


DEPARTMENT OF NATURAL RESOURCES
Ecological and Water Resources

STATE OF MINNESOTA

DATE: February 2, 2012

TO: Larry Hartman, Jamie MacAlister
Minnesota Department of Commerce

FROM: Jamie Schrenzel 
DNR, Ecological and Water Resources

SUBJECT: DNR Comments Regarding Revised Goodhue Avian and Bat Protection Plan Dated
January 24, 2012

The Minnesota Department of Natural Resources (DNR) has reviewed three draft versions of the Avian and Bat Protection Plan (ABPP) for the Goodhue Wind Project and has provided two comment memos for the first draft, dated September 12, 2011 and September 21, 2011, and one comment letter for the second draft dated January 12, 2012. In response to agency comments including those submitted by the DNR, representatives for AWA Goodhue submitted a revised ABPP dated January 24, 2012. The DNR also received a letter, "Response to MDNR Comments," dated January 24, 2012. The DNR has reviewed these responses and provides the following input for consideration in preparation for an upcoming Public Utilities Commission hearing regarding the ABPP.

Previous DNR comments discussed (summarized):

- interpretation of acoustic bat data;
- reports from citizens and DNR site visits regarding eagle nest locations in the vicinity of the project;
- how the discussion of farm animal and road kill carcasses in the project area should affect the presentation of eagle survey data;
- inclusion and methods of trumpeter swan observations in survey plans;
- possible eagle impact mitigation measures, including concerns regarding the affect of habitat modification or food based management on other rare and/or state-listed species;
- efforts to avoid impacts to the state-listed loggerhead shrike, and
- various corrections, clarifications, and technical input.

Regarding interpretation of bat acoustic, the DNR encourages continued surveying efforts as well as deploying additional Anabat units. Additional survey efforts are recommended to offset the effects of losing a portion of data from the previous surveys. The DNR also recommends that the Department of Commerce consider all the comments and responses to increase understanding of existing data and to assist with decisions about future requirements. This is noted because additional technical information regarding bat results is included from both the DNR and project developer in comment and response letters.

Regarding additional reports of eagle nest locations in the vicinity of the project, the DNR submitted comments on an AWA Goodhue map showing eagle nest locations, on January 25, 2012, containing information from DNR site visits. There were some updates included in DNR comments, but reviewers are not certain that DNR field notes include all nests in the project area as additional resident reports are often received. The DNR will continue to communicate with the United States Fish and Wildlife Service (USFWS) regarding reports received or field verifications of eagle nests. AWA Goodhue has also requested these reports, which the DNR can provide. Further coordination regarding verification of eagle nests is recommended between the USFWS and the project developer. The DNR understands that an Incidental Take Permit will be requested by the project developer and reviewers encourage this approach.

Regarding the presentation of eagle survey data and the presence of carcasses in the project area, AWA Goodhue's response to comments indicate that survey data will be presented to the USFWS including all survey data, without omitting data stated to be affected by eagle feeding or carcass presence. The DNR supports providing the USFWS with all requested data. It appears that this is now occurring. The DNR also encourages AWA Goodhue to further coordinate with the USFWS regarding modeling to inform an Incidental Take Permit.

The DNR appreciates efforts to include additional observation times for the state-listed threatened trumpeter swan due to the presence of a nest near the project boundary.

Regarding mitigation measures for possible eagle impacts included in the ABPP, the DNR is concerned that habitat modification practices or food-based management may affect other rare species and wildlife habitat in general. AWA Goodhue clarified that these measures would not be implemented without wildlife agency concurrence. The DNR agrees with a step that includes wildlife agency (USFWS and DNR) concurrence prior to conducting habitat modification. Further coordination with the USFWS regarding mitigation measures that may be required as part of an Incidental Take Permit is encouraged.

Regarding efforts to avoid and minimize impacts to the state-listed loggerhead shrike, as stated in the January 12, 2012 DNR comment letter, the DNR appreciates efforts made to avoid quality loggerhead shrike habitat. Avoidance of higher quality loggerhead shrike habitat is dependent on turbine and infrastructure locations. The project developer responded that if any changes to turbine locations occurred, it would be confirmed with the DNR that loggerhead shrike habitat would not be adversely affected.

Other DNR comments included technical input or information sharing outside of direct DNR jurisdiction. This input is intended to be useful for development of the record and to inform agency decisions.

There were also corrections and clarifications regarding some information in the ABPP. DNR reviewers do not currently agree with all assertions made by the project developer in the ABPP and responses to comments, and the DNR comment letter noted when we felt presentation of information could be misleading to the reader. Please consider these comment/response discussions along with the ABPP when summarizing information for briefing documents.

The DNR cannot support all statements made in the ABPP, and it appears further coordination is necessary regarding possible impacts to eagles. However, the primary concerns outlined above that are within the direct regulatory jurisdiction of the DNR have been addressed in the ABPP dated January 24, 2012, or a commitment has been stated by AWA Goodhue to obtain agency concurrence regarding areas of concern. The DNR has not focused its review on eagles more than other rare species due to limited regulatory jurisdiction in comparison to federal regulations. However, due to the eagle's status as a state-listed species of special concern, the DNR is interested in the opportunity to comment regarding any future changes to the ABPP regarding eagles. The DNR also plans to seek a role as a commenter regarding development of the mitigation measures and/or survey techniques for the Incidental Take Permit.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
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February 8, 2012

Jamie MacAlister
State Permit Manager
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

Re: AWA Goodhue LLC Wind Project
Avian and Bat Protection Plan Review, Goodhue County, Minnesota
PUC Docket No. IP-6701/WS-08-1233
FWS TAILS #32410-2009-FA-0173

Dear Ms. MacAlister,

This letter serves as a final comment letter on AWA Goodhue Wind's state filing of their Avian and Bat Protection Plan (ABPP). The US Fish and Wildlife Service (the Service) wishes to address some outstanding issues regarding the ABPP, as well as several issues of concern expressed by the public. These issues are: the Service's role in the future of the Goodhue Wind facility development, the sufficiency of the ABPP for the Service's needs and recommendations, issues of alleged baiting activity, collision risk models for assessing the risk Goodhue Wind farm poses to bald and golden eagles, clarification on the Service's recommended two-mile buffer, and the role of future coordination between the Service and Minnesota state agencies.

Role of the Service in Goodhue Wind Development

As we have discussed, the task of coordinating our respective state and federal permitting, licensing, and siting procedures is challenging, but important. In this regard, we sincerely thank the Minnesota Department of Commerce (DOC) for seeking and considering Service input in important areas where our responsibilities overlap. State approval of a site permit and associated ABPP will largely define the scope of actions for which Goodhue Wind may seek federal permits. Upon receipt of any permit application for this project, the Service must then follow our own permit issuance procedures and criteria to determine any necessary permit conditions, Best Management Practices (BMPs), and appropriate measures to avoid, minimize, or mitigate take of eagles.

The Service and AWA Goodhue Wind have agreed to mutually work together to build on the ABPP and develop a federal non-purposeful bald eagle take permit application (50 CFR 22.26). This permit application process will also examine the need for further

environmental review (in the form of an Environmental Assessment), agreement on use of an appropriate collision risk model (see below), development of future monitoring, and appropriate mitigation (based on anticipated levels of take). We will apply our permitting regulations and policy to determine the appropriate level of internal review, as well as public review and comment.

Sufficiency of the ABPP for the Service's Needs

The development of an ABPP is an important tool to aid in bird and bat conservation, however, the Service does not require an ABPP as a precursor to issuance of eagle (or any other) permits. Rather, the ABPP is one available mechanism whereby a developer may articulate conservation measures it will implement to safeguard birds and bats. From a federal permitting perspective, the Service's comments and opinions concerning an ABPP are advisory only. That said, we note that the Service and Goodhue Wind have satisfactorily resolved all material issues respecting bats and migratory birds (other than eagles)¹. Moreover, with respect to bald eagles, the Service and Goodhue Wind have made significant progress. We believe all remaining issues are appropriate for resolution within the confines of the Bald and Golden Eagle Protection Act permitting process. The Service may refuse to grant an eagle take permit upon failure to resolve any material issue directly relating to our permit issuance criteria.

The Service has reviewed multiple drafts of Goodhue Wind's ABPP, and have provided several substantive comment letters (September 23, 2011; January 12, 2012), and have participated in meetings and data sharing with project developers and state agencies. While there are still several outstanding issues that need to be resolved between the Service and Goodhue Wind, these issues will be addressed in the permit application process as described above. Outstanding issues include level of future monitoring, appropriate take levels compared to local area eagle populations (described below in "Use of Collision Risk Models"), adoption of adaptive management, and mutually agreed upon minimization and mitigation measures. As previously stated, after the Minnesota PUC's decision on the Goodhue Wind ABPP has been reached, the federal permitting process will proceed independently.

Alleged Baiting Activity

As stated in the Service letter to the Department of Commerce dated January 12, 2012, the Service neither agrees nor disagrees with the allegation of an active baiting campaign conducted by county residents. Carcasses available for scavengers are common in an agricultural landscape, and will likely be an on-going management issue for this wind facility. The Service is encouraged by Goodhue Wind's proposal to develop a carcass-management program to minimize eagle exposure to turbine blades, and anticipate this minimization measure will be further refined as the federal permit application process develops. If future carcass availability appears to increase project risk's to eagles, adaptive management strategies will be developed by the project proponent with assistance from the Service.

¹ The Service's agreement with the ABPP does not absolve Goodhue wind or any other party of any responsibilities triggered by future listings of endangered species, or take of migratory birds in violation of the MBTA.

Use of Collision Risk Models

AWA Goodhue Wind has indicated their preference to use the Band model to calculate the collision risk of eagles this wind facility may pose. The Service encourages multiple collision-risk models to be utilized and compared. The Service is currently developing a second version of a collision risk model, which will be publically available when completed. As part of the federal eagle take permit application process, the Service would like all survey data and model iterations to be transparent and replicable for all parties, including making data and modeling available for review by the Service, other agencies, other interested parties in the wind industry, and the public. All collision risk estimates will be compared to the local area eagle population to determine if anticipated take levels are compatible with the Service's goal of a stable or increasing eagle breeding population (as stated in the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c)). The "local area eagle population" is defined as the eagle population within a distance from the project footprint equal to the species mean natal-dispersal distance (43 miles). This is defined and described in detail in the Final Assessment: Proposal to Permit Take (USFWS, 2009):

http://www.fws.gov/migratorybirds/CurrentBirdIssues/BaldEagle/FEA_EagleTakePermit_Final.pdf.

Clarification of Recommended Two-Mile Buffer around Bald Eagle Nests

The Minnesota DOC has requested clarification on the Service recommendation that wind turbines be sited two miles away from active bald eagle nests.

The Service's Eagle Conservation Plan Guidance (ECP) (January 2011)

(http://www.fws.gov/windenergy/docs/ECP_draft_guidance_2_10_final_clean_omb.pdf) states,

"Spatial disturbance avoidance zones have been prescribed to protect nests and other types of eagle use areas. Recommendations for the size of avoidance zones for nests of bald and golden eagles have been based on documented distances between nests and territory boundaries...Garrett et al. (1993) found that bald eagle territories extend at least 2 miles from nests, though studies in areas of dense bald eagle breeding territories in superior habitat suggest home ranges may be much smaller (Sherrod *et al.* 1976, Hodges and Robards 1982, Anthony 2001)." (p. 14, paragraph 2)

The ECP Guidance also states project proponents should identify all Important Eagle Use Areas (IEUAs) within 10-miles of the project footprint.

These statements are not meant to indicate that wind projects with IEUAs within 10 miles of a project, and nests within 2 miles of a project are disqualified from obtaining a Non-Purposeful Eagle Take Permit (50 CFR 22.26). Rather, the Service recommends the project proponent consider the risk of their project within these buffers to local area eagle populations. The ECP recommends five stages to assess a wind facility's risk to eagles. Stage 1 site assessment; Stage 2 site-specific surveys and assessments; Stage 3 predicting eagle fatalities; Stage 4 avoidance and minimization of risk; and Stage 5 post-construction monitoring. Therefore, examining eagle use and nests around the project area are just one step in the risk-assessment process.

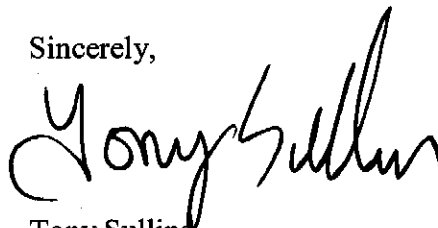
In the Service's January 12, 2012 letter to the Department of Commerce (regarding the ABPP), we stated, "The 2003 Service Interim Guidance provides a recommendation to site potentially lethal infrastructure, including wind turbines, a minimum of two miles from bald eagle nests." To be clear, the 2003 Interim Guidance does not provide an explicit two-mile buffer. Rather, the 2003 Interim Guidance makes general guidelines on avoiding turbine impacts to eagles and other raptors (these recommendations start on page three of the guidance), and encourages developers to consider the home range of species when making these assessments. It is fairly well documented in the literature that bald eagle home ranges are two miles. Additionally, the Service's National Bald Eagle Management Guidelines (2007) state, "to avoid collisions, site wind turbines, communication towers, and high voltage transmission power lines away from nests, foraging areas, and communal roost sites" (p 15). This statement also relies on the assumption of a breeding territory extending two miles in all directions from the established nest location.

Future Coordination between the Service and State Agencies

The Service fully anticipates continued coordination with the MN Department of Natural Resources (DNR), MN DOC, and any other interested state and federal parties as the federal permit application process progresses. This will include sharing of monitoring information and adaptive management, as well as possible federal permit renewal. Currently, federal eagle take permits are available for five years. The Service is also happy to provide technical assistance to the DOC and DNR regarding their own state permit renewals.

In conclusion, the Service appreciates the opportunity to work with state decision-making entities, and hopes to continue such coordination in the future. While not all issues have been resolved on a federal level, the Service will continue to work with Goodhue Wind, state, and federal agencies to process an eagle take permit application with the associated environmental review. The Service appreciates the opportunity to provide technical assistance to the DOC as they make their recommendations to the PUC. We hope this letter answers questions the PUC and DOC may have; please contact me at (612) 725-3548, ext. 2201, Rich Davis, Fish and Wildlife Biologist, at (612) 725-3548, ext. 2214, or Mags Rheude at (612) 725-3548, ext. 2202 if we can be of further assistance.

Sincerely,

A handwritten signature in black ink that reads "Tony Sullins". The signature is written in a cursive, flowing style with a large initial "T".

Tony Sullins
Field Supervisor

cc: Deborah Pile, MN Department of Commerce
Jamie Schrenzel, MN Department of Natural Resources
Jamie Edwards, MN Department of Natural Resources
Melissa Doperalski, MN Department of Natural Resources