U.S. Fish and Wildlife Service Land-Based Wind Energy Guidelines

Terms of Clearance Report

ICR Reference No: 201208-1018-001; OMB Control No: 1018-0148

The U.S. Fish and Wildlife Service (FWS) Information Collection Request (ICR) for the Land-Based Wind Energy Guidelines (WEG) was approved by the Office of Management and Budget (OMB) for a two-year period ending on December 31, 2014. The approval included Terms of Clearance from OMB as follows:

> Terms of Clearance: This ICR has been approved for two years in order to confirm the burden estimates and better understand its practical utility. Prior to renewal of this ICR, OMB must be provided with a detailed report containing the following information: (1) A rigorous estimate of the number of respondents from the prior year and characterization of current industry participation in this collection, (2) Updated burden hour estimates through consultation with respondents, (3) A description of the extent to which the collection has led to technical advice and modifications to specific projects, and (4) A description of lessons learned from the first three years of implementation regarding ways to minimize burden on small entities. We expect the FWS will share the *Federal Register* notice announcing the 60-day comment period for the renewal of this ICR with affected stakeholders to ensure that interested parties provide input.

FWS undertook the following to respond to the questions in OMB's Terms of Clearance:

- added new WEG-related fields to the Tracking and Integrated Logging System (TAILS) used for tracking Ecological Services Field Office[1] activities, allowing staff to indicate when, to the best of their knowledge, project proponents are using the WEG;
- informally surveyed Ecological Services Field Office staff;
- surveyed wind energy industry representatives via an approved Information Collection (OMB Control No. 1090-0011)[2];

[1] There are more than 80 Ecological Services Field Offices in the U.S., staffed by biologists who are the FWS points of contact for wind energy developers.

[2] FWS e-mailed the survey to 48 individuals from the wind energy industry that attended or registered for WEG training sessions, and left the survey open for four months. Survey responses were anonymous. FWS contacted the American Wind Energy Association (AWEA), a national wind industry trade association, to obtain a broader list of recipients. AWEA declined to provide a list, citing a concern with perceived favoritism of certain member companies over others. Although individual responses were anonymous, we were able to ascertain that sixteen

- conducted limited public outreach; and
- shared the *Federal Register* notice announcing the 60-day comment period for the renewal of the Information Collection via e-mail to 1,465 contacts who have identified themselves as interested parties, including: wind energy industry, state and local governments, other federal agencies, tribal entities, non-governmental agencies, academic institutions, and members of the general public.

FWS is unable to provide exact counts regarding usage of the WEG because this information collection does not involve submission of any forms or other standardized documents, is initiated voluntarily, and as guidance, may be undertaken by a project proponent without FWS notification.

In addition, acquiring wind energy industry's response to surveys and limited public outreach is challenging because of Freedom of Information Act requests that may reveal take of federally-protected species, and the recent prosecution of a wind energy company for violation of the Migratory Bird Treaty Act. Even companies that are not currently under investigation tend towards the conservative approach of nonresponse. We received no responses to our limited public outreach. The 60-day comment period ended on September 2, 2014. FWS received five comments responsive to the *Federal Register* notice. One of the five comments was from AWEA, which commented on behalf of its constituency. No individual wind energy companies provided comment.

Because we have limited access to quantitative data, our responses to some questions in the Terms of Clearance are supplemented with qualitative information. FWS will continue to collect data through TAILS and other mechanisms in a continuing effort to evaluate the practical utility of the WEG.

RESPONSE TO TERMS OF CLEARANCE QUESTIONS

We have provided materials supporting our responses to the questions below in the appendices. OMB requested the following information:

(1) A rigorous estimate of the number of respondents from the prior year and characterization of current industry participation in this collection.

To provide the best possible estimate of the number of respondents, we first queried TAILS for the total number of wind energy projects logged by FWS staff during FY 2013. A TAILS query

individuals from fifteen companies responded to the survey. The fifteen companies that responded operate a total of approximately 32,000 MW of wind facilities in the U.S., or about half of the country's total installed capacity. The companies have a total of 14,816 MW in development. This information was gathered from the companies' websites and from AWEA.

run on July 3, 2014, for all activities logged in Fiscal Year 2013 with a primary action/work type "Power Generation - Wind" or "Power Generation – Wind – Onshore" returned 247 records, or approximately 250.

Although FWS added new fields in TAILS to collect information on WEG usage, there is an insufficient dataset at this time to use that information to estimate the number of respondents. Appendix A provides the results of a TAILS query for projects for which the proponent is using the WEG. Currently, TAILS includes only five records indicating that the proponent is using the WEG. We expect the TAILS dataset to improve as the amount of time the new fields have been in use increases.

As an alternative method to produce an estimate, we then applied the estimated average percentage of wind energy project proponents using the WEG ascertained from our survey of Ecological Services Field Offices. (Appendix B) The survey indicated that based on staff experience, approximately 65 percent of wind energy developers are using the WEG. We therefore estimate that there were 160 respondents to the information collection in FY13. This estimate is based on the assumption that each of the approximately 250 TAILS records represents a unique wind energy facility. This is likely an overestimate given that multiple records may exist for a single project, resulting in over-reporting.

OMB also requested that FWS characterize current industry participation in this collection. In order to characterize current industry participation, we relied on feedback from the surveys of Ecological Services Field Office staff and wind energy industry representatives.

According to FWS staff, of those companies that seek technical assistance from FWS, the degree to which they do so depends on variables such as company size, project location, existence of a federal nexus, and phase of project development. Larger, utility-scale companies tend to work more closely with FWS, while smaller, local companies may have less experience or have fewer resources. Project proponents with a federal nexus (such as for projects affecting federally-listed species, or projects requiring a right-of-way on federal lands) do use the WEG and tend to coordinate with FWS. Some project proponents do not contact FWS until the project is in construction, or else FWS is made aware of projects being constructed via news reports. At that point in the development process, the range of options available to proponents to minimize impacts to wildlife via the WEG is reduced, although measures may still be taken. (Appendix B)

Ninety-four percent of the industry survey respondents (15 of 16) indicated that they had used the WEG to some extent in the past year. (Appendix C)

(2) Updated burden hour estimates through consultation with respondents.

We consulted with respondents to update our burden hour estimates via limited public outreach, an OMB-approved survey of wind energy companies, and the notice of request for public comment published in the *Federal Register*.

We received no response in our effort to conduct limited public outreach. (Appendix D)

The industry survey responses reflected the reality that costs vary greatly among individual projects. Of the twelve individuals who provided feedback on our burden hour estimates, some respondents felt that our estimates were too low (for one or more tiers); some that they were too high (for one or more tiers); and some felt that they were accurate. (Appendix C) Based on this qualitative feedback, FWS did not have enough information to justify any change to the burden hour estimates published in the *Federal Register*.

The *Federal Register* notice of the 60-day comment period yielded three comments concerning the accuracy of our estimate of the burden for this collection of information, including comments from AWEA. (Appendix E) Additional comments received via the *Federal Register* notice will be addressed in the Supporting Statement A. Below are summaries of and responses to the three comments on the burden estimates received via the 60-day public comment period:

- *Comment:* The estimate of 50 responses and respondents annually submitting information related to Tier 4 seems low considering that the WEG are intended to apply not only to projects initiated after publication of the WEG, but also to projects that were already in development and already operating. *(K. Fuller)*

  Response: FWS has revised the estimated number of responses and respondents based on TAILS records and Ms. Fuller's comment. FWS originally estimated receiving a total of 400 responses per year. However, we now estimate that 160 responses were received in FY13. Of these, we estimate 45 responses are related to Tier 4. To determine how many of these projects were attributable to each Tier, we assumed that:

  - the majority of responses are related to projects in early scoping phases (Tiers 1-2);
  - not all projects that undergo early scoping continue through Tier 3 pre-construction studies, and fewer are actually constructed;
  - as Ms. Fuller indicated, the number of Tier 4 responses should be greater than the number of Tier 3 responses because the total includes projects that are constructed the previous year, plus projects constructed in prior years that continue to conduct fatality monitoring; and
  - relatively few projects undergo Tier 5.

- *Comment:* AWEA provided an estimate of the paperwork and respondent burden required for the wind industry to collect the data associated with the WEG on a per project basis. Follow-up with AWEA allowed that 15 percent, as a conservative value, is attributable to the non-hour burden costs. *(AWEA)*

  Response: FWS has revised its estimates to reflect the information provided by AWEA. As the trade group representing companies planning, constructing, and operating wind energy facilities in the U.S., they are best positioned to estimate the burden of using and adhering to the WEG. It should be noted that the estimates provided for Tier 3 studies include all types of studies that may be possibly conducted. This has produced a very high estimate of the burden for Tier 3, as it shouldn't be assumed that all types of studies will be conducted at all sites. Studies conducted will be based on the conditions present at each site. For example, raptor surveys would only be recommended if raptors have been identified as species of concern at a project site.

  It should also be noted that metadata, such as the number of responses used to compile the estimates, the types of companies included, and whether data was based on actual or theoretical projects was unavailable to the FWS. AWEA did indicate that the responses used to compile their estimates came from about a dozen companies.

- *Comment:* Estimates are dependent on the size of the project, complexity of the issues, experience and equipment needs of the consultant as well as previous information available for the site. *(Virginia Department of Conservation and Recreation)*

  Response: FWS agrees that the factors listed all affect estimates of project costs. For this reason, we hope that the estimates provided by AWEA include a variety of project types and company sizes to best capture a representative average.

Please see Appendix F for revised burden hour and nonhour burden estimates, as they will appear in Supporting Statement A and the 30-day *Federal Register* notice in our final package.

(3) A description of the extent to which the collection has led to technical advice and modifications to specific projects.

The survey of wind energy industry representatives included questions about whether FWS provided technical assistance and the extent to which technical assistance led to modifications to wind energy projects.

The majority of respondents (85 percent, or 11 of the 13 who responded to this question) indicated that they had received technical assistance from FWS. Per the WEG, it is the decision of the wind energy facility developer and/or operator whether or not to implement FWS technical assistance.

Regarding the extent to which FWS technical assistance led to modifications to specific projects, responses indicated use of technical assistance to:

- plan project development;
- make changes to project design;
- modify turbine placement;
- design pre- and post- construction surveys;
- prepare Bird and Bat Conservation Strategies;
- make decisions to seek an Incidental Take Permit;
- perform additional studies;
- interpret data;
- develop and refine Tier 5 research projects; and
- make decisions to abandon problematic sites.

One respondent indicated that upon deciding to abandon sites based on FWS technical assistance, other companies have purchased and developed those same sites. In those cases, the respondent felt that developers who do not follow the WEG often have a competitive advantage versus those who choose to use the WEG.

Some respondents expressed frustration that FWS seeks to answer all unknowns by recommending studies that confirm suspected impacts and add cost, rather than result in new information, and that FWS staff are not always knowledgeable about resource management and interpretation of existing data to make decisions. (Appendix C)

(4) A description of lessons learned from the first three years of implementation regarding ways to minimize burden on small entities.

As of August 2014, the WEG have been implemented for approximately two and a half years. Since we finalized the WEG, FWS has modified the TAILS database to improve tracking of wind energy projects, including a field to track total project megawatts to help identify small- versus large-scale projects; attended national meetings of the Distributed Wind Energy Association (DWEA) to present information on how we intend the WEG be applied to smaller scale projects and address concerns; and has invited representatives of DWEA to participate in national FWS training conducted via live broadcast and recorded online for future use.

Through these efforts, we have learned that there are both perceived burdens and actual burdens on small entities that choose to implement the WEG. We have taken steps to provide information that helps proponents understand what the appropriate level of effort for small projects should be, and to train staff to avoid placing undue burden on those who choose to work with us voluntarily to reduce impacts to wildlife and their habitat.

FWS attended and presented at the DWEA national meeting, where we explained that in the vast majority of cases, the level of effort for distributed and smaller-scale projects will not extend beyond Tiers 1 and 2. We provided answers to questions that further alleviated concerns and dispel rumors that the WEG is required of small-scale projects, and that projects would be expected to implement the entire tiered approach regardless of the level of risk.

FWS included a unit on distributed and community-scale wind during the fourth Wind Energy Broadcast, a training series developed by FWS and intended for all practitioners of the WEG, including FWS staff, state and local agencies, environmental organizations, and wind energy industry. This particular broadcast was widely attended by DWEA members. Hundreds participated live, and the broadcast was recorded and is available as a training tool online. The broadcast focused on the challenges unique to smaller scale wind facilities, and how best to evaluate effects to wildlife and their habitats. Participants had their questions addressed during a round-table discussion.

We plan to continue working through DWEA to communicate with and further minimize burden to small wind energy developers.

APPENDICES

A. Tracking and Integrated Logging System Report: Proponent is Using the WEG
B. Field Office Survey: Summary of Responses
C. Wind Industry Survey Responses
D. Limited Public Outreach E-mail
E. Public Comment on Burden Hour Estimates
F. Revised Burden Estimates

Appendix A
Tracking and Integrated Logging System Report: Proponent is Using The WEG

Fiscal Year	Lead Region	Lead Office	Activity Title	Primary Action/Work Type	Proponent Is Using The WEG	Technical Advice Provided	Advice Used	Operational Changes	Power Generation/ Transmission In Megawatts
2013	2	OKLAHOMA ECOLOGICAL SERVICES FIELD OFFICE	Chilocco Wind Farm Kay County Oklahoma -- created on September 24, 2013 05:33	Power Generation - Wind - Onshore	Yes	Yes	Yes, partially		
2014	2	OKLAHOMA ECOLOGICAL SERVICES FIELD OFFICE	Tradewind Breckinridge Project E&E Consulting	Power Generation - Wind - Onshore	Yes	Yes	Unknown		
2014	4	CARIBBEAN ECOLOGICAL SERVICES FIELD OFFICE	78010-055 EA Renewable Energy Project, St. Croix Air National Guard	Power Generation - Wind - Onshore	Yes	Yes	Yes, partially		
2014	4	CARIBBEAN ECOLOGICAL SERVICES FIELD OFFICE	78010-055 Air National Guard Station, St. Croix	Power Generation - Wind - Onshore	Yes	Yes	Unknown		
2014	8	VENTURA FISH AND WILDLIFE OFFICE	Rising Tree Wind Project - BBCS and ECP	Power Generation - Wind - Onshore	Yes	Yes	Yes, partially		

U.S. Fish and Wildlife Service Ecological Services Field Office Survey – Land-Based Wind Energy Guidelines Use and Effectiveness

Summary of Responses

The U.S. Fish and Wildlife Service (FWS) Conservation Planning Assistance program developed a Google Drive survey to collect information about the extent to which the Land-Based Wind Energy Guidelines (Guidelines) are used in the field and their effectiveness in improving communication with wind energy developers and in minimizing impacts to wildlife from wind energy facilities.

There were 20 respondents to this survey. Responses varied greatly from office to office, which is consistent with what we have heard informally. Several respondents reported having few to no new wind energy projects in their area, and therefore had not had the opportunity to work with a developer on implementing the Guidelines.

Overall, the responses indicate that having the Guidelines in place has improved communication between the FWS and wind energy developers. Several comments were made indicating that the Guidelines provide for improved communication, clearer expectations, and better understanding of what information to request from a developer. However, according to respondents, these improvements in communication do not always translate into improved project outcomes due to the voluntary nature of the FWS's recommendations. Several respondents reported that they have noted increased push-back from developers on recommendations since the Guidelines were finalized. While some respondents felt that they had increased leverage, the majority felt that they did not have more leverage, or that any leverage they did have was due to mandatory state guidelines or potential eagle take at proposed facilities. Most respondents felt that they had received adequate training in implementation of the Guidelines. Some indicated that they had not received "official" training, but found the FWS's Wind Energy Broadcast series very useful. All feedback in this survey regarding the broadcasts was very positive. Since we consider the broadcast series to be "official" training, we may need to consider how we can better communicate the availability of this training to field office staff.

The following provides a question-by-question summary of field office responses:

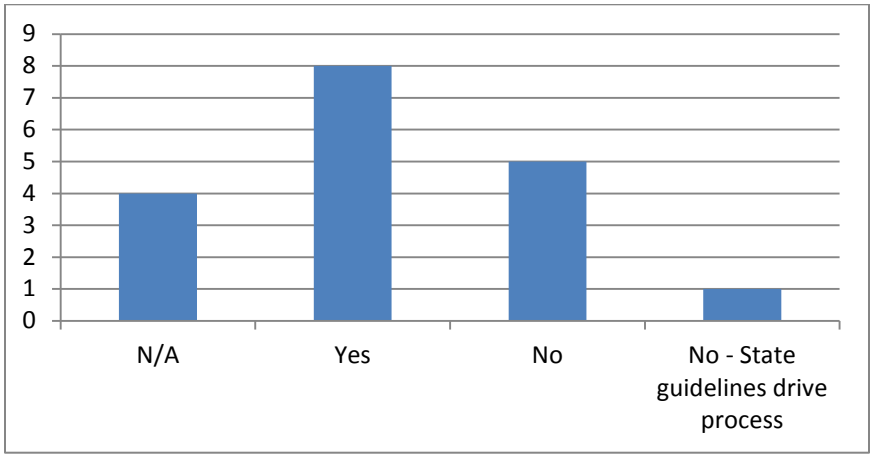
1. What percentage of wind energy projects in your area are using the Guidelines? (Your best guess.)

Average response: 65% (Responses ranged from 0 to 100%)

2. Has communication with wind developers improved since the Guidelines were published in 2012, and has it improved project outcomes?

Responses generally fell into 4 categories:

- Yes, to varying degrees on both the communication side and the improved outcomes side.
- No, because State guidelines are the driving factor.
- No.
- Not applicable (no new projects since Guidelines were finalized, or too few projects to draw conclusions).



3. Do you still find that some developers won't voluntarily work with FWS regardless of the Guidelines? If so, about what percentage?

Average response: Yes, about 25% (Responses ranged from 0 to 70%)

Responses also included a general statement that there were a couple of known cases of developers actively avoiding working with FWS with no percentage provided, a "not applicable" response due to no new projects in the area, and a note that although developers are working with FWS, they often have different interpretations than FWS regarding implementation of the Guidelines.

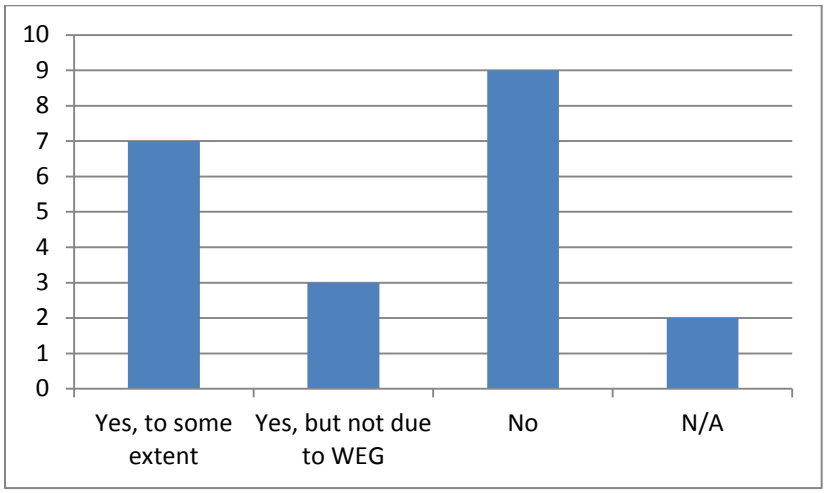
Some responses included additional explanation – Out of those companies that work with FWS, the degree to which they do so is variable. Larger companies tend to work with FWS, while smaller, local companies may be less equipped to use the Guidelines, even when they have contacted FWS. Projects with a federal nexus do use the Guidelines and these are the projects in which FWS is most commonly involved. Often, FWS knows about projects that have not

contacted us directly via news reports, making it difficult to gauge how many developers are actually working with us. The degree to which developers work with FWS varies by state.

4. Compared with before the WEG came out in 2012, do you feel like you have more leverage with wind developers?

Responses generally fell into 4 categories:

- Yes, to some extent.
- Yes, but not because of the WEG. (Other causes included potential for taking eagles and requirements of state guidelines.)
- No.
- Not applicable (no new projects).



Some responses included additional feedback:

"Developers seem to place more emphasis on the guidelines than on best available science. Where the science suggests something above and beyond the guidance might be appropriate, (for example in post-construction monitoring for eagle fatalities), I get more push-back now for recommending something in line with the literature."

"I feel that it has helped me know what to ask for and how to ask for it, so it has been very helpful in that way."

"I view our leverage as the same as before the WEG was released, since the FWS leverage is the regulatory agency with responsibility for implementing management of regulatory compliance with existing statutes. The WEG, if used fully, provides an opportunity for developers to use and expect a consistent framework for assessing regulatory compliance specific to wind energy projects. While we strive for consistency, many of the developers approach regulatory

compliance differently, so our coordination, technical assistance and subsequent responses are adapted to each project that comes in."

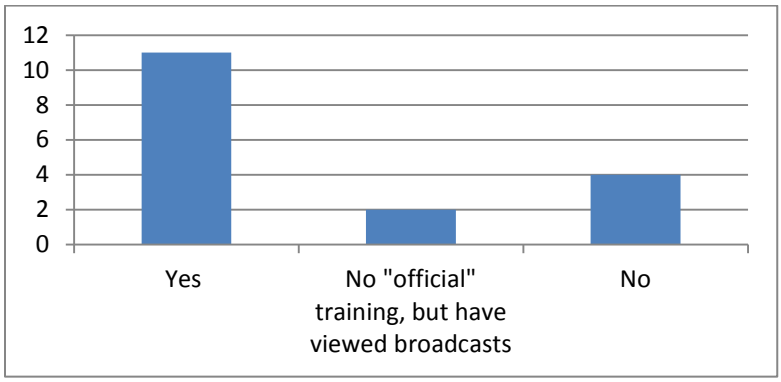
"It seems they do quickly follow-up with us if they receive a recommendation that they interpret as negative. Outcomes of our recommendations are generally the same, but it seems that they tend to debate the merits of the recommendations more often now than before the WEGs."

"Yes, absolutely! Any publicly available guidance [document] always provides staff with more leverage!!!! YES!"

5. Have you received adequate training in order to effectively implement the WEG? If not, what do you need?

Responses generally fell into 3 categories:

- Yes.
- No "official" training on implementation of the WEG, but have viewed or participated in wind energy broadcasts.
- No.



Respondents did not identify any specific training needs, however one "no" respondent further explained that there is a lack of time and of management support to complete training.

Several responses were supportive of the Wind Energy Broadcast training series, although they are viewed by some as not "official" training. It is not clear whether all respondents are aware that the training series exists and is available online.

6. Are there any other thoughts you'd like to share regarding use of the WEG?

Eight respondents provided additional feedback:

"I think the WEG is good, and will make a difference in the way we work with projects and the conservation that we get. However, wind development interest in the western US has died. There are very few projects that I deal with anymore that are not pre-existing or have already completed their surveys. So I have not had a chance to see the WEG in use from start to finish."

"Given the new information coming out, how can we make the WEGs enforceable."

"There appears to be no clear national direction on the FWS's role at regional (and ESFO?) levels, especially with regard to developing BBCS's. Regardless, MBO staffing in at least some FWS Regions is inadequate to do this work - unfortunately."

"While the answer to the first question in this survey is 70%, if I was asked how many developers are fully using the WEG, not just parts of it, my answer would be <10%.

For my experience in the SW Region, developers seem to implement only parts of the WEG. The vast majority choose not to share all of the different analyses under each Tier, but rather pieces of the analyses from some of the Tiers.

Also, typically the information is not presented to the FWS in a way that shows how they are using the WEG, or how they are addressing the questions and recommendations of the WEG at each Tier either, but rather their own approaches and assessment of risk. The vast majority do not provide cc's to the RO for any of their project communications with the ESFOs."

"I am grateful for the WEG since they allow the Service to be unified in its approach and response to wind energy projects."

"Really the developers in our state seemed concerned only with legally enforceable conditions…hence listed species. Those states with oversight of some sort tend to fare better than us."

"We must start drawing hard lines and setting standards for projects. There's too much wiggle room with projects that are clearly bad for wildlife. We need to set minimum standards and stick with them."

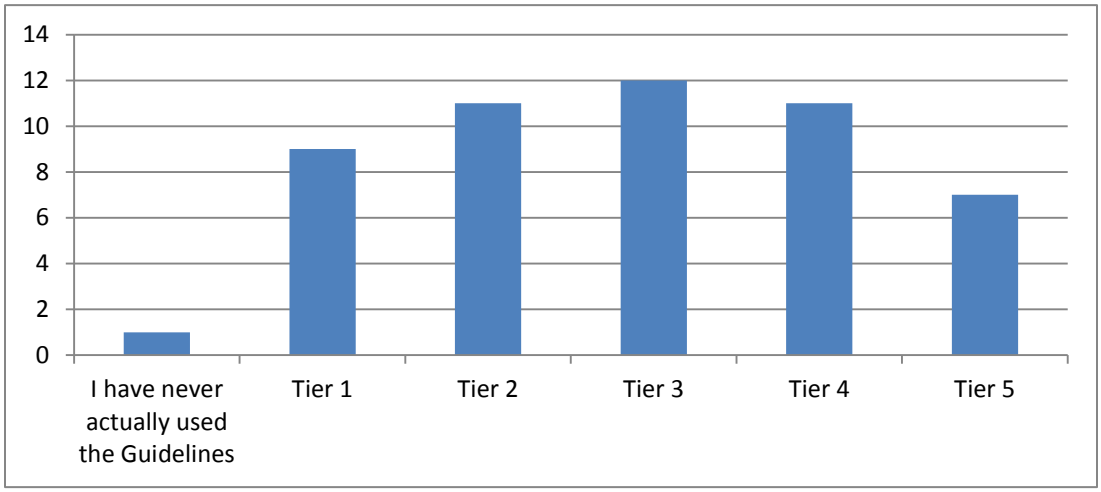
"Project developers are sometimes unclear on how much "consideration" is enough. This is to be expected with guidelines that are largely voluntary. I understand that this is often the best we have to work with."

Land-Based Wind Energy Guidelines: Wind Energy Industry Customer Satisfaction Survey

Q1. In the past year, did you use the Guidelines in the planning, construction, and/or operational phases of a wind energy facility?

Yes	15	94%
No	1	6%

Q2. Which tiers of the Guidelines did you use? Check all that apply.



Q3. The U.S. Fish and Wildlife Service previously estimated that for utility-scale wind energy projects, the average time necessary to provide information for each tier is as follows:
Tier 1 – 83 hours
Tier 2 – 375 hours
Tier 3 – 2,880 hours
Tier 4 – 2,550 hours
Tier 5 – 2,400 hours
In your experience using the Guidelines, how do these estimates compare with your actual efforts? (Note that these estimates do not include time spent on any activities undertaken to comply with Federal laws and regulations such as the Bald and Golden Eagle Act or the Endangered Species Act, rather, only those activities that do not lead to a permit and are carried out voluntarily.)

1. About right on average, but there is high level of variation between FWS field offices on the respective level of effort expected for each tier.

2. Each project site will be different, but these numbers seem reasonable.

3. That appears correct.

4. Looks about right

5. Tier 3 and 4 hours tend to be a bit higher.

6. This seems about right

7. I can't say for sure, but i know that those numbers are drastically underestimating the time that is spend on these steps.

8. All tier time estimates are underestimated if considering time to complete all surveys or data collection by all involved staff. I would say they are underestimated by a factor of 3-4x.

9. I have not estimated the number of hours that I have personally spent on each tier, although the estimates seem high. All of my projects have been in low risk, previously disturbed areas; therefore, I suspect my hours spent on each tier are biased low.

10. Project in development/permitting stage. Total time (office plus field work) for Tiers 1-3 has exceeded 7,000 hours. Office time only considering Tiers 4 and 5 and wrting relevant BBCS chapters has exceeded 100 hours.

11. Tier and Tier 2 estimates seem low and Tier 3, 4 and 5 seems high.

12. the estimates are all approximately 30-50% under actual.

Q4. Did the USFWS provide any technical assistance to you on your wind energy project?

Yes	11	85%
No	2	15%

Q5. If you answered yes to Question 4, please describe any decisions that were influenced by the technical assistance provided by the USFWS.

1. We have walked away from several projects based on technical assistance provided by FWS. Which is fine. However, we have seen numerous times, other wind companies come in and purchase/develop those same projects; build and operate those projects with little risk; and in return gain a significant competitive advandage over responsible wind companies following the WEGs and adhering to the technical assistance provided the FWS.

2. re-working project design to avoid more sensitive areas of the project impacts.

3. There appears to be confusion about whether ecological services or migratory birds is the lead on interactions related to technical assistance. It has not been effective thus far.

4. Deveopment and refinement of the Tier 5 project.

5. Perfromed more studies to address USFWS concerns. Many of the studies confirmed no issues and just added cost.

6. None

7. Actually they did not help on issue related to the guidelines, they helped with issued that resulted from me using the guidelines. I will say that the Service was less than helpful in dealing with the process. They have more speculation than answers. It seems that the Service is being staffed by people who have less knowledge about resource management than they have desire for collecting data that they do not know how to assess. Service employees are hiding their inability behind regulation and policy. They have little input or understanding of how the guidelines are used in development.

8. Additional field delineations for habitat of potentially present species were conducted. Facilities were moved to reduce a concern of species in proximity to a certain habitat. We met with a NWR manager because of the project's proximity at the urging of the Service.

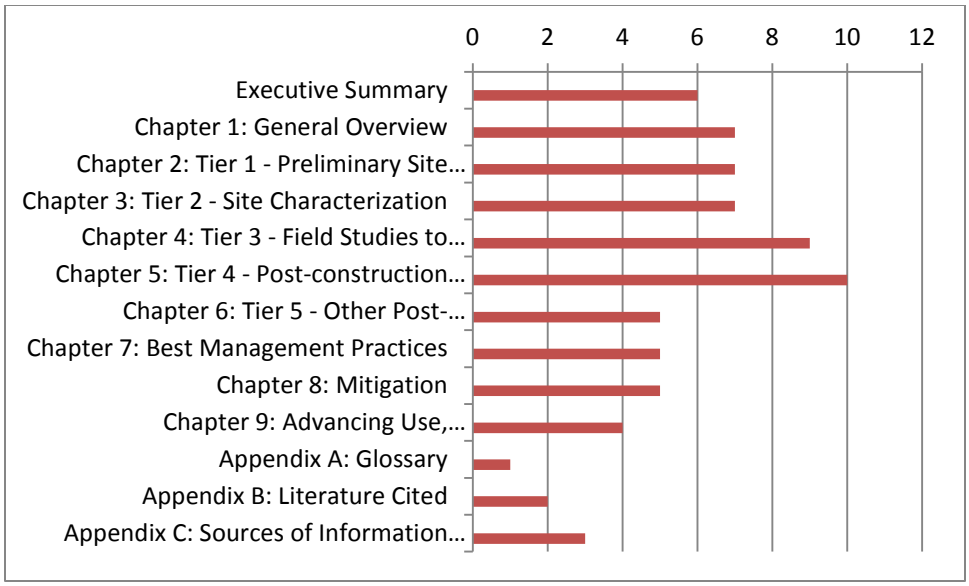
9. Every decision from survey design and protocols and data intrepretation, to BBCS preparation and content, to turbine placements and project development.

10. Decision to persue an ITP. Decision to abandone a project. Inclusion of FWS recommendations on post-con mortality monitoring protocols.

11. We structure our due diligence (both pre- and post-construction) effort around the input we receive from the FWS and state agencies (state and federal land managers for public land development). Turbine locations, risk reduction measures, and duration and types of due diligence are in part influenced by input received from the technical assistance. We often do not accomplish all that is recommended by the technical assistance as we often find that what is recommended is beyond capabilities and/or need of the project's evaluation. Naturally this creates friction at times but the experience we often have is recommendations are not in alignment with what the WEGs suggest and/or the same point of inquiry can be assessed by less intensive efforts. The primary point of divergence is the desire of the FWS to have all unknowns and questions answered whereas there are practical limits to effectively addressing project impacts to such a conclusive point.

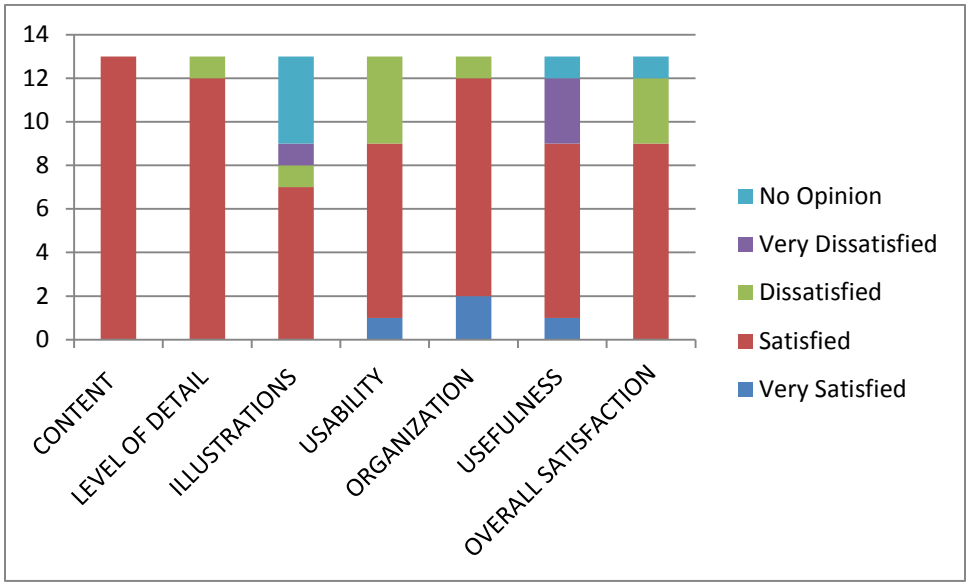
Q6. What portions of the Guidelines do you find especially useful? (check all that apply)

Appendix C
Wind Industry Survey Responses



Q7. How satisfied are you with the Guidelines?

CONTENT - do the Guidelines include the types of information you want?
LEVEL OF DETAIL - do the Guidelines include the right amount of information?
ILLUSTRATIONS - do the pictures and figures add value to the Guidelines?
USABILITY – are the Guidelines easy to read and understand?
ORGANIZATION - is it easy to find the information you seek?
USEFULNESS – do the Guidelines meet your needs?
OVERALL SATISFACTION



Q8. Comment on any aspect of the Guidelines below.

1. The WEG process is very good. However, the use and application is not. In summary, there is strong disincentive to adhere to the WEGs. Adherance to the WEGs provides no level of assurance that enforcement action by FWS OLE/DOJ will not occur. In fact, its just the opposite. By communicating and coordinating with FWS and providing impact information you are volutarily providing evidence for use in enforcement efforts. Meanwhile, wind companies that do not follow the WEGs, enjoy a clear competitive advantage because of reduced development and operating costs and little risk of enforcement action.

2. You need to go above and beyond normal work to prove absence of a species but presence is almost always accepted.

3. Access to Service staff and responsiveness is varied. Service review period of 60 days is rarely met. Technical assistance letters tend to be boiler plated and request a lot of data. The USFWS could improve voluntary participation by making more timely and reasonable requests on the required type and number of survey days. More focused assistance for key species would be appreciated. Research should count towards mitigation as it can ultimately benefit species.

4. now that they are adopted, the agencies need to use them. don't just file them away and require other things outside the guidelines.

5. It was industry's understanding that all operating projects at the time of the issuance of Final WEG's in early 2012 would be considered in Tier 4 and would be held to the standards outlined in Tier 4. However, with the recent Duke Energy Wyoming wind farm prosecutions under MBTA and their being held to the 2003 interim guidelines, there is no longer any incentive to adhere to the Final Guidelines issued in 2012 for existing operating projects because they will be held to the 2003 "standard".

6. They allow the right amount of flexibility to allow for creativity on projects. If only the field offices had some sort of consistency in how they apply them, they would really be helpful.

7. Overall, a useful set of guidelines.

8. The struggle with the guidance is it is a product of debate and negotiation. It represents a series of suggestions, written in a tone of subjective interpretation. This leaves the stakeholders relying upon the guidance in a state of dissatisfaction. For example, the guidance makes no categorical recommendation but instead relies upon project-specific dialog between proponent and agency personnel. We often find that the agency personnel are not familiar with the intent of the guidance, instead attempting to use the subjectivity of the guidance as support for positions taken. Naturally, the same posture can be taken by the proponent. The result is the guidance document lacks specificity and therefore there lacks a difinitive point of reference for stakeholders to rely on.

Q9. Do you have any suggestions on how we might improve the Guidelines?

1. Use it as a basis for a regualtory permit program under the MBTA. That would provide clear certainty that as long as your in compliance with your permit, you are immune from prosecution. It would also level the playing field for all wind developers. The current voluntary/incentive based process for the WEGs does not work. Being voluntary guidelines also allows individual field and regional offices to interpret the WEGs very widely. A regulatory permit program using the WEGs as the basis would create the much needed consistency and certainty to both the FWS and regulated community. And most importantly, would likely result in much greater conservation benefits for wildlife.

2. Realize that wind energy needs to be deployed and that making things too onerous for development will not work long term. A developer should not be scared to come meet with the service--instead they should be interested in designing a better project with the service's input.

3. Provide clear guidance to the regional/field offices about roles and responsibilities within various divisions of the FWS.

4. A lot of money is spent on individual site surveys and post construction mortaility monitoring. While this is important to some degree for good siting and verification, it seems very little is spent to benefit species habitat or research. Is there anyway to streamline data collection or share data regionally and free up dollars for habitat and improve our knowledge of species movement and wind wildlife interaction.

5. USE THEM and train FWS staff to use them.

6. Ask Field Office front line regulatory staff to read them and adhere to them.

7. Minor updates as the science evolves.

8. Update the guidelines on some frequency. Perhaps every 5 years.

9. Not at this time. I would suggest letting the WEGs remain unchanged for five years, despite my comments suggesting they are not ideal. The reason for leaving them static is an accumulation of input from stakeholders will reveal over time what changes should be considered.

Q10. Describe any effect the Communications Protocol on page 5 of the Guidelines had on your interactions with USFWS.

1. There needs to be much more consistency between field offices. For example, what is expected as a BBCS varies considerably amonst field and regional offices. Direction ranges from "a BBCS is a file drawer of studies and analysis of tiers" to a full re-evuation of risks for operating projects in place before the WEGs - essentially a "re-do" of all tiers. For a company operating in mutiple FWS regions, this is very problematic.

2. Tier 2 and 3 Service response are generally vague and very broad.

3. When we framed corresondence in relation to our project and which Tier it was in, it did help in focusing Technical Assistance to that Tier.

4. None, I was already communicating to the Service early and often.

5. None, we already followed the recommended communications protocols.

6. A primary effect of the protocol presupposes that there is an unencumbered flow of information between project proponent and the FWS, which for a variety of reasons is not going to be the case. Our experience is between workloads, limited resources, proprietary nature of this technical information that perfectly informed decisions and recommendations (i.e., informed from all data being shared freely) is not achievable. This forces stakeholders to assume that unrealized impacts will be addressed by adaptive management, a concept that can be too broadly interpreted and become a source of friction rather than means of finding common ground. The WEGs suffer from this as well but our belief is time will settle what is the norm and what our outliers. Right now our experience is we are challenged to address the outliers, however improbable they are, and conflict arises because rare events and other outliers require considerable resources and time to assess for.

Appendix D
Limited Public Outreach E-mail

London, Rachel <rachel_london@fws.gov>

Request from USFWS - WEG burden estimate

London, Rachel <rachel_london@fws.gov> Wed, Jul 2, 2014 at 9:52 AM
Bcc: Alyssa Edwards <Alyssa.Edwards@edf-re.com>, azuhlke@windcapitalgroup.com, mike.pappalardo@nexteraenergy.com, jbatkinson@allete.com, "Roppe, Jerry" <jerry.roppe@iberdrolaren.com>, dave.phillips@apexcleanenergy.com, rroy@firstwind.com, "Funk, Jason" <Jason.Funk@edpr.com>

Good morning -

The U.S. Fish and Wildlife Service requires approval from the Office of Management and Budget (OMB) in order to collect information from wind energy companies and others who voluntarily use the Land-Based Wind Energy Guidelines. This is a requirement of the Paperwork Reduction Act for any type of "information collection".

In this case, "information collection" refers to anything that you, as a project developer or operator, would provide to FWS in order to adhere to the Guidelines. Note that this does not include information that you would provide to FWS in order to comply with the Endangered Species Act or in seeking a permit per the Bald and Golden Eagle Protection Act.

Every few years, we need to ask users of the Guidelines a few questions to help in OMB's review of our request to renew our information collection approval.

It would be extremely useful to have your feedback on a few questions. Your names were provided to me from our Regional Offices as users of the Guidelines who are knowledgeable and also coordinate closely with FWS. Thank you for any assistance you can provide!

Please respond to the following questions at your earliest convenience:

- whether or not the collection of information is necessary, including whether or not the information will have practical utility;
- the accuracy of our estimate of the burden (**SEE BELOW**) for this collection of information;
- ways to enhance the quality, utility, and clarity of the information to be collected; and
- ways to minimize the burden of the collection of information on respondents.

BURDEN ESTIMATE:
The U.S. Fish and Wildlife Service previously estimated that for utility-scale wind energy projects, the average time necessary to provide information for each tier is as follows:

Tier 1 – 83 hours
Tier 2 – 375 hours
Tier 3 – 2,880 hours
Tier 4 – 2,550 hours
Tier 5 – 2,400 hours

(Note that these estimates do not include time spent on any activities undertaken to comply with

Appendix D
Limited Public Outreach E-mail

Federal laws and regulations such as the Bald and Golden Eagle Act or the Endangered Species Act, rather, only those activities that do not lead to a permit and are carried out voluntarily)

Please let me know if you have any questions! Many thanks,

Rachel London
Fish and Wildlife Biologist
Conservation Planning Assistance
U.S. Fish & Wildlife Service
703-358-2491

We're moving!
Beginning July 28, our address will be:
U.S. Fish & Wildlife Service Headquarters
5275 Leesburg Pike
Falls Church, VA 22041-3803

Kelly Fuller
P.O. Box 685
Descanso, CA 91916

September 2, 2014

Service Information Collection Clearance Officer
U.S. Fish and Wildlife Service
MS 2042–PDM
4401 North Fairfax Drive
Arlington, VA 22203
hope_grey@fws.gov

Subject: Proposed Information Collection 1018–0115; Land-Based Wind Energy Guidelines

Dear Ms. Grey:

Thank you for this opportunity to comment on the proposed Information Collection Notice (Notice) for the Land-Based Wind Energy Guidelines.[1] I am an independent consultant to the environmental NGO community and was the Wind Campaign Coordinator at American Bird Conservancy in Washington, D.C. at the time the Land-Based Wind Energy Guidelines (Guidelines) were published by the U.S. Fish and Wildlife Service (FWS). I hope that the FWS will consider this Information Collection from the perspective of the public in addition to the perspectives of the agency and the wind energy industry. The public submitted many comments to the FWS as the Guidelines were being drafted and finalized, and the implementation of the Guidelines (which this data collection supports) remains of keen interest.

I. Comments about the Notice's Abstract

The Notice states, "When used in concert with appropriate regulatory tools, the Guidelines are the best practical approach for conserving species of concern" (page 38056). However, currently FWS has *no* regulatory tools[2] to use with the Guidelines for conserving FWS-designated Birds of Conservation Concern other than eagles. This is significant because Birds of Conservation Concern are, other than federally threatened or endangered species, FWS's highest conservation priorities.[3] In contrast, species

[1] The Notice was published in the Federal Register on July 3, 2014 (Vol. 79, No. 128) and is available at http://www.gpo.gov/fdsys/pkg/FR-2014-07-03/pdf/2014-15617.pdf.

[2] The Federal Register notice of availability of the final Guidelines identifies Habitat Conservation Plans, Bird and Bat Conservation Strategies, and Eagle Conservation Plans as the tools that will be used with the Guidelines. See page 17497, Federal Register, Vol. 77, No. 58 (March 26, 2012). Available at http://www.gpo.gov/fdsys/pkg/FR-2012-03-26/pdf/2012-7011.pdf. Habitat Conservation Plans are associated with the Endangered Species Act and Eagle Conservation Plans with the Bald and Golden Eagle Protection Act. However, unless required by another agency or a FWS permitting decision associated with the ESA or Eagle Act, Bird and Bat Conservation Strategies (BBCSs) cannot be considered a "regulatory tool" because without those other regulatory links, BBCSs are related only to the Guidelines, which are voluntary and not regulatory.

[3] See page iii. FWS, Division of Migratory Bird Management (2008). *Birds of Conservation Concern 2008*. Available at http://www.fws.gov/migratorybirds/NewReportsPublications/SpecialTopics/BCC2008/BCC2008.pdf.

listed under the Endangered Species Act (ESA) are protected from unregulated take and its consequences via Incidental Take Permits, Habitat Conservation Plans, and the ESA's citizen-suit provision, which allows the public to enforce the conservation of listed species. Similarly, eagles have special take permit regulations implementing the Eagle Act. These regulations include Incidental Take Permits that seek to conserve eagles through avoidance and minimization measures, as well as in some cases, compensatory mitigation. However, excepting eagles, FWS-designated Birds of Conservation Concern are only protected by the Migratory Bird Treaty Act (MBTA), which does not have implementing regulations managing take and conservation at wind energy facilities. Nor does the MBTA have a citizen-suit provision that would allow the public to enforce conservation these species.

Thus, due to the lack of true regulatory tools to accompany the Guidelines and the voluntary nature of the Guidelines themselves, many FWS-designated Birds of Conservation Concern are left without adequate protection at wind energy facilities. This is exemplified by the fact that to date, the federal government has only prosecuted *one* energy company for the deaths of migratory birds at wind power facilities. In contrast, there have been many prosecutions of other energy sectors for killing migratory birds protected by law (e.g., owners of electric power lines, oil and gas production facilities).

One passage in the Information Collection notice increases the impression that FWS is leaving Birds of Conservation Concern that are only protected by the MBTA vulnerable to wind power:

> Adherence to the Guidelines is voluntary. Following the Guidelines does not relieve any individual, company, or agency of the responsibility to comply with applicable laws and regulations. Developers of wind energy projects have a responsibility to comply with the law; for example, they must obtain incidental take authorization for species protected by the Endangered Species Act and/or Bald and Golden Eagle Protection Act. (page 38056)

Here, only the ESA and Eagle Act are mentioned as laws that require compliance from wind project developers even though the MBTA protects FWS Birds of Conservation Concern. This omission seems odd given that the Guidelines list the MBTA under "Statutory Authorities," saying,

> The statute's language is clear that actions resulting in a "taking" or possession (permanent or temporary) of a protected species, in the absence of a Service permit or regulatory authorization, are a violation of the MBTA. (page 2)

I hope that this does not mean that in current practice this data collection de-emphasizes migratory birds in general.

II. Comments on the Necessity and Utility of This Information Collection

The Notice invites comments on "Whether or not the collection of information is necessary, including whether or not the information will have practical utility." This information collection is both necessary and useful because if it did not take place, the FWS would not have any means of monitoring the effectiveness of the Guidelines except for whatever information came in through complaints to or investigations conducted by the FWS Office of Law Enforcement. Furthermore, the Senior Advisor to the Director of FWS (David Cottingham) stated publicly at a 2012 research conference that Tier 4 data collection reports would be the FWS's means of knowing whether the Guidelines were effective:

> Q: How is the Service going to measure the effectiveness of the new voluntary guidelines, and how share that with public?
>
> A: The Service has a system for tracking technical assistance that we provide. It is an internal system and the reports are not publicly available. When people come to us with any project, we work with them to incorporate the Tier 4 data collection reports (generated as a result of the new voluntary guidelines) into that tracking system.[4]

In addition, in the Federal Register notice announcing the availability of the final Guidelines, the FWS stated,

> The Service believes that the comprehensive approach described by the Guidelines in combination with use of existing tools such as Habitat Conservation Plans, Bird and Bat Conservation Strategies, and Eagle Conservation Plans will provide robust conservation of wildlife and their habitats. If appropriate, based on experience gained under these Guidelines, the Service can revisit their voluntary nature in the future.[5]

Data collection is necessary for the FWS to determine whether the Guidelines are indeed working well for wildlife conservation and if their "voluntary nature" should receive a "revisit."

III. Comments on the Accuracy of Notice's Estimate of the Burden for This Collection of Information

The Notice estimates that there will only be 50 responses and 50 respondents annually submitting information related to the Guidelines' Tier 4 (post-construction fatality monitoring and habitat studies). This seems low considering that the Guidelines are intended to apply not only to projects initiated after publication of the Guidelines, but also to projects that were already in development and already operating. See, for example, page 4 of the Guidelines:

- For projects initiated prior to publication, the developer should consider where they are in the planning process relative to the appropriate tier and inform the Service of what actions they will take to apply the Guidelines.
- For projects operating at the time of publication, the developer should confer with the Service regarding the appropriate period of fatality monitoring consistent with Tier 4, communicate and share information with the Service on monitoring results, and consider Tier 5 studies and mitigation options where appropriate.

Regarding burden, the Guidelines describe the relief from prosecution for violating wildlife laws that is available to the wind power industry in exchange for Guidelines adherence:

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[4] See page 6, National Wind Coordinating Collaborative (2013). Meeting Proceedings, Wind Wildlife Research Meeting IX (November 28-30, Broomfield, CO). Available at http://nationalwind.org/wp-content/uploads/2013/05/NWCC_WWRM_IX_Proceedings__06-27-13_.pdf.

[5] See page 17497, Federal Register, Vol. 77, No. 58 (March 26, 2012). Available at http://www.gpo.gov/fdsys/pkg/FR-2012-03-26/pdf/2012-7011.pdf.

> The Service urges voluntary adherence to the Guidelines and communication with the Service when planning and operating a facility. While it is not possible to absolve individuals or companies from MBTA or BGEPA liability, the Office of Law Enforcement focuses its resources on investigating and prosecuting those who take migratory birds without identifying and implementing reasonable and effective measures to avoid the take. *The Service will regard a developer's or operator's adherence to these Guidelines, including communication with the Service, as appropriate means of identifying and implementing reasonable and effective measures to avoid the take of species protected under the MBTA and BGEPA.*[6] (page 6, emphasis added)

Having an established FWS procedure to reduce likelihood of prosecution for violations of the MBTA seems like more than full recompense for the industry's burden of data collection.

Moreover, the wind industry frequently and publicly states it is proactive about reducing impacts to wildlife.[7] This data collection can help the wind industry substantiate those claims and so benefits the industry.

In addition, the Notice does not include any estimate of the burden to the *public* of accessing this data collection through the only mechanisms generally at the public's disposal: Freedom of Information Act (FOIA) requests and administrative appeals and lawsuits after FOIA requests are made. For example, since the Guidelines were published, American Bird Conservancy (ABC) has administratively appealed to the Department of Interior multiple times and sued the FWS at least twice after FWS chose not to release Tier 4 and other Guidelines-related data requested by ABC through FOIA.[8] Accessing this data is necessary for public oversight of the effectiveness of the Guidelines.

IV. Comments on ways to enhance the quality, utility, and clarity of the information to be collected

The quality and utility of this data collection could be markedly improved by allowing the public greater access to it. This would not only facilitate the public's evaluation of the effectiveness of the Guidelines (which speaks to the utility of this data collection), but would also improve the quality of the information being collected, by increasing public oversight. For example, the public at times has local knowledge that the FWS does not and so can increase oversight of the data's accuracy.

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[6] The Guidelines clarify that this prosecutorial discretion in exchange for Guidelines adherence applies at wind energy facilities not expected to take eagles; otherwise, an Eagle Conservation Plan should be developed and if necessary the project should apply for an eagle take permit. There is no clarification offered for the MBTA. See Guidelines, page 6.

[7] See, for example, American Wind Energy Association (August 19, 2011), "Wind Energy's Commitment to Wildlife." Available at http://www.awea.org/MediaCenter/pressrelease.aspx?ItemNumber=4661&RDtoken=41096&userID=.

[8] See, for example, American Bird Conservancy (June 26, 2012), "Federal Agencies Sued Over Failure to Disclose Correspondence with Wind Industry - Promise of Government Transparency Not Being Met." Available at http://www.abcbirds.org/newsandreports/releases/120626.html. The legal complaint for ABC's second wind FOIA lawsuit is available at http://www.abcbirds.org/abcprograms/policy/collisions/pdf/ABC_FOIA_lawsuit_6-14-13.pdf.

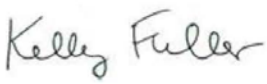
Although the FWS seems to be increasing its support for wind industry claims of "confidential business information" to deny FOIA requests by the public for information related to birds and wind energy,[9] the FWS does have the legal ability and legal obligation under FOIA to exercise its own judgment. Moreover, the FWS has used this judgment at least once in the past to reject an energy company's request to withhold Guidelines-related data.[10] There may well be other examples.

In summary:

1. **I urge the FWS to ensure that this data collection adequately collects data for all FWS Birds of Conservation Concern, as well as birds that are only protected by the MBTA, not just eagles and ESA-listed species.**
2. **This data collection is both necessary and useful.**
3. **The Notice appears to underestimate the number of responses and respondents.**
4. **Burden on the wind industry is balanced by the Guidelines' offer of prosecutorial discretion.**
5. **The FWS should also consider the burden to the public of gaining access to this data collection, which is necessary for public oversight.**
6. **The quality and utility of this data collection could be increased by allowing the public better access to it.**

Thank you for this opportunity to comment. Please add me to the notification list for updates in this matter, via this email address: kelly@kellyfuller.net.

Sincerely yours,



Kelly Fuller

[9] For example, in a June 20, 2014 FOIA release to The Protect Our Communities Foundation (POC), FWS withheld items 1-9 of Iberdrola Renewables' Tule Wind eagle take permit application. See Appendix A, Tule Wind eagle take permit application and Appendix B, June 20, 2014 letter from Larry Buklis (FWS) to Kelly Fuller (representing POC). Although FWS supplied the application itself to POC, Iberdrola had submitted items 1-9 as an attachment to the application. The company then claimed the attachment was confidential business information, and FWS supported the company's claim. This denied the public the ability to see basic factual information such as the species of eagle(s) and number of eagles the company estimates would be killed annually by its wind project. The FOIA denial also harmed public oversight of whether Iberdrola was meeting the conditions of the U.S. Bureau of Indian Affairs' Record of Decision for a lease enabling phase II of the Tule Wind project. In contrast, FWS has previously released at least one eagle take permit application in response to a FOIA request. See Appendix C, May 17, 2013 letter from FWS to Louise Red Corn (Big Heart Times). FWS's partial denial of POC's Tule Wind FOIA is currently undergoing administrative appeal at the Department of the Interior.

[10] See Appendix D, March 8, 2012 letter from Melvin Tobin (FWS) to Judy Rodd (Friends of Blackwater).

September 2, 2014

Ms. Hope Grey
Service Information Collection Clearance Officer
U.S. Fish and Wildlife Service, MS 2042–PDM,
4401 North Fairfax Drive
Arlington, VA 22203

Re: Comments of the American Wind Energy Association on the U.S. Fish and Wildlife Service's Proposed Information Collection; Land-Based Wind Energy Guidelines; *OMB Control Number:* 1018–0148

Dear Ms. Grey:

The American Wind Energy Association ("AWEA")[1] respectfully submits the following information in response to the request for comments on the Proposed Information Collection related to the U.S. Fish and Wildlife Service's Land-based Wind Energy Guidelines, as published in the *Federal Register* on July 3, 2014. Our comments are limited to the accuracy of the estimate of the burden for the collection of information detailed therein.

Attached please find an estimate of the paperwork and respondent burden required for the wind industry to collect the data associated with the voluntary Land-Based Wind Energy Guidelines ("Guidelines") on a per project basis. Based on a survey of our member companies involved in the development of wind energy facilities, we believe these updated estimates are a more accurate reflection of the work necessary to adhere to the Guidelines, and we respectfully request that the Service utilize this estimate, combined with other assumed costs (e.g., government agency costs) in this and any other analysis of the Guidelines going forward.

[1] AWEA is the national trade association representing a broad range of entities with a common interest in encouraging the expansion and facilitation of wind energy resources in the United States, including wind turbine manufacturers, component suppliers, project developers, project owners and operators, financiers, researchers, utilities, marketers, and customers.

Please feel free to contact us should you have further questions.

Sincerely yours,

John Anderson
Director, Permitting Policy and
Environmental Affairs

Tom Vinson
Vice President of Federal
Regulatory Affairs

Chris Long
Manager, Offshore Wind, Permitting
Policy and Environmental Affairs
Policy

Gene Grace
Senior Counsel

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Fax: (202) 383-2516
E-mail: janderson@awea.org

Appendix E
Public Comment on Burden Hour Estimates

WILDLIFE STUDY COSTS	Average	Range		Assumptions, Notes and Comments
Based on Wind Energy Guidance Implementation				STUDY COSTS NOT A LINEAR RELN. WITH PROJECT SIZE DUE TO START UP, BASIC TRAVEL COSTS, AND TIME FOR DATA ANALYSIS & REPORTING
Update: 8/27/2014		Assumptions:		
Assumptions		20,000 Acres		
Pre-Construction Site Size		100 Megawatts		
Post-Construction Site Size				
	Approx. Average	Low End	High End	
Tier 1 - Multiple Site Desktop Screening				
TOTAL COST (Regional context)	$5,500	$3,000	$8,000	assumes regional context to the scope and therefore could be one or more individual sites. No site visit but does include multiple project sites, given regional context Agency contacts with USFWS, state game, state nat. heritage program
Tier 2 - Single Site Characterization w/ Site Visit				
TOTAL PROJECT COST	$25,000	$5,000	$45,000	Wildlife Single Characterization Study only but assumes additional analysis concerning level of fragmentation and other habitat condition considerations (e.g., movement corridors, geospatial data analysis combined with findings of site visit) that likely require additional site visits for confirmation Assumes 4 hrs total travel time, 6 hrs on-site No overnight stay Additional agency contacts with USFWS, state game, state nat. heritage program
Tier 3 - Pre-construction/Baseline Wildlife Studies				
Protocol Development, Agency Meetings	$14,500	$4,000	$25,000	assumes one (1) agency meeting will all applicable agencies engaged Protocol development/agency meeting includes meeting time, travel expenses (less overnight stay costs) and time to finalize protocol
Habitat Mapping	$37,500	$15,000	$60,000	Assumes habitat quality mapping in states with robust, geospatial datasets. The level of effort for habitat mapping requires much more detail and evaluation of habitat quality and assumes site visits have confirmed accuracy of geospatial data. Habitat mapping Used to ID sensitive plant communities and potential habitat for listed/sensitive species, can guide future species-specific surveys
Avian Use Study (Spring 15 Mar -31 May)	$35,000	$5,000	$65,000	Avian use in spring (or the first season of study) Includes time for project admin, which is likely higher at start of project. Also includes time for field set-up and training Avian use assumes 10 Obs. points, sampled on a weekly basis, 11 weeks Avian use Includes travel and expenses, with one overnight and perdiem per observation period
Avian Use Study (Summer 1 Jun - 31 Aug)	$42,500	$20,000	$65,000	Avian use assumes tech has 4 hours of travel, round trip Avian use includes some time for tech data mgmt, mailing, maintenance Avian use assumes ATV not needed to access points
Avian Use Study (Fall 1 Sep - 15 Nov)	$42,500	$20,000	$65,000	Avian use includes some time for tech data mgmt, mailing, maintenance Avian use includes extra time for final report and assumes no interim reports are produced
Avian Use Study (Winter 16 Nov - 14 Mar)	$50,000	$25,000	$75,000	Avian use includes some time for tech data mgmt, mailing, maintenance Assumes additional cost in order to traverse landscape during harsh weather months Avian use includes extra time for final report and assumes no interim reports are produced
Raptor Migration Survey - One Season	$22,500	$15,000	$30,000	Raptor Migration Protocol similar to Hawkwatch Raptor Migration Observer at one point, 7hr/day, 4day/week observing raptors only, over a 4-week period Assumes a 4-week study; a 6-8 week period which may increase these costs by 50-100%
Raptor Nest Surveys- Spring (April - June 08)	$25,750	$1,500	$50,000	Raptor Nest Survey assumes Tech conducts search and follow-up at potential nesting habitats a total of three times between mid-April and early June Includes travel expenses and time Raptor Nest Survey assumes add 6 days rental vehicle, 3 days for perdiem, lodging, and 3 units gasoline if conducted separately from other studies Raptor Nest Survey- If cliffs/rough country is present, may need aerial survey at a cost of about $10,000 for 10 hours of helicopter time plus fuel, Research Biol. Would In forested areas, call surveys may be required and add to cost
Eagle-specific Surveys	$10,000	$5,000	$15,000	Protocol development/agency meeting assumes one meeting
	$87,500	$75,000	$100,000	Helicopter nest surveys (seasonal)
	$200,000	$150,000	$250,000	Territory ground-based monitoring (Hawkwatch-style method) (1 year)
	$15,000	$10,000	$20,000	Telemetry (per eagle cost) deployment and monitoring (includes data analysis) (1 year)
	$12,500	$10,000	$15,000	Nest (per nest cost) Cameras installation and monitoring (seasonal)
				Assumes base-level, WEG-informed surveys. Additional effort need for BGEPA Conservation Plan survey protrocols
Breeding Bird Density Surveys - May 15 - June 15	$33,000	$10,000	$56,000	Breeding Bird Surveys include time to write up report Breeding Bird Surveys Assume data collection at 30 points or transects on three different dates Breeding Bird Surveys Assume it will take the tech 3 days to sample each round of points/transects Breeding Bird Surveys Assume ATV not required to access land
Nocturnal Avian Acoustic Surveys	$47,500	$10,000	$85,000	Nocturnal Avian Acoustic use a microphone to detect birds flying overhead at night Nocturnal Avian Acoustic surveys assume lower equipment costs compared to Anabat surveys, but analysis and reporting costs are similar
NEXRAD Surveys	$30,000	$15,000	$45,000	NEXRAD Radar data are free; survey cost almost exclusively time for data analysis and report preparation
Bat Use Acoustic Study				Bat Acoustic Studies Include time for project admin, field support and trouble-shooting, data mgmt, data entry, analysis, reporting
Anabat Surveys- Summer (15 July - 15 Oct 08)	$74,500	$25,000	$124,000	Bat Acoustic Studies Include cost of travel Bat Acoustic Studies assume purchase 6 Anabat units and equipment to have paired units at met towers, one on ground, one up high (equipment = bat hats; associated Bat Acoustic Studies more Anabats may be needed for larger projects, eastern projects, or projects with lots of bat habitat Bat Acoustic Studies Include time for project admin, field support and trouble-shooting, data mgmt, data entry, analysis, reporting Bat Acoustic Studies Include cost of travel Bat Acoustic Studies assume purchase 6 Anabat units and equipment to have paired units at met towers, one on ground, one up high (equipment = bat hats; associated Bat Acoustic Studies more Anabats may be needed for larger projects, eastern projects, or projects with lots of bat habitat
Nocturnal Marine Radar Surveys - One Season	$135,000	$70,000	$200,000	**Optional scope of work, used only in unique landscape circumstances** Nocturnal Marine Radar Studies assume 45 nights of radar sampling
Bat Mist-Netting - One or Two Sites	$52,500	$25,000	$80,000	**Optional scope of work: used only when deemed appropriate, informed by accoustic surveys or unique circumstances** Bat Mist-Netting assumes time to arrange permits, access, project set-up, reporting Bat Mist-Netting assumes 8 total net nights (1 site 8 nights or 2 sites 4 nights each), travel expenses Bat Mist-Netting assumes travel expenses, perdiem, lodging Bat Mist-Netting assumes no surveys for T&E species, which would require higher costs Bat Mist-Netting assumes some minor equipment costs (poles, string, datasheets)
Hibernacula Surveys	$27,500	$20,000	$35,000	**Optional Scope of Work: Bat Hibernacula Surveys assume this is an emergence survey** Bat Hibernacula Surveys assume Binary units used in conjunction to ID species
Tier 4 - Post-construction Mortality Studies for 1 Year at				

Appendix E
Public Comment on Burden Hour Estimates

WILDLIFE STUDY COSTS	Average	Range		Assumptions, Notes and Comments
TOTAL PROJECT COST	$272,500	$130,000	$415,000	Management Assumes one (1) agency meeting Carcass searching assumes 20 turbines searched every two weeks, fo a total of 26 searches per turbine per year Carcass searching assumes 4 hours round trip travel for tech Carcass searching assumes it takes 4 days to search 20 turbines Carcass searching assumes no additional site prep such as mowing Carcass searching assumes purchase of a freezer to store carcasses on-site Experimental Bias Trials assume travel and expenses for biologist to administer SEEF trials Experimental Bias Trials assume one SEEF and one CR trial (10 lg, 10 sm) per season Experimental Bias Trials assume purchase and shipping of trial birds Data Analysis and Reporting does NOT include analysis of weather data which would add about $6,000 to budget Min/max influenced by state-level requirements (e.g., PA, NY, OH, and CA represent significant increase in level of effort to meet data collection requirements, regardless of technical merit)
Tier 5 - Other Wildlife Studies				
	$325,000	$150,000	$500,000	Enhanced mortality surveys require daily searches at a subsample of turbines, assume 5 of the 20 searched turbines This budget should be considered IN ADDITION to Tier 4 Studies **NOTE: Tier 5 studies are ad hoc and generally not needed so cost assumed here are conservative and should be understood to be generally expensive, given research nature of the work.**
Avian Displacement Surveys (radar-based?)	$100,000	$75,000	$125,000	**NOTE: While contemplated in WEG there is no known application. Cost assumes migration displacement is characterized/assessed with radar though no such protocol exists. Additional cost for Baseline assessment is unaccounted for under Tier 3.**
Replicate breeding bird studies done pre-construction	$45,000	$30,000	$60,000	Will require more analysis time to compare pre- and post-construction results
Total Average, Min and Max Cost of WEG Effort	**$1,768,250**	**$923,500**	**$2,613,000**	**Does not assume enhanced mortality surveys, the budgets of which should be considered IN ADDITION to Tier 4 Studies**

Appendix E
Public Comment on Burden Hour Estimates

London, Rachel <rachel_london@fws.gov>

Additional Information for Costs Associated with WEG Adherence

John Anderson <JAnderson@awea.org> Thu, Sep 4, 2014 at 10:22 AM
To: "Rachel London (Rachel_London@fws.gov)" <Rachel_London@fws.gov>

Rachel,

I have checked with a few of the companies who responded to AWEA's request for feedback on the assumed costs associated with IC for adhering to the WEGs and have obtained a bit more information. Unfortunately, it is not as cut and dry as simply saying that across the board 'x' dollars are for hourly wages and 'y' dollars are for non-burden costs (e.g. equipment, travel and housing costs, etc.). Much of this is variable, depending on the scope of the project and the project specifics including size, location in the country, species of concern identified in earlier tiers, etc. For example, there's no equipment cost associated with avian use counts but there is with bat acoustic surveys.

As a result, the combination of logistical differences, differences in specific protocols, and perhaps anti-trust issues necessitates a min/max approach in what we shared in terms of total costs. Given these facts, coupled with a strong desire to not create a lot of work for anyone in deriving different breakouts for each line item, I think it reasonable to sufficiently account for the variability by simply applying a factor in order to account for consumables/expenses separate from labor. Based on the feedback I received it seems 12-15% (with 15% being a good conservative value) is the appropriate amount to assign to the non-burden costs.

I hope this is sufficient to addressing the what you need. If you need any additional information or clarification please let me know and I will do my best to accommodate you.

Sincerely,

JA

John M. Anderson
Director, Permitting Policy and Environmental Affairs
American Wind Energy Association

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Appendix E
Public Comment on Burden Hour Estimates

Molly Joseph Ward
Secretary of Natural Resources

Clyde E. Cristman
Director

Joe Elton
Deputy Director of Operations

Rochelle Altholz
Deputy Director of Administration
and Finance

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

600 East Main Street, 24th Floor
Richmond, Virginia 23219
(804)786-6124

September 2, 2014

Hope Gray
Service Information Collection Clearance Officer
U.S. Fish and Wildlife Service
MS 2042-PDM
4401 North Fairfax Drive
Arlington, VA 22203

Re: Proposed Information Collection; Land-based Wind Energy Guidelines "1018-0148"

Dear Ms. Gray:

The Department of Conservation and Recreation's Division of Natural Heritage's (DCR) mission is conserving Virginia's biodiversity through inventory, protection, and stewardship. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal, unique or exemplary natural communities, and significant geologic formations.

DCR has reviewed the Land-Based Wind Energy Guidelines in reference to information collection and provides the following comments:

- Up-to-date data for the project area is a vital component of determining whether the project area is a suitable location for a wind energy project, potential impacts and mitigation options and cost. Dependent on whether previous information /survey work has been conducted for the project area determines the level of needed information or if the collection of information is necessary.
- The accuracy of the estimate of the burden for the collection of information listed in the table on page 38056 of the Federal Register is dependent on the size of the project, complexity of the issues, experience and equipment needs of the consultant as well as previous information available for the site.
- Established survey protocol used for collecting the data will enhance the quality, utility and clarity of the information.
- Initial use of on-line desktop tools such as the Natural Heritage Data Explorer in the Tier 1 phase of project development will help in determining the data available and guide needed survey work for the project area reducing potential costs.
- Ways to minimize the burden of the collection of information on respondents is to identify project locations with potential minimal impacts to rare, threatened and endangered (RTE) species based on existing information and development of guidelines/best management practices for candidate and existing RTE species that can be implemented to avoid and minimize impacts such as facility operations including higher cut in speeds.

Appendix E
Public Comment on Burden Hour Estimates

Thank you for the opportunity to comment on this proposed Land-Based Wind Energy Guidelines: Information Collection.

Sincerely,

S. Rene' Hypes
Virginia Natural Heritage Project Review Coordinator

Appendix F
Revised Burden Estimates

Revised Burden Hour Estimate: Supporting Statement A

ACTIVITY (Reporting and recordkeeping)	NUMBER OF RESPONDENTS	NUMBER OF RESPONSES	COMPLETION TIME PER RESPONSE	TOTAL ANNUAL BURDEN HOURS	TOTAL DOLLAR VALUE OF BURDEN HOURS (@$57.57/hr) (rounded)
Tier 1 (Desktop Analysis)	40	40	81	3,240	$186,527
Tier 2 (Site Characterization)	35	35	369	12,915	$743,517
Tier 3 (Pre-construction studies)	30	30	14,695	440,850	$25,379,735
Tier 4 (Post-construction fatality monitoring and habitat studies)	45	45	4,023	181,035	$10,422,185
Tier 5 (Other post-construction studies	10	10	6,939	69,390	$3,994,782
TOTALS	160	160	26,107	707,430	$40,726,746

Revised Nonhour Burden Estimate: Supporting Statement A

ACTIVITY	NUMBER OF RESPONSES	COST PER RESPONSE	TOTAL ESTIMATED ANNUAL NONHOUR COST BURDEN
Tier 1 (Desktop Analysis)	40	$825	$33,000
Tier 2 (Site Characterization)	35	$3,750	$131,250
Tier 3 (Pre-construction studies)	30	$149,288	$4,478,640
Tier 4 (Post-construction fatality monitoring and habitat studies)	45	$40,875	$1,839,375
Tier 5 (Other post-construction studies	10	$70,500	$705,000
TOTALS	160		$7,187,265

Appendix F
Revised Burden Estimates

Revised Burden Estimates: 30-day Notice

ACTIVITY (Reporting and recordkeeping)	NUMBER OF RESPONDENTS	NUMBER OF RESPONSES	COMPLETION TIME PER RESPONSE (HOURS)	TOTAL ANNUAL BURDEN HOURS	NONHOUR BURDEN COST PER RESPONSE	TOTAL ANNUAL NONHOUR BURDEN COST
Tier 1 (Desktop Analysis)	40	40	81	3,240	$2,000	$33,000
Tier 2 (Site Characterization)	35	35	369	12,915	$4,000	$131,250
Tier 3 (Pre-construction studies)	30	30	14,695	440,850	$23,000	$4,478,640
Tier 4 (Post-construction fatality monitoring and habitat studies)	45	45	4,023	181,035	$95,000	$1,839,375
Tier 5 (Other post-construction studies	10	10	6,939	69,390	$191,000	$705,000
TOTALS	160	160		707,430		$7,187,265