

**Science Tools & Procedures Subcommittee of the  
Wind Turbine Guidelines Advisory Committee**  
Teleconference – August 29, 2008

Draft Summary

Participants:

Ed Arnett	Dale Strickland	Abby Arnold
Robert Thresher	Greg Hueckel	Doug Johnson
Steve Quarles	Rachel London	

- The purpose of this teleconference was to:
  - A. discuss two site evaluation approaches for evaluating risk to wildlife from wind development, and
  - B. Discuss and agree on the approach the Subcommittee would use to recommend guidance for pre-construction siting evaluations.

A. *Site evaluation approaches:*

Two fundamental approaches to site evaluation were briefly discussed:

**Site Categorization Approach** - The site categorization approach involves a priori categorization of potential projects into groups for the purposes of determining intensity of study required to make siting/permitting decisions. The California guidelines contain an example of this approach. The CA Guidelines' categories include the following three categories:

*Category 1* - Project Sites with Available Wind-Wildlife Data. These sites are generally defined based on the existence of data;

*Category 2* - Project Sites with Little Existing Information and No Indicators of High Wildlife Impacts. These sites are described based on a preliminary site assessment, and

*Category 3* - Project Sites with High or Uncertain Potential for Wildlife Impacts. These sites are defined based on “high levels of bird/bat use” or “considerable uncertainty regarding bird or bat risk.” Unlike categories 1 and 2, category 3 sites are characterized by the potential risk and not linked to the amount of available data.

**Decision Framework Approach** - A decision framework approach is a tiered approach such as Ecological Risk Assessment. The National Wind Coordinating Committee (NWCC) Wildlife Workgroup, subgroup on Risk Assessment, produced Ecological Risk Assessment: A Framework for Wildlife Assessments at Wind Energy Facilities (2007). The NWCC report describes how the decision framework approach works and suggested that a decision-oriented tiered paradigm may be useful for determining impacts to birds and bats at wind turbine facilities. The underlying philosophy of the decision framework approach is that risk is assessed using the same process for every site. For example, the first tier might be an assessment of potential risk based on existing information and perhaps a site visit and discussions with local experts. If the result is that there is little potential risk, or that the risks are unacceptable then no further evaluation is needed. The next tier would be more intensive study including primary data collection, and so on. This is an over simplification because I left out all the planning and coordination included in a decision framework.

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- The NWCC will be revising the Methods and Metrics document, a workshop has been scheduled September 15 to discuss the decision framework approach. A few members of the

Subcommittee will participate in the September 15 workshop, The Subcommittee agreed to defer further discussion of the two approaches above, until after the workshop.

*B. Site selection method:*

- Regarding identifying the appropriate approach the Subcommittee would take in their recommendations to the full committee on evaluating sites for development the Subcommittee agreed they would organize their recommendations using the following questions:
  - ✓ What questions need to be addressed?
  - ✓ What is known/what is the level of confidence about the question?
  - ✓ What is the relationship between what is known for other industries and how it could apply to wind?
  - ✓ When new data are needed to increase our knowledge what tools are available/what are their strengths and weaknesses (quality)?
  - ✓ If data are lacking, what are our options for making site selection decisions?

**NEXT STEPS**

- ✓ Dale and Ed will each choose one question they've identified related to birds and bats, respectively, and Bob R. will choose one for habitat, and each will provide an abbreviated example of a recommendation following the above approach.
- ✓ Update Landscape group on Science work, and invite to next call.
- ✓ TELECONFERENCE SCHEDULED: **SEPT 25<sup>th</sup> 1 – 2:30 pm EST**
  - Report on Sept. 15 NREL workshops on Decision Frameworks Metrics and site selection method examples to be developed by Dale and Ed.
  - Updates on abbreviated examples of process for site evaluation