

# Appendix B: Agency/Tribal Communication

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# Appendix B-0: List of Agencies/Tribes Receiving Letters or Phone Calls

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ENGINEERING | SURVEYING | ENVIRONMENTAL | PLANNING

# MEMO

## Notification Letters sent to Agencies and Governmental Units

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The following governmental units received letters from EVS. If a response was received, its date is noted with the listing.

### FEDERAL

#### US Fish and Wildlife (USFWS)

- Response received October 28, 2011

#### US Army Corps of Engineers (USACE, COE)

- Response received December 29, 2011

#### Native American Tribes

- Letters sent to the following:

- Flandreau Santee Sioux Tribe of South Dakota
- Lower Sioux Indian Community in the State of Minnesota
- Prairie Island Indian Community in the State of Minnesota
- Santee Sioux Nation, Nebraska
- Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota
- Spirit Lake Tribe, North Dakota
- Upper Sioux Community, Minnesota

### STATE

#### Minnesota Department of Natural Resources (DNR)

- DNR Response received.

#### Minnesota Public Utilities Commission (MN PUC)

- Meeting held

#### MnDOT

- Letters sent to Aviation and Transportation. Aviation responded on November 9, 2011.

#### State Historic Preservation Office (SHPO) and Minnesota Historical Society (MHS)

- Response letter sent of February 9, 2012

#### Minnesota Pollution Control Agency (MPCA)

- Response received November 10, 2011

**Minnesota Board of Water & Soil Resources (BWSR)**

- Response received November 10, 2011

**LOCAL****Counties (Pipestone, Murray)**

- Pipestone response received November 7, 2011
- Letter sent to Murray County Soil and Water Conservation District
- Murray – Two letters sent, no response

**Townships**

- Burke Twp – No response received
- Cameron Twp – No response received
- Chanarambie Twp – Response received November 7, 2011
- Rock Twp – No response received

# Appendix B-1: U.S. Fish and Wildlife Service (USFWS) Response Letter

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## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Twin Cities Field Office  
4101 American Blvd E.  
Bloomington, Minnesota 55425-1665

October 28, 2011

Robert G. Everard  
Environmental Project Manager  
Burns & McDonnell  
9400 Ward Parkway  
Kansas City, Missouri 64114-3319

Re: Stoneray Wind Energy Project  
Pipestone and Murray Counties, Minnesota  
FWS TAILS # 03E19000-2012-CPA-006

Dear Mr. Everard:

This is in response to your September 14, 2011, request for our review of the proposed Stoneray Wind Energy Project in Pipestone and Murray Counties, Minnesota. The proposed project includes the installation of approximately 67 wind turbines and associated infrastructure including roads, transmission lines, and staging areas.

The macro-siting project boundary sent to our office covers a total area of approximately 22,400 acres located as described below.

- All or parts of sections 7-10, 14-29, and 32-36  
Township 107 North, Range 44 West, Pipestone County
- Sections 3, 4, 9, 10, 12, 13, 24 and 25  
Township 106 North, Range 44 West, Pipestone County
- Sections 30 and 31  
Township 107 North, Range 43 West, Murray County
- Sections 6, 7, 17-20, 29 and 30  
Township 106 North, Range 43 West, Murray County

The following comments are being provided pursuant to the Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), Bald and Golden Eagle Protection Act, and Fish and Wildlife Act of 1956. This information is being provided to assist you in making an informed decision regarding wildlife issues, site selection, project design, and compliance with applicable laws.

The Service has been in contact with the Minnesota Department of Natural Resources (MnDNR) as they have developed recommended survey protocols and site evaluations that will satisfy both state and federal wildlife statutes, and this letter describes these measures, in part. We appreciate your early coordination with both the Service and the MnDNR, and recommend continued collaboration on this project to ensure wildlife and habitat issues are fully and appropriately addressed.

The Fish and Wildlife Service supports the development of wind power as an alternative energy source. However, wind farms can have negative impacts on wildlife and their habitats if not sited and designed with potential wildlife and habitat impacts in mind. Selection of the best sites for turbine placement is enhanced by ruling out sites with known, high concentrations of birds and/or bats passing within the rotor-swept area of the turbines or where the effects of habitat fragmentation will be detrimental. In support of wind power generation as a wildlife-friendly, renewable source of power, development sites with comparatively low bird, bat and other wildlife values would be preferable and would have relatively lower impacts on wildlife.

The Service recommends that impacts to streams and wetlands be avoided, and buffers surrounding these systems be preserved. Streams and wetlands provide valuable habitat for fish and wildlife resources, and the filtering capacity of wetlands helps to improve water quality. Naturally-vegetated buffers surrounding these systems are also important in preserving their wildlife-habitat and water quality-enhancement properties. Furthermore, forested riparian systems (wooded areas adjacent to streams) provide important stopover habitat for birds migrating through the region. Project activities should avoid grasslands within the project macro-siting boundary; ground nesting birds and prairie butterflies are susceptible to impacts caused by construction and operational activities at wind energy facilities.

The proposed activities do not constitute a water-dependent activity, as described in the Section 404(b)(1) guidelines, 40 CFR 230.10. Therefore, practicable alternatives that do not impact aquatic sites are presumed to be available, unless clearly demonstrated otherwise. Therefore, before applying for a Section 404 permit, the client should closely evaluate all project alternatives that do not affect streams or wetlands, and if possible, select an alternative that avoids impacts to the aquatic resource. If water resources will be impacted, the St. Paul District of the Corps of Engineers should be contacted for possible need of a Section 404 permit.

### **Federally-listed Threatened, Endangered, and Candidate Species**

Because of the potential for wind power projects to impact federally-listed species, they are subject to the Endangered Species Act (16 U.S.C. 1531-1544) section 9 provisions governing "take," similar to any other development project. "Take" incidental to a lawful activity may be authorized through the initiation of formal consultation, if a Federal agency is involved. If a federal agency, federal funding, or a federal permit are not involved in the project, an incidental take permit pursuant to section 10(a)(1)(B) of the ESA may be obtained upon completion of a satisfactory habitat conservation plan for the listed species. However, there is no mechanism for authorizing incidental take after the project is constructed and operational.

Currently, Dakota skipper (candidate) and Topeka shiner (Endangered) are present within Pipestone and Murray Counties. Additionally the western prairie fringed orchid (Threatened) is present within in Pipestone County. Our records indicate several records of Topeka shiner within and directly adjacent to the proposed macro-siting area. There are also records of Dakota skippers directly adjacent to the proposed macro-siting area.

Designated Critical Habitat for the Topeka shiner is located within the proposed macro-siting boundary. The records of Topeka shiners in the proposed project occur within and outside of designated Critical Habitat streams. To avoid direct and indirect impacts to the Topeka shiner and the designated Critical Habitat areas the Service recommends the following actions for the Stoneray Wind Energy Project.

1. No work within any stream channels during construction or operation of the project.
2. Underground cables should be directionally bored under all stream channels in a manner and at a depth that does not disturb the bottom of the stream channel.
3. Best Management Practices (BMPs) should be in place to control soil erosion and stop all sediment prior to discharge into all streams and all grassed waterways.
4. No hazardous materials will be discharged or released, during construction or operation, in a manner that the substance would reach surface waters within or adjacent to the macro-siting areas.

If the above conditions cannot be met, further consultation with the Twin Cities Field Office will be necessary to determine if a Habitat Conservation Plan (HCP) and Incidental take Permit will be needed to satisfy the project proponent's responsibilities under the ESA.

### **Migratory Birds**

The Migratory Bird Treaty Act (16 U.S.C. 703-712; MBTA) implements four treaties that provide for international protection of migratory birds. The MBTA prohibits taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. Bald and golden eagles are afforded additional legal protection under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d). Unlike the Endangered Species Act, neither the MBTA nor its implementing regulations at 50 CFR Part 21, provide for permitting of "incidental take" of migratory birds.

The Service recommends that a raptor nest survey be completed within the proposed project boundary and out to two miles from the macro-siting boundary prior to leaf-out in the spring of the year. This is particularly important in identifying recently constructed bald eagle nests, as the Minnesota DNR's records of eagle nest locations has not been updated since 2007.

Monitoring should be conducted to assess the daily movement patterns of any raptors actively nesting within the proposed project site or within two miles of the proposed project site. During the incubation and rearing stage, the location of adult birds should be tracked for at least four hours twice per week until consistent activity patterns are established. These monitoring dates will be determined based upon identified species within two miles of the project boundary.

Alternate monitoring strategies that assess the degree to which nesting birds utilize the proposed project site will be considered. Information collected will be used to document how frequently the birds enter the proposed project site, assist in identifying foraging areas, and should assist with micro-siting to minimize substantial risks to birds within close proximity to the project site.

If bald or golden eagle use areas, including but not limited to nesting areas, winter roost areas, and foraging areas, are identified within or in close proximity to the proposed project, or if bald or golden eagles are identified during point count or flight path surveys, please contact our office immediately. The presence of bald or golden eagles and data gathered through these survey efforts will be utilized by our office to provide recommendations to assist the project proponent in reducing potential impacts to bald and golden eagles.

The small prairie streams and adjacent grasslands and wetlands present within the macro-siting areas are utilized by various migratory bird species as flight pathways as they move through the area. The grasslands and wetlands adjacent to these streams may also serve as important nesting habitat for ground nesting grassland bird species. Stream corridors, riparian habitat, and wetlands are regularly utilized by bats for foraging. Turbine placement directly adjacent to the stream corridors, including vegetated riparian areas, should be avoided.

The Service recommends that point count surveys be completed to determine bird species that may be moving through this area during spring and fall migration, and bird species that may be in the area throughout the summer. These surveys will help assess the overall value of the proposed project area to migratory bird species, and it will also assist us in determining the need for post construction monitoring.

The Service's Office of Law Enforcement serves its mission to protect federal trust wildlife species in part by actively monitoring industries known to negatively impact wildlife, and assessing their compliance with Federal law. These industries include oil/gas production sites, cyanide heap/leach mining operations, industrial waste water sites and wind power sites. There is no threshold as to the number of birds incidentally killed by wind power sites, or other industry, past which the Service will seek to initiate enforcement action. However, the Service is less likely to prioritize enforcement action against a site operator that is cooperative in seeking and implementing measures to mitigate take of protected wildlife.

### **Migratory Bird Concentration Areas and Conservation Lands**

We recommend that no turbines be located within ¼-mile of Conservation Reserve Program, Wetland Reserve Program, or other similar federally- or state-funded restoration projects.

### **Service-owned Lands**

At this time there are no Service-owned refuge lands or Waterfowl Production Areas (WPAs) within the macro-siting area or within one mile of the proposed project area. The Service generally recommends a minimum setback distance of ½-mile from WPAs.

## Interim Service Guidelines

Research into the actual causes of bat and bird collisions with wind turbines is limited. To assist Service field staffs in review of wind farm proposals, as well as aid wind energy companies in developing best practices for siting and monitoring of wind farms, the Service published *Interim Guidelines to Avoid and Minimize Wildlife Impacts from Wind Turbines* (2003). We encourage any company/licensee proposing a new wind farm to consider the following excerpted suggestions from the guidelines in an effort to minimize impacts to migratory birds and bats.

- 1) Pre-development evaluations of potential wind farm sites to be conducted by a team of Federal and/or State agency wildlife professions with no vested interest in potential sites;
- 2) Rank potential sites by risk to wildlife;
- 3) Avoid placing turbines in documented locations of federally-listed species;
- 4) Avoid locating turbines in known bird flyways or migration pathways, or near areas of high bird concentrations (i.e., rookeries, leks, refuges, riparian corridors, etc.);
- 5) Avoid locating turbines near known bat hibernation, breeding, or maternity colonies, in migration corridors, or in flight paths between colonies and feeding areas;
- 6) Configure turbine arrays to avoid potential avian mortality where feasible. Implement storm water management practices that do not create attractions for birds, and maintain contiguous habitat for area-sensitive species;
- 7) Avoid fragmenting large, contiguous tracts of wildlife habitat;
- 8) Use tubular supports with pointed tops rather than lattice supports to minimize bird perching and nesting opportunities;
- 9) If taller turbines (top of rotor-swept area is greater than 199 feet above ground level) require lights for aviation safety, the minimum amount of lighting specified by the Federal Aviation Administration (FAA) should be used. Unless otherwise requested by the FAA, only white strobe lights should be used at night, and should be of the minimum intensity and frequency of flashes allowable. Red lights should not be used, as they appear to attract night-migrating birds at a higher rate than white lights;
- 10) Adjust tower height to reduce risk of strikes in areas of high risk for wildlife.

The full text of the guidelines is available at <http://www.fws.gov/habitatconservation/wind.pdf>. The Service believes that implementing these guidelines may help reduce mortality caused by wind turbines. We encourage you to consider these guidelines in the planning and design of the project. We particularly encourage placement of turbines away from any large wetland, stream corridor, or wooded areas, and avoiding placing turbines between nearby habitat blocks.

If this proposal is to move forward, we strongly recommend that on-the-ground surveys using radar, infrared, and/or acoustic monitoring be conducted during the peak of spring and fall bird migrations and during the breeding season over a period of several years (consistent with the Service's *Interim Guidelines, op. cit.*) to identify breeding and feeding areas and migration stopover sites. Observations made from greater than ¼-mile from target areas are likely to be insufficient to accurately assess bird use of the landscape, particularly if the observer is moving. Generalized ground research survey protocols, such as those followed in the Waterfowl Breeding Population and Habitat Survey (Smith 1995) and the North American Breeding Bird Survey (Pardieck 2001), among others, often do not accept observations made at greater than ¼-mile from the observer, due in part to high probabilities of missed detections (R. Russell, personal communication). Furthermore, spring and fall raptor migration surveys may be necessary, as will surveys to document movement patterns of bald eagles that may use the project area or surrounding habitat.

We request that any on-the-ground survey protocols be consistent with the Service's Interim Guidelines (2003), and be coordinated with this office and with the Minnesota Department of Natural Resources prior to implementation.

### **Pre-construction Surveys**

The Service recommends that project proponent and their consultants conduct rigorous assessments of bird and bat use of the area before proceeding with project design (i.e., preliminary siting of specific turbines). We strongly recommend development of a protocol for bird/bat surveys at this site, and specific consideration should be given to the potential for occurrence of upland sandpiper within the proposed project area. We encourage project proponent to maintain consistency with other wind farm survey protocols, thus allowing us to compare results with other wind farm survey data. These comparisons will potentially provide valuable information that can be applied in future wind farm/turbine macro- and micro-siting.

In addition to on-the-ground (point or transect) surveys, the use of mobile, horizontally- and vertically-scanning radar could be useful to study the direction, altitude, and numbers of flying animals moving through and within the project area during the fall and spring migration of birds and bats, and the breeding period of birds in the area. We recommend that radar be employed for 24 hours a day, seven days a week during migration, and at a minimum from dawn to dusk during the breeding period. Radar studies are providing useful information in evaluating bird and bat activity at wind generation sites in Wisconsin, Vermont, Massachusetts and other locations. The use of radar coupled with ground-truthing (surveys) can provide a more complete assessment of bird and bat use of a potential wind project area than point counts or other traditional survey methods alone. Such information could inform project design and minimize potential mortality associated with the project.

We recommend installation of two AnaBat SDI detectors per meteorological tower to be used within the project area, and data should be collected from April 15 - November 15, in both 2012 and 2013. One AnaBat detector should be mounted at five meters above ground, and the other should be mounted as close to the rotor-swept area as possible. The AnaBat's sensitivity should

be adjusted to detect a calibration tone at 20 meters. AnaBat units must monitor from 0.5 hour before sunset until 0.5 hour after sunrise. This will help to gauge bat activity and to some degree, to determine bat species/guild composition within the project area during spring and fall migration and the maternity season.

### **Post -construction Surveys**

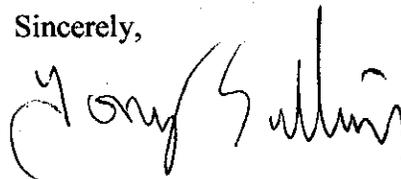
The Service recommends the project be monitored post-construction to determine impacts to migratory birds and bats. A specific post-construction monitoring plan should be prepared and reviewed by the Service and should include a scientifically robust, peer reviewed methodology of mortality surveys. Generally, the Service recommends that surveys be conducted for a minimum of three years following construction to assess impacts to birds and bats. The duration of post construction surveys is project specific and will be determined, in part, based upon pre-construction survey results. We also recommend that the post-construction mortality studies be conducted by an independent third-party contractor with expertise in bird/bat mortality monitoring. Results of mortality surveys and other forms of monitoring should be used to adjust operations to reduce mortality if necessary and feasible, as well as improve design and siting of future wind generation facilities. **The Developer or its contractor should provide to this office each year, no later than December 31, copies of annual bird/bat mortality monitoring reports.**

### **Infrastructure Considerations**

Development of transmission infrastructure associated with wind facilities also poses risks to wildlife. These risks include potential avian mortality, particularly electrocution of raptors (hawks, eagles, kites, falcons, and owls), that could occur when they attempt to perch on uninsulated or unguarded power poles. Recently published information about which types of power line poles and associated hardware (e.g., wires, transformers and conductors) pose the greatest danger of electrocution to raptors and what modifications can be made to reduce this threat can be found on the internet at <http://www.aplic.org/>.

Thank you for the opportunity to provide comments on this proposed project. Please contact me at (612) 725-3548, ext. 2201, or Fish and Wildlife Biologist Rich Davis at (612) 725-3548, ext. 2214, if we can be of further assistance.

Sincerely,



Tony Sullins  
Field Supervisor

cc: Kevin Mixon, MN DNR

# Appendix B-2: U.S. Army Corps of Engineers (USACE) Response Letter

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**DEPARTMENT OF THE ARMY**

St. Paul District Corps of Engineers  
180 Fifth Street East, Suite 700  
St. Paul, Minnesota 55101-1678

December 29, 2011

Operations  
Regulatory (2011-04918-DAS)

Mr. Dan Bowar  
EVS  
10250 Valley View Road, Suite 123  
Eden Prairie, Minnesota 55344-3531

Dear Mr. Bowar:

This letter responds to your request for comments about a project of enXco Development Corporation to construct a wind energy facility identified as the Stoneray Wind Energy Project in Pipestone and Murray Counties, Minnesota.

The placement of aerial lines that cross-navigable waters of the U.S. requires authorization under Section 10 of the Rivers and Harbors Act.

Underground utility lines through waters of the U.S., including wetlands, as well as navigable waters of the U. S. are regulated under Section 404 of the Clean Water Act if there is a discharge of dredged or fill material. Any discharge would require authorization by a general permit or letter of permission.

Underground lines installed by vibratory plow and directional bore method through waters of the U.S., including wetlands, do not involve a discharge and a permit is not required. However, if installation of connecting points requires excavation and backfill in waters of the U.S., including wetlands, a permit would be required.

The placement of poles, overhead wiring, and/or buried wiring at upland locations is not within the jurisdiction of the Corps of Engineers, provided the work does not involve the placement of dredged or fill material into any water body or wetland.

Temporary placement of fill material into any water body or wetland for purposes such as bypass roads, temporary stream crossings, cofferdam construction, or storage sites may require a Department of the Army permit.

If any of the proposed projects would involve the placement of fill material, either permanent or temporary, please notify our office.

Work will be reviewed for potential impact on threatened or endangered species pursuant to Section 7 of the Endangered Species Act. A Federally endangered fish, the Topeka Shiner (*Notropis topeka*), is widely distributed in streams and in side channels, cut-off channels, oxbows, and wetlands in Minnesota's Big Sioux and Rock River

Watersheds. Therefore, applications proposing work in water or wetland areas in these watersheds will be reviewed pursuant to Section 7 of the Endangered Species Act.

Without detailed construction plans, we cannot provide specific comments regarding the effects that the proposed activity would have on watercourse flood stages. It has been our experience that underground and overhead utility construction has negligible effects on flood stages, provided excess construction material is removed from the floodplain and additional care is taken not to disturb its hydraulic characteristics.

You may also need city, county, or State permits for the project. You should contact the appropriate agencies for their permit requirements. If the project includes the placement of dredged or fill material in a Federal regulated water body, we will notify the responsible State agency for water quality (401) certification.

You should also contact the State Historical Preservation Officer (SHPO) to determine if there are any known historic or archeological sites in the area or if any cultural resource survey would be required.

If you have any questions, contact Mr. Dave Studenski in our La Crescent Field office at (507) 895-2064. In any correspondence or inquiries, please refer to the Regulatory number shown above.

Sincerely,



 Tamara E. Cameron  
Chief, Regulatory Branch

# Appendix B-3: Minnesota Department of Natural Resources (MDNR) Response Letter

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# Minnesota Department of Natural Resources

Division of Ecological Resources – Reg. 4

261 Hwy 15 South

New Ulm, MN 56073-8915

Phone: (507) 359-6073 Fax: (507) 359-6018 E-mail: [kevin.mixon@dnr.state.mn.us](mailto:kevin.mixon@dnr.state.mn.us)

October 7, 2011

Mr. Robert G. Everard  
Burns & McDonnell  
9400 Ward Parkway  
Kansas City, Missouri 64114-3319

In re: Stoneray Wind Energy Project  
Preliminary Project Review  
Pipestone and Murray Counties, MN

Dear Robert:

The Minnesota Department of Natural Resources (DNR) has received information concerning the above referenced wind project located in Nobles County, MN. The DNR is providing the following comments as a mechanism to collaboratively work together to identify potential natural resource issues that should be considered during project development.

The Minnesota Department of Natural Resources Guidance For Commercial Wind Energy Projects (attached) should be reviewed and considered throughout project development. The following specific sections are known to pertain to this project area: Rare Species and Native Plant Communities, Native Prairie, Public Conservation and Recreation Lands, State Trails and Recreational Trail Corridors, Properties in Government Programs or With Conservation Easements, and Lakes, Wetlands, Streams, and Rivers.

Salt & Pepper, Gromers Draw, Holland, Terrace, and Van Beek Wildlife Management Areas (WMAs) are adjacent to the project area. The DNR recommends the new turbines be located a minimum of 5 rotor diameter (dominant wind direction) x 3 rotor diameter (non-dominant wind direction) from the non-participating DNR administered lands.

The Casey Jones State Trail (Trail) crosses the project area and the DNR recommends that no direct impacts occur to the trail. The Public Utilities Commission considers trail setbacks on a trail-by-trail basis. However, the DNR highly recommends that turbines not be placed within the 5 x 3 rotor diameter distance from the trail and that no access roads bisect it. In addition, the DNR plans to extend the trail east of where it currently ends in Murray County to connect to the Lake Wilson segment. The new trail segment may cross the narrow portion of the Stoneray project area where turbines currently exist. This issue should be discussed further with the DNR when a preliminary turbine layout is available.

The DNR has developed a Blanding's turtle priority map (attached) that includes potential habitat for the state-listed threatened species. The DNR recommends that infrastructure not be placed in the pasture areas associated with the stream. Construction within the actively farmed areas, within the priority area, should occur from November 1 to May 1 in order to avoid impacts to Blanding turtles or their nests. This issue should be discussed further with the DNR when a preliminary turbine layout is available.

The DNR considers this site to be moderate risk for bird and bat fatalities from operational turbines due to the proximity of the project to WMAs, Conservation Reserve Program lands, Reinvest In Minnesota lands, and streams. As a moderate risk site, the DNR recommends fatality searches be conducted using the methods described in the Draft Avian and Bat Survey Protocols for Large Wind Energy Conversion Systems in Minnesota (attached).

The DNR also recommends bat acoustic surveys be conducted in the project area. The project area contains numerous stream corridors that are associated with wetlands, pasture, Conservation Reserve Program (CRP) lands, and WMAs. The recommended methods are described in the Draft Avian and Bat Survey Protocols for Large Wind Energy Conversion Systems in Minnesota.

The project area contains numerous large tracts of CRP that has the potential to attract grassland birds into the project area. The DNR recommends grassland avian surveys be conducted for any large tracts of grassland where turbines are being considered within the grassland tract or within ¼ mile of the border. The recommended methods are described in the Draft Avian and Bat Survey Protocols for Large Wind Energy Conversion Systems in Minnesota.

This review constitutes a preliminary review of the project and is not a substitute for reviewing potential turbine placement. Further review of the project should be conducted when the preliminary turbine locations are determined. The DNR will provide a second review of the project that is site specific to the proposed turbine locations, transmission lines, substations, and access roads.

The DNR looks forward to working in a positive and collaborative manner on this project to ensure that sustainable energy sources are developed while protecting Minnesota's natural resources. The DNR would appreciate a timely response to the above referenced issues in order to facilitate a collaborative resolution. Please contact me directly at 507-359-6073 if you have any questions.

Very truly yours,



Kevin Mixon  
Regional Environmental Assessment Ecologist  
Division of Ecological and Water Resources

Cc: Lisa Joyal, DNR  
Lisa Gelvin-Innvaer, DNR  
Laurinda Brown, DNR  
Skip Wright, DNR  
Jamie Schrenzel, DNR  
Phil Nasby, DNR  
Vicki Robinson, DNR  
Wendy Krueger, DNR  
Bob Hobart, DNR  
Rich Davis, USFWS  
Jamie MacAlister, DOC

# Appendix B-4: MnDOT Aeronautics Office Response Letter

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## John Howard

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**From:** Dahlseide, Darlene (DOT) [Darlene.Dahlseide@state.mn.us]  
**Sent:** Wednesday, November 09, 2011 11:07 AM  
**To:** Dan Bowar  
**Subject:** Tall Structures in MN  
**Attachments:** MN TT Brochure\_2011.pdf

Mr. Bowar,  
Attached is a copy of our MN Airspace Obstructions brochure.

The brochure is straight forward and will answer most of your questions regarding the National Airspace around Minnesota Airports.

If I can be of any other assistance, please contact me.

**DARLENE DAHLSEIDE**  
**MN/DOT AERONAUTICS**  
**222 PLATO BLVD E**  
**ST. PAUL, MN 55107**

**651-234-7248**

# MINNESOTA AIRSPACE AND TALL STRUCTURES

## In General

When planning to build or modify a structure in Minnesota, one of the considerations must be the impact of the structure on the national airspace system. This consideration is vitally important to Minnesota's public airports; navigational aids; and instrument approach flight procedures.

A number of federal, state, and local regulations exist to protect our airspace system. In the paragraphs below we discuss Federal Aviation



Administration (FAA) and Minnesota Regulations concerning airspace obstructions.

## FAA Notification

Federal law requires that the FAA must receive "prior notification" regarding construction or alteration of a structure, whether permanent or temporary, which meets specific criteria per 14 C.F.R. Part 77.

Whether or not the proposed structure meets these criteria depends on its location in relation to an aviation facility, navigational aid, or instrument procedure ground track. These structures may include but are not limited to highways, roads, railroads, waterways, traverse ways (parking or rest areas), bridges, overpasses, high-mast light poles, utility poles, antenna towers, buildings, signs or billboards, fences or gates, plus temporary-use construction materials or equipment, including dirt piles and cranes, as well as natural growth, vegetation, and landscaping.

For additional information to persons proposing to erect or alter an object that may affect the navigable

airspace, see Advisory Circular 70/7460-2K, "Proposed Construction or Alteration of Objects That May Affect the Navigable Airspace", on the FAA's Obstacle Evaluation/Airport Airspace Analysis (FAA OE/AAA) web site, <http://www.oaaaa.faa.gov>.

If FAA notification is required, the project sponsor must submit FAA Form 7460-1, "Notice of Proposed Construction or Alteration," electronically via FAA's OE/AAA web site or submit hard copy documents to:

Express Processing Center  
Federal Aviation Administration  
Southwest Regional Office  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137-0520

Submitting FAA Form 7460-1 to any other FAA address may significantly delay the OE/AAA process.

Notification must be submitted at least 30 days before the earlier of two dates: the date the proposed construction or alteration is to begin, or the date an application for a construction permit is to be filed.

## Notification to FAA for Large Projects

A large project, such as a power line or a road or maybe a bridge, includes the submittal of at least 12 or more study points. If the structure is a building, FAA will want the latitude and longitude for the corner of the building that is closest to the nearest public use runway, the latitude and longitude for all other corners, as well as the appropriate elevations, a picture and/or a diagram. In addition, file the highest height of any of the points and let the FAA build a worst case scenario.

If you are planning a large project in Minnesota, consider



contacting the FAA Southern Region Technician at 718-553-2611. He/She may provide guidance which will save you and the FAA time during the aeronautical study process. In addition, time and money spent on a professional aviation consultant may benefit you greatly.

## FAA OE/AAA Web Site

The FAA OE/AAA web site has become the single source for all OE/AAA case studies and information. You may view proposed, determined and circularized cases, as well as supplemental notices. Mn/DOT Aeronautics highly recommends all airports sign up for automatic notification of circularized cases. <http://www.oaaaa.faa.gov>

Once a username and password has been set up, submitting structures for analysis becomes very simple, especially if there are multiple structures. In addition, you may track the progress of your case studies by logging onto the OE/AAA web site. You may also submit additional materials to the FAA electronically. All OE/AAA related information and instructions are just a click away.

## FAA Supplemental Notification

If the FAA advises that supplemental notice is required, the sponsor of the notice of construction or alteration is also required to submit a supplemental notice (FAA Form 7460-2, Part 1) to the FAA Southwest Regional Office in Fort Worth, Texas within 48 hours of the start of construction. Also, within five days after the construction or alteration reaches its greatest height, the sponsor must notify the FAA Southwest Regional Office using FAA Form 7460-2, Part 2.

## FAA Emergency Notification

In the case of an emergency involving essential public services, public health, or public safety that requires immediate construction or alteration, the 30-day advance notice requirement does not apply. In such a case, the required notification may be sent by telephone (800-992-7433) or any expeditious means to the nearest FAA Flight Service Station. Within five days thereafter, the sponsor must submit a completed

copy of FAA Form 7460-1 to the FAA Southwest Regional Office in Fort Worth, Texas.

## FAA Notification for On-Airport Structures

For structures to be located on a public-use airport, the airport sponsor must notify the FAA's Airports District Office (ADO). For additional information pertaining to submitting on airport structures, please contact your Minneapolis Airports District Office representative at 612-713-4350.

## FAA Determinations

After receiving a notice of proposed construction or alteration, the FAA conducts an aeronautical study to determine the structure's potential impact on the navigable airspace. That study results in an FAA determination of "hazard" or "no hazard," and the FAA indicates whether or not the proposed construction exceeds the FAA's standards. In some cases, the FAA determination is "no hazard" even though the structure exceeds the standards. If the FAA indicates the proposed construction poses no hazard *and* does not exceed standards, then refer to Minnesota Structure Heights Regulations for permits that may be required from the state of Minnesota or from a local authority. If, however, the proposed construction *does* exceed standards (even if it poses "no hazard"), then the sponsor must apply for a permit from the state or from a local government, if a local ordinance governs the matter.



## Mn/DOT Aeronautics Airspace Obstruction Permit

Minnesota law protects the national airspace in Minnesota by preventing airport hazards and by preventing inappropriate uses of land near public-use airports. Minnesota law also gives Mn/DOT Aeronautics the responsibility and authority to issue an airspace obstruction permit for any proposed structure.

A permit from Mn/DOT Aeronautics may be required for the following wind turbines and other tall, non-transmitting structures located outside the zoned territory of any public use airports with airport zoning in place:

- that are more than 500' AGL any place in the state, or
- when the structure is more than 200' AGL or more than 200 feet above the established airport elevation, whichever gives the highest elevation, within three nautical miles of an airport and increasing by 100' for each additional mile out to six miles and 500', or
- that would increase an instrument approach minimum flight altitude or increase its flight visibility minimums, or
- that would increase the minimum obstruction clearance altitude of a federal airway, or
- that penetrates any of the following imaginary surfaces: primary, horizontal, conical, approach, or transitional surfaces.

Note: Mn/DOT Aeronautics is not authorized to issue a permit for a tower greater than 1000' with a few exceptions.

A permit from Mn/DOT Aeronautics is not required for tall structures

- that transmit, and therefore require a permit from the FCC, or
- that are within the zoned territory of any public-use airport that has airport zoning.



**Note:** A letter of "non-objection" from the FAA as a result of their airspace study does not constitute an "erection permit" nor does an "objection letter" to the tower proponent by the FAA constitute denial of an "erection permit."

It is imperative for every airport manager to understand their local airport zoning ordinance and which department is responsible for its enforcement. In addition, every airport manager should also verify that the FAA has the most current runway endpoint data (including planned runways and runway extensions). Every FAA OE/AAA aeronautical case study depends on the accuracy of this data.

### Application for Permit

To apply for this permit, the proponent should send their request by formal letter or email.

The request should contain the proponents information, a point of contact, the exact location of the structures, a diagram of its location relative to the nearest airport runway, the elevation of the structure above ground level, the ground elevation at the base of the structure, and the plans for marking and lighting the structure. If the proposed structure is a wind turbine the elevation should include the maximum height at the top of the rotating blades, and the marking and lighting should contain the plans for illuminating or marking the blades in addition to the tower. The request should also contain a copy of the Federal Aviation Administration's airspace determination.

Please direct your request to:

**Mn/DOT Aeronautics**  
**Darlene Dahlseide**  
**222 Plato Blvd. E.**  
**St. Paul, MN 55107**

Email: [darlene.dahlseide@state.mn.us](mailto:darlene.dahlseide@state.mn.us)  
or 651-234-7248, fax: 651-296-9089

### Mn/DOT Aeronautics Coordination

While the responsibility for filing notifications and permit applications or variances rests with the project sponsor, the Mn/DOT Aeronautics is available to provide additional guidance for projects that may

impact the national airspace system in Minnesota. In addition, Mn/DOT Aeronautics is also available to provide technical assistance to local governments and airports.

### Marking and Lighting Requirements

Any marking and/or lighting of a structure that is considered an airspace obstruction—and that has been recommended by the FAA in its aeronautical study in order to enhance pilot visual awareness of the structure's presence and location—is a mandatory requirement to be included on the structure by Minnesota law. All airspace obstruction permits contain provisions which require obstruction marking and lighting. Advisory Circular 70/7460-1K, "Obstruction Marking and Lighting", describes the standards for marking and lighting structures such as buildings, chimneys, antenna towers, cooling towers, storage tanks, supporting structures of overhead wires, etc. and is available on FAA's OE/AAA web site listed below.



### Airspace Regulations and Information

- FAA's OE/AAA web site is <http://www.oecaa.faa.gov>
- 14 C.F.R., Part 77, "Objects Affecting Navigable Airspace", Federal Aviation Regulations, is available at [http://www.access.gpo.gov/nara/cfr/waisidx\\_04/14cfr77\\_04.html](http://www.access.gpo.gov/nara/cfr/waisidx_04/14cfr77_04.html)
- Mn/DOT Minnesota Structure Height Regulations: <http://www.dot.state.mn.us/aero/avoffice/talltowers.html>



**MINNESOTA**  
Mn/DOT Office of Aeronautics  
[www.mndot.gov](http://www.mndot.gov)

# Appendix B-5: State Historic Preservation Office (SHPO) Response Letter

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February 9, 2012

Mr. Garrett Knudsen  
Archaeologist  
EVS Engineering, Inc.  
10250 Valley View Road, Suite 123  
Eden Prairie, MN 55344

RE: Stoneray Wind Project  
Pipestone and Murray Counties  
SHPO Number: 2012-0875

Dear Mr. Knudson:

Thank you for the opportunity to review and comment on the above project. It has been reviewed pursuant to the responsibilities given the Minnesota Historical Society by the Minnesota Historic Sites Act and the Minnesota Field Archaeology Act.

Due to the nature of the proposed project, we concur with your recommendation that a Phase I archaeological survey be completed. The survey must meet the requirements of the Secretary of the Interior's Standards for Identification and Evaluation, and should include an evaluation of National Register eligibility for any properties that are identified.

Please note that this comment letter does not address the requirements of Section 106 of the National Historic Preservation Act of 1966 and 36CFR800, procedures of the Advisory Council on Historic Preservation for the protection of historic properties. If this project is considered for federal assistance, or requires a federal license or permit, it should be submitted to our office by the responsible federal agency.

If you have any questions on our review of this project, please contact our Compliance Section at (651) 259-3455.

Sincerely,

  
Mary Ann Heidemann  
Manager, Government Programs and Compliance