

**U.S. Fish & Wildlife Service**  
**WIND TURBINE GUIDELINES ADVISORY COMMITTEE**

**Federal Advisory Committee Meeting**

Department of Interior South  
1951 Constitution Ave. NW  
Washington, DC

**January 27-29, 2009**

**-Draft Meeting Summary-**

On January 27-29, 2009, the Wind Turbine Guidelines Advisory Committee (FAC) convened its sixth meeting at the Department of the Interior in Washington, DC.

*For copies of the slides presented at the meeting and Attachments referred to herein, please visit the U.S. Fish & Wildlife Service Web site at [www.fws.gov/habitatconservation/windpower/wind\\_turbine\\_advisory\\_committee.html](http://www.fws.gov/habitatconservation/windpower/wind_turbine_advisory_committee.html).*

Meeting Objectives:

- Review Subcommittee recommendations and reports and develop a proposal for moving forward with the FAC recommendations.
  - Synthesis Workgroup Draft One-Text of the Recommendations and policy questions (Draft One-Text)
  - Legal Subcommittee update
  - Incentives Subcommittee update
  - Scientific Tools & Procedures Subcommittee update
- Hear presentation from Christopher M. O'Melia, *USFWS Biologist & Fire Ecologist*
- Discuss milestones, timelines, and process steps for any additional items.

**I. WELCOME AND OVERVIEW OF THE AGENDA**

Dave Stout, *USFWS/Committee DFO and Chairman*, welcomed all meeting attendees and asked them to introduce themselves (See Attachment A).<sup>1</sup> Abby Arnold, *facilitator*, asked anyone with a public comment to sign up. These comments would be heard at the end of the second and third meeting days. All FAC Members, alternates, and technical experts to the Subcommittees received scheduling forms for public FAC conference calls to be held between the January 27-29, 2009, and March 24-26, 2009, FAC meetings. These calls will be scheduled in advance and announced in the *Federal Register*.

A. Arnold reviewed the agenda and the FAC approved it (see Attachment B). She explained that the goal of this FAC meeting is to focus on the larger policy questions the Synthesis Workgroup raised while drafting the One-Text, and avoid wordsmithing the details of the text at this time.

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<sup>1</sup> Winifred Perkins, *Next Era Energy Resources*, announced that Florida Power and Light has changed its name to Next Era Energy Resources.

## II. SUBCOMMITTEE PRESENTATIONS: OVERVIEW, QUESTIONS TO THE FAC, DECISIONS, AND NEXT STEPS

### Overview of the Tiered Approach

At the October 21-23, 2008, FAC meeting, the FAC agreed to use the tiered approach proposed by the Scientific Tools & Procedures Subcommittee as a decision-making framework for the Recommendations. The tiered approach is an iterative process for guiding site selection and quantifying the risks to wildlife of a proposed wind project. The process involves collecting information in increasing detail as the developer progresses through the tiers, to the extent necessary to help them evaluate sites, make siting decisions, assess impacts, and construct and operate the wind project. The Synthesis Workgroup incorporated the tiered approach into the Draft One-Text. The five tiers in the Draft One-Text span from pre-site selection to project operation. The tiered approach does not intend for every tier or every element within a tier to be implemented at every project. The goal is for the developer to take the steps that are appropriate for the project circumstances.

### A. Scientific Tools & Procedures Subcommittee

#### A. 1. OVERVIEW:

FAC Member Taber Allison, *MA Audubon*, provided an overview of the work of the Scientific Tools & Procedures Subcommittee. The Subcommittee drafted the proposed questions for developers to attempt to answer at each tier, although the questions in Tier 5 require further work (see Attachment C). The Subcommittee also created a separate list of “Research Questions,” formerly Tier 6, to distinguish them as being useful but more extensive than the studies developers usually conduct. The Synthesis Workgroup has incorporated the Tier Questions into the Draft One-Text (Chapter 3, pages 8-17 of Attachment J).

FAC Member Rob Manes, *The Nature Conservancy, Kansas*, distributed a compilation of his colleagues’ feedback on landscape-level habitat concerns associated with the development of wind energy (See Attachment D). This document has yet to be edited or discussed in detail by the Subcommittee, but it may provide helpful information for the FAC.

#### A. 2. QUESTIONS TO THE FAC:

The Scientific Tools & Procedures Subcommittee requested guidance from the FAC on the level of detail to include in the tier questions and in the methods and protocols for answering the questions. A FAC Member asked whether the Subcommittee should evaluate the costs to wind developers of answering the questions in the tiers. The Subcommittee also revised their Purpose Statement to reflect their current direction, and asked the FAC for their approval (See Attachment E).

#### A.3. DECISIONS AND NEXT STEPS:

The FAC agreed that the purpose statement drafted by the Scientific Tools and Procedures Subcommittee is appropriate. The Subcommittee’s next step is to divide the questions for each tier into those that are recommended for most sites, and those which are less broadly applicable. They will also develop descriptions of the methods and metrics for answering the tier questions, and try to provide as much detail as possible.

The FAC directed a small group of FAC Members to estimate the costs associated with answering the tier questions. The Scientific Tools & Procedures Subcommittee will focus on the scientific side of the recommendations. Balancing the potential impacts to wildlife with the costs of assessing those impacts is a part of the FAC's Charter, and therefore the FAC will later have a policy discussion regarding the costs and benefits of the tiered approach.

## **B. Legal Subcommittee**

### **B. 1. OVERVIEW:**

FAC Member Patrick Traylor, *Hogan& Hartson, LLP*, described the status of the Legal Subcommittee's work. At the October 21-23, 2008, FAC meeting the FAC adopted the White Paper drafted by the Legal Subcommittee, describing the federal laws, regulations, and policy that apply to the FAC's Charter. The three acts that are most relevant to wind energy development are the Endangered Species Act (ESA), the Migratory Bird Treaty Act (MBTA), and the Bald and Golden Eagle Protection Act. At the October meeting, the Subcommittee was tasked with assessing possible legal incentives to encourage wind energy developers to follow the FAC's Recommendations. The Legal Subcommittee divided itself into two workgroups to consider the legal incentives under the ESA and the MBTA. As their work products are not complete, the workgroups drafted progress reports for the FAC (See Attachments F and G). The incentives are being evaluated primarily based upon how well they provide protection from liability under the wildlife laws identified in the White Paper, and whether they create more efficient administrative procedures.

FAC Member Mike Daulton, *National Audubon Society*, presented the work of the MBTA workgroup. They recommended against unconditionally authorizing take of migratory birds, as they concluded that this would be inconsistent with the FAC's Charter, nor would it create a meaningful incentive. The workgroup also suggested ruling out case-by-case permits. These permits would necessitate a new FWS regulation, and for each project, thresholds for take would have to be set for a large number of species. This might be a prohibitively resource-intensive process for the FWS, and seems unlikely to be approved.

The MBTA workgroup approved of two basic options. The first is a **programmatic permit supported by a regulation**, which would apply to a number of projects or to a region. This incentive provides a large degree of certainty against being prosecuted, but might take longer to implement than is desired.

The second option recommended by the workgroup is a **letter of assurance**. It is unclear whether a regulation would be required for this option. An assurance letter from the FWS could acknowledge that a developer is following the Recommendations to the best of their ability, and the FWS could then exercise enforcement discretion. By signing such a letter, the FWS would not be guaranteeing that no future FWS staff would recommend enforcement against the developer. Such an assurance letter could be sufficiently explicit so that developers could show it to their banks and lenders to validate their "good developer" status. Another benefit of an assurance letter is that it could be developed quickly compared to a permitting system.

It was remarked that the best management practices (BMPs) that will be in the FAC's Recommendations would be utilized by both of these options, and these BMPs must be drafted carefully to assure the usefulness of the incentives.

FAC Member Steve Quarles, *Crowell & Moring, LLP*, described the status of Legal Subcommittee ESA workgroup product. The incentives under the ESA include some of those already listed in the Legal Subcommittee's White Paper, as well as several new options suggested by FWS staff. The workgroup ruled out safe harbor agreements as inappropriate for wind energy development, and conservation banking as not being an effective incentive. The options they are continuing to consider are Conservation Agreements, General Conservation Plans, Umbrella Habitat Conservation Plans, ESA Sections 4 and 6, and the FWS Information, Planning and Consultation system.

**Conservation Agreements** are basic agreements between the FWS and a developer describing the land use activities the developer intends to conduct and the methods they will use to provide protection for potentially affected listed species. The main strength of a Conservation Agreement is that it can give incidental take authority, while potentially avoiding a lengthy legal process. However, its usefulness with larger scale projects has not been well-tested, and it would not include a "no surprises" assurance.

**General Conservation Plans (GCPs)** are set up by the FWS, rather than by individual applicants. They include "no surprises" assurances, and do not punish all developers under the permit for a single developer's noncompliance. However, they may not adequately reflect variation between different projects covered by one GCP. As they are administered by the FWS, they may be resource-intensive for the FWS, and may insufficiently represent developers' interests.

**Umbrella Habitat Conservation Plans (HCPs)** are one option that can be useful when a state or other local jurisdiction is interested in holding the "master" permit. Developers join the permit through certificates of inclusion. One of the weaknesses might be that all certificate holders would be affected if one fails to comply. There also may not always be an appropriate and willing master permit holder.

**Section 4(d) of the ESA** applies only to threatened species, but it may have the potential to be used creatively for conservation purposes in general. However, the FWS has broad discretion with 4(d) rules and this could make it difficult to decide which prohibitions should be enforced or relaxed. Also, Section 4(d) rules are usually done at the time of species listing, not afterwards.

**Section 6 agreements** have been traditionally used to qualify states for funding, but it may be possible to create an Umbrella HCP using this section, wherein the state is the master permit holder and project proponents could obtain certificates of inclusion. This could be an attractive possibility for states that do not have comprehensive wildlife/wind guidelines. However, Section 6 agreements are typically re-negotiated every two years, and some consider the language in these agreements to be confusing and difficult to use.

**Information, Planning and Consultation (IPaC)** is a web-based tool being developed by the FWS. It can be used to screen out projects that will not affect listed resources, to complete the requirements of formal and informal consultations, and to gather information about site characteristics and best management practices.

### **B.2. QUESTIONS TO THE FAC:**

The Legal Subcommittee asked whether they should continue to develop the options they have outlined thus far, under both the Migratory Bird Treaty Act (programmatic permits with conditions and letters of assurance) and the Endangered Species Act (Conservation Agreements, GCPs, Umbrella HCPs, ESA Sections 4 and 6, and IPaC).

### **B.3. DECISIONS AND NEXT STEPS:**

The FAC asked the Legal Subcommittee to choose the legal incentives that have the best chance of success, and develop text describing how they would function. The FWS will review their draft text and provide feedback on the feasibility of implementation.

## **C. Incentives Subcommittee:**

### **C.1. OVERVIEW:**

FAC Member Aimee Delach, *Defenders of Wildlife*, explained how the Incentives Subcommittee, formed at the October 21-23, 2008 FAC meeting, evaluated some of the potential incentives that are not being addressed by the Legal Subcommittee. The Subcommittee first developed a set of evaluation criteria: a) the strength of the incentive; b) its ease of implementation; c) its cost to both the federal government and to developers; and d) any additional wildlife and habitat protection that might be provided. The Subcommittee created two different matrices using these criteria, one for incentives that can be developed under current law, and the other for incentives that would require a new law or regulation (See Attachment H). The Incentives Subcommittee plans to continue with a more detailed and descriptive analysis of the incentives that they select as the best options.

### **C.2. QUESTIONS TO THE FAC:**

The Incentives Subcommittee asked the FAC to confirm which of the Subcommittee's evaluation criteria and incentives are likely to be most useful, and to provide suggestions on how to proceed with developing them.

### **C.3. DECISIONS AND NEXT STEPS:**

The FAC suggested that the Incentives Subcommittee continue to review their incentives and draft descriptions of those that particularly provide value to developers and can be feasibly implemented.

## **III. SYNTHESIS WORKGROUP: IMPORTANT POLICY QUESTIONS RELATING TO THE FIRST DRAFT OF THE ONE-TEXT RECOMMENDATIONS**

### **A. OVERVIEW:**

T. Allison provided an overview of the Synthesis Workgroup's progress since the October 21-23, 2008, FAC meeting when it was formed (See Attachment I for a PowerPoint Overview of the draft). The Synthesis Workgroup incorporated the work products from the other subcommittees (Other Models, Guiding Principles, Existing Guidelines, Landscape/Habitat, and Scientific Tools & Procedures) into a rough draft, or Draft One-Text of Recommendations (See Attachment J).

FAC Member Mike Azeka, *AES Wind Generation*, described the tiered approach as it is used in the Draft One-Text (See Attachment K for Synopsis of Tiered Approach). The Draft

One-Text contains five tiers that closely follow the actual process used by wind developers to address wildlife issues. In Tiers 1 and 2, developers use available data to conduct very preliminary evaluations of one or more sites. However, in Tier 1 a developer may not yet have access to a site, while in Tier 2 they generally have the right to enter the property. Detailed site specific studies are not conducted until Tier 3, and Tiers 4 and 5 go beyond permitting to the monitoring of post-construction impacts. Tier 4 focuses on fatality monitoring, while Tier 5 includes other types of post-construction studies such as habitat alteration and loss. Not all projects will go through each of these tiers, and a developer may decide to abandon a site at any point between Tiers 1 through 3. After Tier 3, the site is already in operation.

T. Allison identified each of the chapters of the Draft One-Text:

Chapter One – Introduction

Chapter Two – Preamble to the Recommendations

Chapter Three - The tiered approach for assessment and siting decisions

Chapter Four - Impact avoidance, minimization, compensation, and mitigation

Chapter Five - Coordination, use, and effective implementation of the Recommendations

Chapter Six - The benefits of the Recommendations for the minimization of impacts from wind on wildlife

Chapter Seven - Revisions of the Recommendations

Chapter Eight – Effectively administering the Recommendations

Appendix – Includes a glossary, a flow chart of the tiered approach, a list of tools and case studies from the Landscape/Habitat Subcommittee, the Legal White Paper, a list of options from the Other Models Subcommittee, and a draft Avian/Bat Protection Plan.

T. Allison emphasized that the Draft One-Text is the first iteration in the process and is not complete. Specifically, the Synthesis Workgroup has not drafted the following sections:

Chapter 3.E. of the One-Text on best management practices (BMPs); Chapter 5 on the role of other entities besides FWS and coordination between them; Chapter 6 on benefits of using the Recommendations; Chapter 7 on updating the Recommendations; Chapter 8 on the administration of the Recommendations; and Appendix G, the glossary.

Many policy-related questions arose while drafting the One-Text, in addition to those that were raised at previous FAC or subcommittee meetings. The goal of this FAC meeting is to discuss these questions (See Attachment L), and to give the Synthesis Workgroup feedback and direction for subsequent drafts of the One-Text.

#### **B. QUESTIONS TO THE FAC:**

A. Arnold read the list of policy questions raised by the Synthesis Workgroup that need direction from the FAC. Additional questions suggested by the FAC were added to the list of policy questions, and the FAC provided guidance on many of these topics.

#### **POLICY QUESTIONS**

- **Should the FAC recommend “guidelines” or “a set of recommendations”?**

The FAC reviewed the Groundrules language that specifies the FWS’s commitment to use the Recommendations. See section below (and Attachment M for full Groundrules).

**Sect.6, P.4** (signed April 23, 2008)

- b. Use of Product. The Secretary, through the Director of the U.S. Fish and Wildlife Service, anticipates using the Committee's written agreement as the basis of his or her guidance to the maximum extent possible consistent with the Agency's legal obligations.*
- c. Final Guidance. So long as it is consistent with federal law, the Secretary anticipates promulgating final guidance consistent with the Committee's written recommendations, unless new information or comments submitted in response to the Notice of Proposed guidance require changes.*

The FAC directed the Synthesis Workgroup to develop a draft set of Recommendations that contains more specific guidance or guidelines as one element of it.

- **How should the Recommendations address regulated vs. non-regulated species throughout the tiered approach? How should the Recommendations be structured to address “non-federalized” projects, or projects that don't have a federal nexus?**

The FAC recommended addressing a broad range of species initially, including federal and state-listed species, and then using the tiered approach to focus on those species that are of most concern at the site. Contact with wildlife agencies will help narrow down which species are of concern. A habitat suitability index is another possible tool to address communities or groups of species associated with a given area.

The FAC discussed how to address compensation and mitigation for non-regulated species, and the extent to which developers are expected to revise their project design because of impacts to non-regulated species. The FAC deferred any recommendations on this topic until after the definition and use of “mitigation” in the Draft One-Text were discussed (see page 9).

- **In Tier 1 and/or Tier 2, what is the appropriate time to contact state and federal government representatives?**

The FAC discussed the need to clarify distinctions between the different tiers. Contact with agencies, while desirable, is optional in Tier 1. Part of the goal of Tier 1 is to encourage developers to identify wildlife-sensitive habitats early on, and therefore avoid developing them. In Tier 2 developers are expected to contact state, federal, and local experts regarding site characteristics, and a site visit takes place. In Tier 3, contact with wildlife agencies must occur, and project design begins. The FAC suggested that each tier include a description of the expected status of the wind development project.

- **In Tier 3, should field studies be conducted to address local populations, their habitat, meta-populations, or entire species?**

It is unclear in the current Draft One-Text whether developers are expected to address impacts on entire populations. In practice, wildlife agencies ask developers to look at impacts at the site level and slightly beyond. Only when there are potential impacts to a discreet local population might a developer be asked to assess population impacts. The FAC agreed that

this is a reasonable standard. If the population distribution is not localized, population studies are not the responsibility of the developer.

- **The transition between tiers: who makes the decision whether enough information is available? How is it determined whether and when a project should be abandoned? Clarify language on trigger points.**

The FAC concluded that the decision to move to the next tier is a business decision made by the developer. Federal and state wildlife agencies have the authority to respond to this decision, but they are also responsible for providing the best information possible to developers. Thus the Recommendations should provide guidance regarding trigger points for moving from tier to tier. The Scientific Tools & Procedures Subcommittee will undertake this task.

- **How should the pre-construction aspect of some Tier 5 studies, which may start in an earlier Tier, be addressed?**

The FAC discussed the types of studies that occur in Tiers 4 and 5 and when the developer determines that more detailed studies are needed for a site. In many cases, they become aware in Tier 3 that these later studies will need to occur, and this may factor into their decision to proceed with a project. However, there are cases when it becomes clear later in the process that Tier 5 studies are necessary, and the developer has to adapt to this.

- **Guidance on what questions need to be answered to evaluate a site sufficiently**

The FAC pointed to the Scientific Tools & Procedures Subcommittee to develop technical advice for the FAC to review. A “reasonableness” test may be helpful.

### ***Site Studies***

- **What level of detail should be included for the studies that are recommended? Does the FAC want to include the methods and metrics required at each site, reference the “Methods & Metrics” document, or another option?**

The FAC debated whether the Recommendations should reference the appropriate sections of the “Methods and Metrics” document, *‘Studying Wind Energy/ Bird Interactions: A Guidance Document’* that is currently being updated, or whether the specific methods and metrics themselves should be included in the Recommendations. There is concern that if a separate document is referenced in the Recommendations that is updated outside the purview of the FAC, then the FAC Members are recommending a document they have not reviewed. One way to potentially avoid this is to explicitly state that not all of the methods and metrics referenced will apply at every site.

The question of level of detail will also vary depending on the site and the question. There must be a balance between providing enough detail in the FAC Recommendations for FWS guidelines to be useful, and allowing flexibility for regional and site specific conditions. Yet this openness and flexibility should not leave the developer unsure of whether they are in compliance with the guidelines.

The FWS would find it particularly useful in its development of guidelines if the Recommendations are as specific and well-developed as possible. The FAC also suggested

that the Scientific Tools & Procedures Subcommittee include one level of detail for federally listed species and habitats, incorporating FWS best practices, and a different level of detail for non-regulated species.

- **Should the Recommendations address cumulative impacts?**

The FAC considered the importance of addressing both the positive and negative cumulative impacts of wind energy in their Recommendations. A FAC Member noted that there are different degrees to which cumulative impacts can be analyzed. A less demanding analysis would be to consider how the project's impacts add to current conditions, whereas a more demanding analysis would involve projecting what the long-term impacts of a project may be, ten to twenty years later. For example, wind energy projects that fall under the National Environmental Protection Act (NEPA) are required to consider the "reasonably foreseeable" future impacts of the project. It was proposed that this is too stringent a standard to be used in these Recommendations.

The FAC concluded that the cumulative impacts of a growing industry should be addressed, but probably not by individual wind energy developers. One way the FAC Recommendations could help with cumulative impacts is to develop guidance on the site characteristics that signal a fragile ecosystem. The FAC may begin drafting a section with this type of guidance. Overall, the developer should strive to keep each project's impact as low as possible.

The FAC discussed the positive externalities of wind power, but reached no conclusion. They pointed out that externalities are very important in global climate change and other environmental issues. It was remarked that wind power produces positive externalities by lowering the need for fossil fuel-based energy sources. It was then suggested that these externalities could be quantified, and this would help wind energy compete against traditional, more polluting energy sources.

### ***Mitigation***

The FAC discussed the ways that it could define and use mitigation in its Recommendations. To help in this, the FWS described the four Resource Categories developed to implement their 1981 FWS Mitigation Policy. Resource Category 1 is for unique and irreplaceable resources, with the goal of no loss of habitat value (mitigation is not an acceptable option). Resource Category 2 is for high value resources that are relatively scarce, for which the goal is no net loss of in-kind value (after avoiding and minimizing impacts, offsite mitigation can be done). Resource Category 3 is for medium to high value resources that are relatively abundant, for which there should be no net loss of habitat value (in-kind replacement is emphasized, however out-of-kind replacement is acceptable). Resource Category 4 is for medium to low value habitat, and the FWS is not usually involved although such areas should be considered as potential sites to improve to mitigate for the loss of Resource Category 2 or 3 habitats. Some state wildlife agencies also utilize a similar approach to mitigation.

The FAC discussed which definition of mitigation they would like to use in the Draft One-Text, as the concept is currently interpreted in different ways throughout the Draft One-Text. Under the Council on Environmental Quality (CEQ) regulations for administration of

NEPA, avoidance, minimization and mitigation are three separate steps within a hierarchy, wherein the developer first tries to avoid impacts; then if impacts cannot be avoided, they minimize them; then if necessary, they mitigate for the impacts. Within mitigation there are also three steps: rectifying, reducing/eliminating, and compensating. However, the 1981 FWS Mitigation Policy subsumes all the different steps within one, “mitigation.” S. Quarles proposed the following definition that separates the different components of mitigation:

“Avoid or minimize, and, when required or performed voluntarily, mitigate.”

In this definition, “mitigation” is the last resort, and includes the three different steps of rectifying, reducing/eliminating, and compensating. The FAC asked that the Recommendations address both fatalities and habitat, and refer only to compensatory mitigation.

#### **40 CFR 1508.20 Mitigation.**

"Mitigation" includes:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impact by replacing or providing substitute resources or environments

**Due to time constraints, the following policy questions raised by the Synthesis Workgroup were not discussed at the meeting:**

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- State and Federal Coordination in Implementation of National Guidance
  - Confidentiality of Information
  - Should the national program and Recommendations be updated and revised based on future research, actual experience, and effectiveness at minimizing wildlife/wind adverse reactions, and if so, how, at what intervals, and through what process?
  - Should these Recommendations include guidance on FWS management objectives including clear, objective biological goals, and a requirement to adjust the national

program, management approach, guidelines and mitigation measures if these objectives are met?

- Under what circumstance is more than one year of data needed (reasonableness and adequacy)?
- Do we agree that BMPs are an important tool, and if yes, what is an appropriate approach to refer to and modify over time based on new information?

#### **C. DECISIONS AND NEXT STEPS:**

Between now and the beginning of March, the Synthesis Workgroup will edit the One-Text and reorganize its formatting, clarify the tiers, and consider organizing Tiers 2 and 3 differently, and draft the sections that remain unfinished in the current draft. They will incorporate the new subcommittee products that they receive at the beginning of March.

### **IV. OTHER PRESENTATIONS**

#### **A. PRESENTATION FROM CHRIS O'MEILIA, *USFWS FISH AND WILDLIFE BIOLOGIST* (SEE ATTACHMENT N)**

C. O'Meilia presented the project entitled, "A Landscape Planning Tool to Evaluate Anthropogenic Impacts and Conservation Potential for an Area Sensitive Species: Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*) Strategic Habitat Planning and Conservation." His team developed this Geographic Information Systems (GIS) tool to assist in lesser prairie-chicken (LEPC) landscape-scale planning, avoidance and conservation. It can be used to assess the impacts of all types of development, including wind energy development, occurring within the LEPC range, and formulate voluntary mitigation recommendations, by overlaying multiple data layers to categorize and identify the relative importance and amount of LEPC habitat potentially affected. This tool could potentially be expanded to apply to other natural resource issues.

#### **B. Presentation by Ed Lewis, *USFWS Law Enforcement***

Ed Lewis, *USFWS Law Enforcement*, presented the Bird Bat Mortality Database pilot project, which the FWS is working on in consultation with Andrew Linehan at *Iberdrola Renewables*. This project is similar to the database that has been used successfully by energy developers for several years, but it is being extended to include bats and to apply more specifically to wind power. The database will be adapted if problems are found, so feedback is encouraged after it is in operation.

#### **C. Presentation by Bonnie Ram, *Energetics* (See Attachment O)**

Steve Lindenberg, *USDOE*, introduced the Energetics project to the FAC. The project deals with risk characterization analysis of wind energy projects, and may be useful for the FAC's risk analysis recommendations. Bonnie Ram, *Energetics*, described an analytical and integrated framework of risk, based on decades of studies from the National Academy of Sciences and applied frequently by the Environmental Protection Agency, Nuclear Regulatory Commission, and Federal Aviation Administration among others. A White Paper on this framework will be peer reviewed by nationally recognized experts this summer and members of the FAC may be asked to participate in this review (**See Attachment P**).

The first level of the framework deals with analyses of sector-by-sector risks, such as wildlife assessments, and reflects the FAC's process. Ms. Ram noted that the centerpiece of the risk analysis is the comparative framework. The results of one level of sector risk analysis alone, such as habitat fragmentation, will not lead to effective decisions about site suitability although it identifies their "acceptability" and tradeoffs with other alternatives. The decisionmaker needs to know how this impact or risk compares across other potential risks, such as visual effects, and other sites. Only within this comparative context can risks be assessed fairly. The framework also considers how decisions can be made with expert judgments and stakeholder input in the face of uncertainties and a data gaps. As more data is gathered, feedback loops and commitment to adaptation principles allow decisionmakers to revisit the risk characterization. The framework also extends to broader risk questions such as how to address life cycle risks, transmission build outs, cumulative risks, as well as benefits such as climate change mitigation and energy security. The framework provides the knowledge base for management strategies and implementation that is iterative in nature with feedback loops and continuous stakeholder involvement.

**C. Film Presented by René Braud, *Horizon Wind Energy* (See Attachment Q)**

**D. Public Comment by Michael Fry from the American Bird Conservancy (ABC) (See Attachment R)**

The American Bird Conservancy (ABC) applauds the progress of the FAC. ABC has several observations and recommendations. While cumulative impacts are very important, they should not be addressed not by individual developers but by the Department of Energy, in consultation with the Department of Interior. Additionally, the Draft One-Text outlines issues and processes well, but does not discuss what results will trigger decisions. In addition, ABC suggests that a process be developed to "red-flag" or "blacklist" sites when responsible developers abandon them, to prevent less responsible developers from building there. A permitting process could assist in this. The incentives that ABC supports include production tax credits (PTC) and regulatory streamlining, accompanied by assurances of continued, rather than short-term, compliance.

**V. FAC DECISIONS/NEXT STEPS**

A public webcast briefing on the Information, Planning and Consultation System (IPaC) will be held on March 6 from 1:00-3:00pm Eastern Time. A public FAC webcast to review the Draft One-Text was scheduled for March 13. Details of these webcasts are being published in the *Federal Register*.

The Scientific Tools & Procedures, Legal, and Incentives Subcommittees will draft their products and send them to the Synthesis Workgroup on March 2. The Synthesis Workgroup will incorporate these new sections into their revised draft, and send this out to the full FAC by March 11 for review before the public webcast on March 13. The FAC noted that it is important to be able to review the draft BMPs and incentives prior to agreeing to the rest of the Recommendations. The FAC also agreed to evaluate different implementation options by examining the pros and cons of recommending regulatory versus voluntary implementation of FWS guidelines.

Meeting adjourned.

**VI. ATTACHMENTS:**

**Attachment A:** List of Participants

**Attachment B:** Agenda

**Attachment C:** Scientific Tools & Procedures Tier Questions

**Attachment D:** The Nature Conservancy Responses to Landscape Questions

**Attachment E:** Scientific Tools & Procedures Revised Purpose Statement

**Attachment F:** Legal Subcommittee Endangered Species Act Progress Report

**Attachment G:** Legal Subcommittee Migratory Bird Treaty Act Progress Report

**Attachment H:** Incentives Matrix

**Attachment I:** Synthesis Workgroup PowerPoint Summary of Draft

**Attachment J:** Synthesis Workgroup Draft One-Text

**Attachment K:** Synthesis Workgroup Synopsis of Tiered Approach

**Attachment L:** Synthesis Workgroup Policy Questions

**Attachment M:** FAC Groundrules

**Attachment N:** USFWS PowerPoint Presentation: “A Landscape Planning Tool to Evaluate Anthropogenic Impacts and Conservation Potential for an Area Sensitive Species: Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*) Strategic Habitat Planning and Conservation”

**Attachment O:** Energetics Presentation

**Attachment P:** Energetics White Paper Outline

**Attachment Q:** Horizon Wind Energy film link

**Attachment R:** American Bird Conservancy Written Comments