidence as to the reasons why, otherwise there is a risk that (for development stage projects) planning permission/permits may be difficult to acquire and/or the project is exposed to increase risk of third party challenge/litigation.
- ← Due diligence rarely affords adequate time for additional data collection, therefore, uncertainty is likely to increase based on the outcome.
- ← Legal drivers, as well as precedent, are pivotal considerations. e.g. in some countries vulnerable wildlife such as bats may not be afforded equal protection to less vulnerable but more charismatic wildlife, or there may be a lack of precedent in evaluating those species. Thus country specific drivers must be considered in each case.
- ← Recommendations on additional measures may be required to reduce the risk profile. These measures could have a significant timescale implication, and so should not be made lightly. Contextualising potential legal and financial ramifications may be required.
- ← The risks of wildlife impacts may negatively effect project permitting opportunities, have implications to/or consequences in respect to legal compliance, may result in increased DEVEX, CAPEX or OPEX budgets, may affect public or lender perception in the environmental standards of a project.



Discussion

While our questions based framework may seem intuitive, the recent National Wind Coordinating Collaborative workshop on International Exchange on Wind Energy and Wildlife (2016) illustrated that in many countries diverse and often inappropriate methods are still commonly used, and the audience debated which approaches are appropriate for evaluating impacts. There is value in seeking a common framework to minimise erroneous method selection as well as to provide a universal context for evaluating projects. Our questions-based framework approach has been successful for due diligence and may be applied more universally.

To learn more speak to Nancy McLean and Chris Robinson at conference or contact davidt@naturalpower.com