

APPENDIX C:
AGENCY COORDINATION AND APPROVALS

Delivered by email

From: Mitch, Brian (Brian.Mitch@dnr.state.oh.us)

Sent: Friday, August 27, 2010 12:21 PM

To: Aaron Godwin (AAaron@conservefirst.com)

Subject: 10-0277; Ohio Wind Schools Wind Turbine Projects

**ODNR COMMENTS TO:**

Aaron Goodwin, The Renaissance Group, 8281 Euclid Chardon Road, Suite E, Kirtland, Ohio 44094

Project: The project consists of the installation of several single wind turbine projects located in the cities of Archbold, Pettisville, Berea, Cleveland, and Chagrin Falls, Ohio. All turbines will be less than 750kW.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced projects. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Fish and Wildlife: The ODNR, Division of Wildlife (DOW) has the following comments.

Archbold Area Schools Project:

The project is within the range of the Indiana bat (*Myotis sodalis*), a state and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees: Shagbark hickory (*Carya ovata*), Shellbark hickory (*Carya laciniosa*), Bitternut hickory (*Carya cordiformis*), Black ash (*Fraxinus nigra*), Green ash (*Fraxinus pennsylvanica*), White ash (*Fraxinus americana*), Shingle oak (*Quercus imbricaria*), Northern red oak (*Quercus rubra*), Slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), Eastern cottonwood (*Populus deltoides*), Silver maple (*Acer saccharinum*), Sassafras (*Sassafras albidum*), Post oak (*Quercus stellata*), and White oak (*Quercus alba*). Indiana bat habitat consists of suitable trees that include dead and dying trees of the species listed above with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees of the species listed above with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. If suitable trees occur within the project area, these trees must be conserved. If suitable habitat occurs on the project area and trees must be cut, cutting must occur between September 30 and April 1. If suitable trees must be cut during the summer months of April 2 to September 29, a net survey must be conducted in May or June prior to cutting. *If no tree removal is proposed, the project is not likely to impact this species.*

The project is within the range of the rayed bean (*Villosa fabalis*), a state endangered and federal candidate mussel species. If there is a history of mussels near the proposed project area, it may be necessary for a professional malacologist approved by the DOW to conduct a mussel survey in the project area. *If no in-water work is proposed, the project is not likely to impact this species and a survey would not be necessary.*

The project is within the range of the Eastern massasauga (*Sistrurus catenatus*), a state endangered and a federal candidate snake species. *Due to the location of the project, the project is not likely to impact this species.*

The ODNR, Ohio Biodiversity Database contains no data at this project site.

Pettisville Local Schools Project:

The project is within the range of the Indiana bat (*Myotis sodalis*), a state and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees: Shagbark hickory (*Carya ovata*), Shellbark hickory (*Carya laciniosa*), Bitternut hickory (*Carya cordiformis*), Black ash (*Fraxinus nigra*), Green ash (*Fraxinus pennsylvanica*), White ash (*Fraxinus americana*), Shingle oak (*Quercus imbricaria*), Northern red oak (*Quercus rubra*), Slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), Eastern cottonwood (*Populus deltoides*), Silver maple (*Acer saccharinum*), Sassafras (*Sassafras albidum*), Post oak (*Quercus stellata*), and White oak (*Quercus alba*). Indiana bat habitat consists of suitable trees that include dead and dying trees of the species listed above with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees of the species listed above with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. If suitable trees occur within the project area, these trees must be conserved. If suitable habitat occurs on the project area and trees must be cut, cutting must occur between September 30 and April 1. If suitable trees must be cut during the summer months of April 2 to September 29, a net survey must be conducted in May or June prior to cutting. *If no tree removal is proposed, the project is not likely to impact this species.*

The project is within the range of the rayed bean (*Villosa fabalis*), a state endangered and federal candidate mussel species. If there is a history of mussels near the proposed project area, it may be necessary for a professional malacologist approved by the DOW to conduct a mussel survey in the project area. *If no in-water work is proposed, the project is not likely to impact this species and a survey would not be necessary.*

The project is within the range of the Eastern massasauga (*Sistrurus catenatus*), a state endangered and a federal candidate snake species. *Due to the location of the project, the project is not likely to impact this species.*

The ODNR, Ohio Biodiversity Database contains no data at this project site.

Cuyahoga County Fairgrounds Project:

The project is within the range of the Indiana bat (*Myotis sodalis*), a state and federally endangered species. There is a record for this species about 4.3 miles from this project site. The following species of trees have relatively high value as potential Indiana bat roost trees: Shagbark hickory (*Carya ovata*), Shellbark hickory (*Carya laciniosa*), Bitternut hickory (*Carya cordiformis*), Black ash (*Fraxinus nigra*), Green ash (*Fraxinus pennsylvanica*), White ash (*Fraxinus americana*), Shingle oak (*Quercus imbricaria*), Northern red oak (*Quercus rubra*), Slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), Eastern cottonwood (*Populus deltoides*), Silver maple (*Acer saccharinum*), Sassafras (*Sassafras albidum*), Post oak (*Quercus stellata*), and White oak (*Quercus alba*). Indiana bat habitat consists of suitable trees that include dead and dying trees of the species listed above with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees of the species listed above with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. If suitable trees occur within the project area, these trees must be conserved. If suitable habitat occurs on the project area and trees must be cut, cutting must occur between September 30 and April 1. If suitable trees must be cut during the summer months of April 2 to September 29, a net survey must be conducted in May or June prior to cutting. *If no tree removal is proposed, the project is not likely to impact this species.*

The project is within the range of the bald eagle (*Haliaeetus leucocephalus*), a state threatened species. *However, the Ohio Biodiversity Database currently has no records of this species near the project area.*

The project is within the range of the Canada darner (*Aeshna canadensis*), a state endangered dragonfly. *Due to the mobility of this species, the project is not likely to impact this species.*

The project is within the range of the black bear (*Ursus americanus*), a state endangered species, and the bobcat (*Lynx rufus*), a state endangered species. *Due to the mobility of these species, the project is not likely to have an impact on these species.*

The project is within the range of the golden-winged warbler (*Vermivora chrysoptera*), a state endangered bird, the piping plover (*Charadrius melodus*), a state and federally endangered bird species, the king rail (*Rallus elegans*), a state endangered bird, and the yellow-bellied sapsucker (*Sphyrapicus varius*), a state endangered bird. *Due to the location of the project and the habitat requirements of these species, the project is not likely to impact these species.*

The ODNR, Ohio Biodiversity Database contains no data at this project site.

Kenston Local Schools Project:

The project is within the range of the Indiana bat (*Myotis sodalis*), a state and federally endangered species. There is a record for this species about seven miles from the project area. The following species of trees have relatively high value as potential Indiana bat roost trees: Shagbark hickory (*Carya ovata*), Shellbark hickory (*Carya laciniosa*), Bitternut hickory (*Carya cordiformis*), Black ash (*Fraxinus nigra*), Green ash (*Fraxinus pennsylvanica*), White ash (*Fraxinus americana*), Shingle oak (*Quercus imbricaria*), Northern red oak (*Quercus rubra*), Slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), Eastern cottonwood (*Populus deltoides*), Silver maple (*Acer saccharinum*), Sassafras (*Sassafras albidum*), Post oak (*Quercus stellata*), and White oak (*Quercus alba*). Indiana bat habitat consists of suitable trees that include dead and dying trees of the species listed above with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees of the species listed above with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. If suitable trees occur within the project area, these trees must be conserved. If suitable habitat occurs on the project area and trees must be cut, cutting must occur between September 30 and April 1. If suitable trees must be cut during the summer months of April 2 to September 29, a net survey must be conducted in May or June prior to cutting. *If no tree removal is proposed, the project is not likely to impact this species.*

The project is within the range of the bald eagle (*Haliaeetus leucocephalus*), a state threatened species. *However, the Ohio Biodiversity Database currently has no records of this species near the project area.*

The project is within the range of the snuffbox (*Epioblasma triquetra*), a state endangered mussel, and the eastern pondmussel (*Ligumia nasuta*), a state endangered mussel. If there is a history of mussels near the proposed project area, it may be necessary for a professional malacologist approved by the DOW to conduct a mussel survey in the project area. *If no in-water work is proposed, the project is not likely to impact these species and a survey would not be necessary.*

The project is within the range of the American emerald (*Cordulia shurtleffi*), a state endangered dragonfly, the frosted whiteface (*Leucorrhinia frigida*), a state endangered dragonfly, and the racket-tailed emerald (*Dorocordulia libera*), a state endangered dragonfly. *Due to the mobility of these species, the project is not likely to impact these species.*

The project is within the range of the black bear (*Ursus americanus*), a state endangered species, and the bobcat (*Lynx rufus*), a state endangered species. *Due to the mobility of these species, the project is not likely to have an impact on these species.*

The project is within the range of the yellow-bellied sapsucker (*Sphyrapicus varius*), a state endangered bird. *Due to the location of the project and the habitat requirements of this species, the project is not likely to have an impact on this species.*

The project is in the range of the snowshoe hare (*Lepus americanus*), a state endangered species. *Due to the location of the project area, the project is not likely to have an impact on this species.*

The ODNR, Ohio Biodiversity Database contains no data at this project site.

Geological Survey: The ODNR, Division of Geological Survey has the following comments.

The Archbold site is on soft lacustrine silt and clay and the bedrock is 150 feet deep. The Pettisville site is on soft lacustrine sand and the bedrock is 145 feet deep. Both of these sites may require deepened foundations.

The Division of Geological Survey has no significant geologic concerns with the other two sites.

ODNR appreciates the opportunity to provide these comments. Please contact Brian Mitch at (614) 265-6378 if you have questions about these comments or need additional information.

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Ohio Department of Natural Resources
Environmental Services Section
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Columbus, Ohio 43229-6693
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United States Department of the Interior

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September 21, 2009

Mr. Aaron Godwin
The Renaissance Group
10299 Longview Drive
Kirtland, Ohio 44094

TAILS# 31420-2009-TA-1156

Dear Mr. Godwin:

This is in response to your September 14, 2009 letter requesting our review of a proposed wind energy project in Fulton County, Ohio. The project involves installation of a small (225 kW-750 kW), single wind turbine at the Archbold Schools Site, Fulton County, Ohio. Currently, the project area is composed of an open field adjacent to an existing school. The landscape surrounding the school is residential and agricultural in nature. This information is solicited to support an application for ARRA stimulus funding.

There are no Federal wilderness areas, wildlife refuges, or designated critical habitat within the vicinity of the project area.

The following comments are being provided pursuant to the Endangered Species Act (ESA), Migratory Bird Treaty Act, 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 Fish and Wildlife Service (Service) supports the development of wind power as an alternative energy source, however, wind power projects 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 rotoswept 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.

ENDANGERED SPECIES COMMENTS:

The proposed project lies within the range of the **Indiana bat** (*Myotis sodalis*), a Federally listed endangered species. Since first listed as endangered in 1967, their population has declined by nearly 60%. Several factors have contributed to the decline of the Indiana bat, including the loss and degradation of suitable hibernacula, human disturbance during hibernation, pesticides, and the loss and degradation of forested habitat, particularly stands of large, mature trees. Fragmentation of forest habitat may also contribute to declines. During the winter Indiana bats hibernate in caves and abandoned mines. Summer habitat requirements for the species are not well defined but the following are considered

important:

1. Dead or live trees and snags with peeling or exfoliating bark, split tree trunk and/or branches, or cavities, which may be used as maternity roost areas.
2. Live trees (such as shagbark hickory and oaks) which have exfoliating bark.
3. Stream corridors, riparian areas, and upland woodlots which provide forage sites.

The Service currently has no records for Indiana bats within 5 miles of the project area, and the immediate and greater project areas do not support suitable habitat. Therefore, we do not anticipate any impact on this species.

The project lies within the range of the rayed bean mussel and eastern massasauga federally listed candidate species. Due to the project type, size, and location, we do not anticipate any impact on these species or their habitats. Should the project design change, or during the term of this action, additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, consultation with the Service should be initiated to assess any potential impacts.

MIGRATORY BIRD COMMENTS:

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. No bald eagle nests are known to occur in Fulton County, and we are not aware of any eagle staging or congregation areas in this county. Therefore, we do not anticipate any impact on this species.

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 takes of protected wildlife.

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 professionals 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 rotorswept 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, including the areas mentioned previously, and avoid placing turbines between nearby habitat blocks.

Thank you for the opportunity to provide comments on this proposed project. Please contact biologist Megan Seymour at extension 16 in this office if we can be of further assistance.

Sincerely,



for Mary Knapp, Ph.D.
Supervisor

Cc: Mr. Keith Lott, ODNR, Old Woman Creek, 2514 Cleveland Road East, Huron, OH 44839
Mr. Brian Mitch, ODNR, REALM, Columbus, OH



United States Department of the Interior

FISH AND WILDLIFE SERVICE

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September 2, 2010

DOE Golden Field Office
 c/o Melissa Rossiter
 1617 Cole Boulevard
 Golden, CO 80401

Dear Ms. Rossiter:

This is in response to your Notice of Public Scoping for the proposed Archbold School District Wind Turbine, which involves the construction and operation of a single 600-750 kW wind turbine at the school, located at 600 Lafayette Street, Archbold, Fulton County, Ohio. Funding for the project is being sought through the Department of Energy (DOE). The following comments are being provided pursuant to the Endangered Species Act (ESA), Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Fish and Wildlife Act of 1956. This information is being provided to assist you in making informed decisions regarding wildlife issues, site selection, and project design, and to assist you with complying with the applicable Federal wildlife laws.

The Fish and Wildlife Service (Service) supports the development of wind power as an alternative energy source; however, wind power projects can have avoidable negative impacts on wildlife and their habitats if not sited and designed with potential wildlife and habitat impacts in mind. Generally speaking, selection of the best sites for turbine placement is enhanced by ruling out sites with known, high concentrations of birds and/or bats passing nearby the rotorswept area of the turbines or where the effects of habitat fragmentation will be detrimental.

ENDANGERED SPECIES COMMENTS:

The ESA prohibits the "take" of any listed species. Take is defined as, among other things, to harass, harm, wound, or kill. Harm and harass are further defined by regulation. Harm includes habitat modification or degradation that results in death or injury. Harass means to cause injury by disrupting normal behavior patterns such as breeding, feeding, or sheltering. The ESA also prohibits Federal agencies from funding, authorizing, or carrying-out, in full or in part, any action that is likely to adversely modify critical habitat. For reasons described below, we believe your project is not likely to adversely affect Indiana bats. The project additionally lies within the range of the **rayed bean** (*Villosa fabalis*) and **eastern massasauga** (*Sistrurus catenatus catenatus*), Federal candidate species. However no suitable habitat for either of these species occurs within the project area and no impact to these species is anticipated.

Indiana Bat

Your proposed project lies within the range of the Indiana bat (*Myotis sodalis*), a federally listed endangered species. Since first listed as endangered in 1967, their population has declined by nearly 60 percent. Several factors have contributed to the decline of the Indiana bat, including the loss and degradation of suitable hibernacula, human disturbance during hibernation, pesticides, and the loss,

fragmentation, and degradation of forested habitat, particularly stands of large, mature trees. During the winter, Indiana bats hibernate in caves and abandoned mines. These caves are critical for the survival of the species and several have been officially designated as critical habitat. In the spring and fall, Indiana bats migrate between their summer and winter habitats. Knowledge of the migratory behavior of Indiana bats is limited. Anecdotal information and available data give some insights into their flight behavior. Data from a few studies from the eastern portion of the range indicate that Indiana bats will fly at the canopy level during migration. Anecdotal information and data from closely related species, however, indicate that they may also fly at higher elevations especially over open areas. Upon arriving at their summer grounds, females form maternity colonies while males tend to roost singly. Summer habitat for Indiana bats includes roosting, foraging, and commuting areas. Roosting habitat is generally described as wooded areas containing trees or snags with peeling or exfoliating bark, split tree trunk and/or branches, or cavities. Foraging habitat includes stream corridors, riparian areas, and upland woodlots, and commuting habitat includes wooded areas, tree-lines or wooded hedgerows and other such wooded pathways that connect roosting and foraging areas. Information to date indicates that Indiana bats predominately forage, roost, and travel within wooded habitats or along their edges and are rarely found in open areas. Drawing from all existing data, we believe it is highly unlikely for summering Indiana bats to use open areas that are greater than 1000 feet from a wooded edge or area. Extensive research has shown that Indiana bats are highly philopatric to both their hibernation and summer areas. Thus, loss or degradation of these traditionally used areas is likely to cause harm to Indiana bats.

Wind energy facilities in various habitats across the U.S. and Canada have been documented to cause “widespread and often extensive fatalities of bats” (Arnett *et al.* 2008). At this time, research into the mechanisms that cause mortality of bats at wind power sites is ongoing but collision and barotrauma associated with moving turbine blades are clear proximate causes of death. Also, research on how to avoid fatalities is continuing. Currently, only a few operational tools have shown some success at avoiding or minimizing take, e.g., feathering of turbines during times when bats are most at risk has been shown to reduce mortality in some situations. Clearly, siting is important measure for avoiding and minimizing impacts. Siting recommendations to avoid impacts during the summer and winter periods are easier to provide, while the uncertainties relating to Indiana bat migration lend some difficulty to predicting where on the landscape we would expect Indiana bats to occur.

We have integrated what we know about Indiana bat ecology, the siting and operational specifics of your project, and what we know about turbine and bat interactions to assess the impacts of your project on Indiana bats. For reasons described below we believe your project is unlikely to adversely affect fall swarming and wintering Indiana bats but may adversely affect migrating and summering Indiana bats.

Winter (and fall swarming) Period

In fall just before entering caves for hibernation, Indiana bats use the surrounding forested area to forage and build up fat reserves for their 6-7 month hibernation period. Data available suggest that Indiana bats will forage up to 10 to 20 miles from their hibernacula. Turbines placed within this fall swarming range may take Indiana bats. As the location of your proposed wind turbine is not within 20 miles of any known or suspected Indiana bat hibernacula, we believe it is unlikely that your project will take Indiana bats during the fall swarming and hibernation periods.

Migration Period

The vast majority of the document fatalities across U.S. and Canada have occurred during the fall migratory season (Arnett *et al.* 2008). Most of these mortalities were “long-distant migratory tree bats,” which are a group of bats that exhibit substantially different behaviors during migration than species like Indiana bat. It is currently suspected that these differences make the long-distant migratory tree bats more susceptible to exposure to wind turbines than other guilds of bats. Although not as frequently recorded,

there have been a notable number of fatalities for other species of bats as well, with a single Indiana bat mortality incident detected at a wind power facility in Indiana. These observations confirm that other bats, including Indiana bats, are also susceptible to mortality from wind turbines during the migration period.

Interactions between bats and wind turbines, particularly small-size, single turbines, are poorly understood, and therefore appropriate siting of wind power facilities to avoid and minimize take remains our most effective tool. Generally speaking, we expect that Indiana bats are substantially less vulnerable to take at small wind facilities. However, there is a confounding factor of blade height with the smaller-sized turbines. As indicated above, we lack data on the height at which Indiana bats fly while migrating. Mortality of little brown bat (*Myotis lucifugus*) at wind facilities across the range indicate that this closely related species migrates at heights typical of the rotorswept area of commercial turbines. This coupled with the record of an Indiana bat killed at a commercial wind facility suggest that Indiana bats may often fly at heights that intersect commercial sized turbines during migration. This mortality event occurred in an unforested area. Thus, we believe that Indiana bats are susceptible to wind turbine mortality anywhere within the range of Indiana bats. At small scale wind sites, the area of exposure is substantially less than the cumulative rotorswept area of a commercial sized facility, and thus, so too is the likelihood of an Indiana bat intersecting a turbine.

In areas where suitable habitat is nearby, however, the risk of mortality during migration is higher. Data from migration studies indicate that Indiana bats will fly at or above the tree canopy level during the migration period. The rotorswept area associated with small-size turbines will intersect the area that Indiana bats are known to use at times during migration. For this reason, we believe in order to minimize the chance of taking Indiana bats during the migratory period, the wind turbine should be located greater than 1000 feet from woodlots and forested streams corridors.

Summer Period

Although monitoring to date shows that mortality is greatest during the fall migration period, substantial bat fatalities have been recorded during the summer, including *Myotis* species. For this reason, we believe turbines sited within or near (1000 ft) suitable Indiana bat summer habitat may lead to the take of Indiana bats.

In addition to the direct take due to collision and barotrauma associated with turbine operation, habitat manipulation needed to construct the wind turbines can also have adverse effects on Indiana bats. Extensive research has been conducted on the behavior and habitat use of Indiana bats during the summer period. Briefly, female Indiana bats form colonies ranging from 25 to 300 adult bats, with an average around 80. Each female rears a single pup. The colony typically has a single tree within wooded areas in which they roost together for most of the summer with decreasing frequency/dependency in latter part of the summer. Male Indiana bats are sometimes found among females, but more typically they roost singly or smaller groups. At dusk, the adults and volant young depart the roost tree to search for insect prey throughout the night. Their foraging habitat is primarily restricted to woodlots and forested streams although they will forage along the forest edge and tend to avoid open areas. Although there are observations of Indiana bats flying over open space, the vast majority of the records are within 1000 feet of a forested edge. Thus, we believe wind turbines constructed within 1000 feet of suitable habitat are likely to pose a threat to Indiana bats. Data also show that colonies show strong fidelity to their summer areas. Loss, modification or fragmentation of their traditional summer areas—whether or not such destruction occurs during summer period--can lead to adverse impacts to colonies.

Based on the information provided, your wind turbine will be located greater than 1000 feet from woodlots and forested streams corridor and beyond 20 miles of any known hibernacula. Further, all

associated construction activity will not affect potentially suitable roosting, foraging or commuting habitats. These measures will, we believe, substantially minimize the potential exposure of Indiana bats to your wind turbine and harm through habitat modification. Therefore, we do not believe your project poses adverse impacts to Indiana bats. If this incorrect, however, further consultation with this office is necessary to comply with the ESA.

Note: Research on the interaction of wind turbines and bats is active but in the beginning stages. As we indicated previously, there is still a great amount of uncertainty regarding the impacts of wind turbines on Indiana bat, particularly small scale wind facilities. Data are rapidly becoming available, and hence, our conclusions and recommendations necessarily evolve as this new information becomes available. We understand that DOE, in consultation with the Service, may be undertaking a regional monitoring program to help resolve some of the uncertainty surrounding impacts from small scale wind turbines. As these data become available, we will adapt our conclusions and recommendations accordingly. Please note that we currently believe that sufficient evidence suggests siting turbines greater than 20 miles from known hibernacula and farther than 1000 feet from summer habitat will likely avoid adverse impacts to Indiana bats. However, if new information reveals that these beliefs are in err, DOE will reinitiate consultation with the Service and you may be instructed to take further precautions (such as curtailing operations) to avoid or minimize the take of Indiana bats.

MIGRATORY BIRD COMMENTS:

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. While the MBTA has no provision for allowing unauthorized take, the U.S. Fish and Wildlife Service (FWS) recognizes that some birds may be taken during activities such as wind turbine operation even if all reasonable measures to avoid take are implemented. The U.S. Fish and Wildlife Service's Office of Law Enforcement carries out its mission to protect migratory birds not only through investigation and enforcement, but also through fostering relationships with individuals and industries that proactively seeks to eliminate their impacts on migratory birds. Although it is not possible under the MBTA to absolve individuals, companies, or agencies from liability (even if they implement avian mortality avoidance or similar conservation measures), the Office of Law Enforcement focuses on those individuals, companies, or agencies that take migratory birds with disregard for their actions and the law, especially when conservation measures have been developed but are not properly implemented.

Your project lies within the range of the bald eagle (*Haliaeetus leucocephalus*), a species included under the Migratory Bird Treaty Act, but also afforded additional legal protection under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d). The Bald and Golden Eagle Act prohibits the take of eagles without a permit. Interactions between eagles and turbines, particularly small single turbines, are poorly understood, and therefore appropriate siting of wind power facilities to avoid and minimize take remains our most effective tool. Because so little is known about interactions between eagles and single, small turbines, and how multiple small turbines across the landscape may affect eagles, it is difficult to predict if and how this project may affect eagles. However, the siting of the turbine in areas that generally do not provide high quality eagle habitat, and the small size and rotor-swept area of the turbine, leads us to believe that take of bald eagles from operation of the turbine is unlikely to occur. Additionally, bald eagle nests are not known to currently occur within the project area or within 5 miles of the project area. The FWS has recently finalized official agency guidelines to assist project proponents in avoiding and minimizing impacts to migratory birds, including bald eagles. We encourage you to consider those aspects of the guidelines detailed below to minimize impacts to all migratory birds.

Note: As explained above for endangered species, given the uncertainties associated with the effects of small scale turbines locally and cumulatively on birds and bats, we are working with DOE to develop a research program. Although the precise study design has yet to be agreed upon, we anticipate this program will entail monitoring at a subset of DOE-funded small-scale wind turbines. This would aid in our assessment of future wind power projects, test the assumptions we are currently making, and promote the conservation of eagles.

The full text of the Service's 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 particularly encourage you to consider the following excerpted suggestions from the Service's guidelines in an effort to minimize impacts to all 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, State or Federal refuges, staging areas, wetlands, riparian corridors, etc.). Avoid known daily movement flyways and areas with a high incidence of fog, mist or low visibility.
- 5) Avoid placing 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 (i.e., group turbines and orient rows of turbines parallel to known bird movements). 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. Wherever practical, place turbines on lands already disturbed and away from intact healthy native habitats. If not practical, select fragmented or degraded habitats over relatively intact areas.
- 8) Minimize roads, fences, and other infrastructure. Wherever possible, align collection lines and access roads to minimize disturbance.
- 9) Develop a habitat restoration plan for the proposed site that avoids or minimizes negative impacts on vulnerable wildlife while maintaining or enhancing habitat values for other species (i.e., avoid attracting prey animals used by raptors).
- 10) Use tubular supports with pointed tops rather than lattice supports to minimize bird perching and nesting opportunities. Avoid placing external ladders and platforms on tubular towers to minimize perching/nesting. Avoid use of guy wires for turbine or meteorological tower supports. All existing guy wires should be marked with bird deterrents (Avian Power Line Interaction Committee 1996).
- 11) 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.

- 12) Adjust tower height to reduce risk of strikes in areas of high risk for wildlife.
- 13) Wherever feasible, place electric power lines underground or on the surface as insulated, shielded wire to avoid electrocution of birds. Use recommendations of the Avian Power Line Interaction Committee (1996) for any required above-ground lines, transformers, or conductors.

WATER RESOURCE COMMENTS:

Generally speaking, 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 and bats migrating through the region. As such, we also recommend that impacts to streams and wetlands be avoided, and buffers surrounding these systems be preserved even in areas where endangered species are not to occur. 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 Corps of Engineers should be contacted for possible need of a Section 404 permit.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the Endangered Species Act of 1973, as amended, and are consistent with the intent of the National Environmental Policy Act of 1969 and the U. S. Fish and Wildlife Service's Mitigation Policy. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

Thank you for the opportunity to provide comments on this proposed project. Please contact Megan Seymour of this office for further information.

Sincerely,



Mary Knapp, Ph.D.
Field Supervisor

Cc: Brian Mitch, ODNR, Columbus, OH
Keith Lott, ODNR, Huron, OH



OHIO DEPARTMENT OF TRANSPORTATION AVIATION

2829 W. DUBLIN-GRANVILLE ROAD • COLUMBUS, OH • 43235-2786

August 5, 2010

Archbold Schools
Attn: Aaron Godwin
8281 Euclid Chardon Rd. # E
Kirtland, OH 44094

Proposal: Wind Turbine
Lat: N41°-30'-54.65"
Lon: W84°-18'-57.24"
Height: 335 ft AGL 1062 ft AMSL

Subject: APPLICATION FOR CONSTRUCTION/ALTERATION PERMIT
Aeronautical Study No: 2010-DOT-664-OE

To Whom It May Concern,

The purpose of this letter is to notify you that your application concerning construction at the specified latitude, longitude and proposed height does not require a permit from this office. Your proposal falls outside the limits set forth in Section 4561.32 of the Ohio Revised Code. However, this does not exempt you from filing with the FAA or contacting local zoning authorities regarding compliance with local zoning ordinances.

If you have any questions, please call; (614)387-2346.

Respectively,

E-SIGNATURE

John A. Milling, Aviation Specialist
ODOT Office of Aviation
2829 W. Dublin-Granville Road
Columbus, OH 43235



Federal Aviation Administration
 Air Traffic Airspace Branch, ASW-520
 2601 Meacham Blvd.
 Fort Worth, TX 76137-0520

Aeronautical Study No.
 2010-WTE-10896-OE
 Prior Study No.
 2009-WTE-8657-OE

Issued Date: 08/19/2010

Dave Deskins, Superintendent
 Archbold Schools
 600 Lafayette St.
 Archbold, OH 43502

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine Archbold Schools Wind Turbine
 Location: Archbold, OH
 Latitude: 41-30-54.65N NAD 83
 Longitude: 84-18-57.24W
 Heights: 335 feet above ground level (AGL)
 1062 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is marked and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

This determination expires on 08/19/2012 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2010-WTE-10896-OE.

Signature Control No: 128939283-129829833

(DNE -WT)

Michael Blaich
Specialist



UNITED STATES DEPARTMENT OF COMMERCE
National Telecommunications and
Information Administration
Washington, D.C. 20230

OCT 18 2010

Ms. Caroline Mann
Office of Energy Efficiency and Renewable Energy (EE-40)
US Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Re: Archbold Area Wind Project, in Fulton County, OH

Dear Ms. Mann:

In response to your request on August 18, 2010, the National Telecommunications and Information Administration provided to the federal agencies represented in the Interdepartment Radio Advisory Committee (IRAC) the plans for the Archbold Area Local School Wind Energy Project, located in Fulton County, Ohio.

After a 45 day period of review, no federal agencies identified any concerns regarding blockage of their radio frequency transmissions.

While the IRAC agencies did not identify any concerns regarding radio frequency blockage, this does not eliminate the need for the wind energy facilities to meet any other requirements specified by law related to these agencies. For example, this review by the IRAC does not eliminate any need that may exist to coordinate with the Federal Aviation Administration concerning flight obstruction.

Thank you for the opportunity to review these proposals.

Sincerely,

A handwritten signature in black ink, appearing to read "Ed M. Davison".

Edward M. Davison
Deputy Associate Administrator
Office of Spectrum Management

Archbold

ORDINANCE NO. 08-24

AMENDING ORDINANCE NO. 02-38 TO REGULATE THE INSTALLATION
AND USE OF WIND TURBINES

BE IT ORDAINED by the Council of the Village of Archbold, Ohio, as follows:

Section 1. Ordinance 02-38 is hereby amended to add Section 152.085 regulating wind turbines as follows:

Section 152.085(A) Wind Energy Conversion Systems (WECS) shall be a Conditional Use only in the M-2 General Industrial, Agricultural, and S-1 Special districts, and shall require Planning Commission review as per Section 152.162 of Ordinance 02-38. To obtain a Conditional Use permit a WECS must meet all of the requirements specified in Section 152.085(C) of this ordinance. WECS shall not be allowed in any residential district.

Section 152.085(B) DEFINITIONS

WECS . Wind Energy Conversion System: An electrical generating facility comprised of one or more wind turbines and accessory facilities, including but not limited to: power lines, transformers, substations and meteorological towers, that operate by converting the kinetic energy of wind into electrical energy. The energy may be used on-site or distributed into the electrical grid.

Fall Zone: An area defined as a distance of at least 125% of the total height of the total structure from any property line, occupied building, and public or private road or right-of-way.

Feeder Line: Any power line that carries electrical power from one or more wind turbines or individual transformers associated with an individual wind turbine to the point of interconnection with the electric power grid.

Meteorological Tower: For the purposes of this Wind Energy Conversion System Ordinance, meteorological towers are those towers which are erected primarily to measure wind speed and directions plus other data relevant to siting WECS.

Property line: The boundary line of the area over which the entity applying for a WECS permit has legal control for the purposes of installation of a WECS. This control may be attained through fee title ownership, easement, or other appropriate legal relationship between the project developer and landowner.

Rotor diameter: The diameter of the circle described by the moving rotor blades.

Substations: Any electrical facility designed to convert electricity produced by wind turbines to a voltage greater than (35,000 KV) for interconnection with high voltage transmission lines.

Total height: The highest point, above ground level, reached by a rotor tip or any other part of the WECS.

Tower: Towers include vertical structures that support the electrical generator, rotor blades, or meteorological equipment.

Wind Turbine: A wind turbine is any piece of electrical generating equipment that converts the kinetic energy of blowing wind into electrical energy through the use of airfoils or similar devices to capture the wind.

Section 152.085(C) Requirements

- (a) The application for conditional use shall include a scale site drawing showing the proposed location of all facilities to be constructed, the dimensions of the property, proposed heights, and the distance to all buildings and property lines.
- (b) All WECS towers shall be sited so as to provide a safe fall zone.
- (c) All moving rotor blades shall be a minimum of 30 feet from ground level.
- (d) Noise levels shall be less than 60 dBA at the nearest property line, unless the property where the wind turbine is proposed abuts a residential district, in which case the maximum noise level shall be 50 dBA at any property line abutting a residential district.
- (e) All permanent wind turbine towers shall be self supporting. No guy wires will be allowed on permanent structures.
- (f) All towers shall be made non-climbable in a manner approved by the Archbold Village Engineer.
- (g) All electrical wires leading to or from a wind turbine shall be buried underground. All connections to transmission lines and/or substations shall be buried underground.
- (h) A color scheme of the tower and turbine assembly shall be submitted to the Planning Commission and shall be subject to its approval.
- (i) Wind energy facilities shall not be artificially lighted, except to the extent required by the FAA or other applicable authority.
- (j) A shadow flicker study to determine any potential negative impact on surrounding properties shall be conducted prior to Planning Commission hearing of the conditional use and the report shall be included in the conditional use application. The study shall be at the applicant's expense, and shall be performed by a neutral third party approved by the Archbold Village Engineer.
- (k) A study to determine any possible interference with radio, television, or cellular telephone communication shall be conducted prior to hearing of the application by Planning Commission, and the results shall be included in the conditional use application. The study shall be at the applicant's expense, and shall be performed by a neutral third party approved by the Archbold Village Engineer.
- (l) Any tower or structure associated with a WECS that remains unused for any

reason for more than 30 days shall be dismantled and removed from the property no later than 90 days from the time use of the equipment has ceased. A plan for dismantling and removal of the equipment shall be included in the conditional use application.

Section 2. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal action were in meetings open to the public, in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

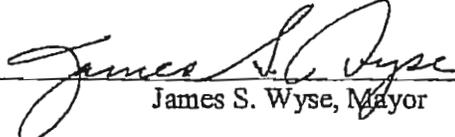
Section 3. This ordinance shall take effect and be in full force from and after the earliest date allowed by law.

First reading: May 19, 2008

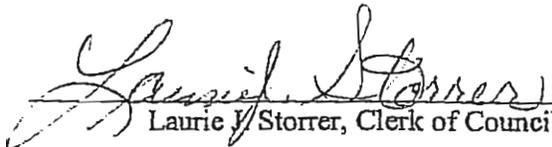
Second reading: June 2, 2008

Third reading: June 16, 2008

Passed: June 16, 2008


James S. Wyse, Mayor

Attest:


Laurie J. Storrer, Clerk of Council



**Village of Archbold
Planning Commission Minutes
August 23, 2010, 7:00 pm**

Commission members present: Jim Wyse, Ed Leininger, Lin Ross, Doug Rupp, Denny Meyer

Secretary: Dennis Howell

Planning Director/Zoning Inspector: Carma Grime

Interested Parties: Aaron Godwin, Krystal Naylor, Scott Miller, David Deskins, Kris Juillard, Bruce Rupp, Tom Warner, Bob Seaman, Phil Nofziger, Andy Brodbeck, Tony Warnacke, Bob Aschliman

President Ed Leininger called the meeting to order at 7:00 pm. He asked the members to consider the minutes from November 24, 2008. Lin Ross moved to approve the minutes and Denny Meyer seconded. All vote aye, motion approved.

Ed Leininger led the committee to vote for new officers of the Planning Commission. Denny Meyer moved to elect Ed Leininger as president, seconded by Doug Rupp. All voted aye, motion approved.

Denny Meyer moved to elect Jim Wyse as Vice-President, seconded by Doug Rupp. All voted aye, motion approved.

Ed asked Carma Grime to present the issue. Carma told the planning commission that Archbold High School has been studying the effects of a wind turbine to help reduce the cost of their electrical usage. After a year of study they have decided to move forward with this project. Archbold High School is in a S1 special zone. A wind turbine is a conditional use in an S1 zone in accordance with the Zoning Ordinance Section 152.085. Archbold High School is requesting a conditional use permit for a wind turbine on school property which is to be reviewed by the planning commission.

Ed introduced Mr. David Deskins and asked him to introduce his guest and present his request. Mr. Deskins told the committee that the Archbold High School has spent a couple of years doing research studying the possibility of installing a wind turbine at the school district to help with offsetting costs of electricity but also as an educational benefit for students. Archbold School is working in conjunction with Pettisville School and Northwest State Community College as they pursue this. They are asking the planning commission to approve the Archbold School District's request for a variance to the Village of Archbold's tower policy that would allow them to move forward and install a wind tower on school district property. They also are asking that the commission remain open to the possibility for filing an easement if one is determined necessary for the property that is adjacent to the school district to the west. He introduced Aaron Godwin,

who is with the Renaissance Group. Mr. Godwin is the founder and CEO of that group. He is interested in supporting Ohio and alternative energy in the state.

Mr. Godwin spoke to the group about wind turbine energy. His group has been involved in helping communities invest in themselves and get a return on their investment. They have been looking into this as a jobs issue. Most people don't realize that Ohio is number two in potential jobs from creating the equipment that goes into this industry. There are over 900 companies involved in Ohio right now in producing this equipment and there are thousands of companies that could be involved for small component parts. While the whole economy has been having challenges over the last few years, the wind industry has been growing in double digits every year. Mr. Godwin told the committee about how they were able to get grants for the Archbold School wind project but since a lot of the grant money was Federal money that meant they had to perform a lot of studies.

He showed through pictures and data on how the spot for the wind turbine was determined. He brought the preliminary results of all the tests and data gathered. He showed the group the data on the fall zones of the areas considered for the wind turbine. It would take a catastrophic incident such as a tornado to make the turbine fall. The impact of the machine on populated areas is minimal but they want to try to avoid all occupied structures. The location chosen has the least wind obstructions and so there is a boost from the power output. This project is about savings to the school district.

There was a study on the noise from the wind turbine. The tests were performed both in the daytime and evening to determine the sound levels of the village. The ambient levels in town are louder both in the daytime and evening at 40 – 80 decibels then a wind turbine would be. The turbine ambient level is at about 40 – 50 decibels.

There was a study on shadows of the turbine done over a year's time to see if there was any impact on residents or businesses to make sure the turbine shadow was not a nuisance. The only potential problem with shadows was the stadium and ball field in winter right before sunset, but he told the group that the turbine could be shut down for games or special events. The turbines are self monitoring but can also be monitored through the internet, and through cell phones. If there is any kind of adverse issue the turbine will turn itself off or it can be turned off manually.

The next study was to look at the visual impact of the turbine to the community. Most of the community will not be able to see the wind turbine because of the trees and buildings except for the southwest corner of the Village of Archbold. The turbine will be best seen from the rural areas or farmland. This turbine will be smaller than Bowling Green's wind turbines. The radio tower in town is taller than the turbine they will put up at the school. Archbold has seven towers in the community already.

Ed asked the committee if they had any questions. No one responded. Ed opened the questions up to the guests. Mr. Godwin took questions about the shadows and the sound. He said that the smaller the turbine the more noise. He suggested not to take his word about the sound but to go stand underneath a turbine.

Dennis told the group that the planning commission does not record easements. That would be for the county recorder. That issue would be between the school board and any other property owner. Ed asked what would happen in the future if the property by the wind tower would want to be developed as an occupied property. Dennis said if the property was incorporated into the Village, they would not allow any building permits and if the property is outside the village, the Village of Archbold would not have any jurisdiction. The group discussed the fall zone. Mr. Godwin says normally the tower will crumple upon itself in the worst case scenario. There have been only two citizens killed by wind turbines. One was a sky diver and one was a suicide. He told the group this is a non climbable, slippery steel structure. The climbing is all in the inside with a locked steel door. Carma asked the board, since the school is proposing a white tower and white blades, if someone wanted to pay to have Archbold Blue Streaks painted on the tower would they have to come before the board for approval. Any change would have to come back to the planning commission. Ed asked if there were any more questions or comments from the guests. Ed thanked everyone for coming to the meeting. Ed asked if the board had anymore questions or comments.

Jim made a motion to approve the conditional use for the wind tower, with a variance for the fall zone, seconded by Lin. Ed Leininger called the roll.

Jim Wyse – Yes
Lin Ross – Yes
Denny Meyer – Yes
Doug Rupp – Yes
Ed Leininger - Yes

Dennis mentioned to the group that this issue also has to be approved by council.

Jim made a motion to adjourn, seconded by Lin. All voted aye. The meeting adjourned at approximately at 8:00 pm.

Respectively submitted,

Deb Volkman

Dennis Howell
Secretary, Archbold Planning Commission

Ed Leininger
President, Archbold Planning Commission



Village of Archbold

P.O. Box 406, 300 N. Defiance
Archbold, OH 43502-0406
Phone 419 445 4726 - FAX 419 445 0908
email ksrupp@archbold.com

Letter of Transmittal

Date: November 11, 2010

TO: Mr. David Deskins, Superintendent
Archbold Area Schools
600 Lafayette Street
Archbold, OH 43502

Transmitted: (i) 2 certified copies of Ordinance #10-65
(ii) a certified copy of the minutes of the November 8 Council meeting

Copy to: Dennis Howell, Village Administrator

A handwritten signature in cursive script that reads "Kathy S. Rupp".

Kathy S. Rupp
Director of Finance

ORDINANCE NO. 10-65

**AN ORDINANCE TO ACCEPT THE RECOMMENDATION
OF ARCHBOLD PLANNING COMMISSION FOR A CONDITIONAL USE**

Whereas the Archbold Area School Board has applied for a permit to install a Wind Energy Conversion System (Wind Turbine), and

Whereas per Ordinance 08-24 Wind Turbines are a Conditional Use, and

Whereas the Archbold Planning Commission met according to law on August 23, 2010 and voted unanimously to recommend approval of the Conditional Use, now therefore

The Village Council of Archbold, Ohio hereby ordains:

Section 1. That the Archbold Planning Commission held a Public Hearing on August 23, 2010 to consider a request from the Archbold Area School Board for a Conditional Use, said Conditional Use being construction of a Wind Turbine in an S-1 Special district.

Section 2. That the Archbold Planning Commission unanimously recommended the approval of the Conditional Use requested as shown in the minutes from the Archbold Planning Commission meeting on August 23, 2010.

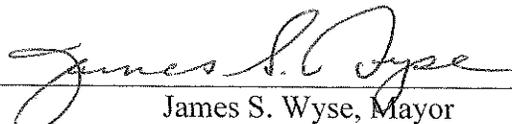
Section 3. That Council held a Public Hearing on Monday, November 8, 2010 in consideration of the Planning Commission recommendation.

Section 4. That Council hereby approves the Conditional Use requested, as recommended by Planning Commission.

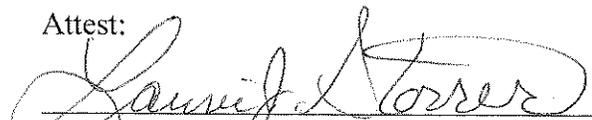
Section 5. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulting in such formal action were in meetings open to the public, in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 6. This ordinance shall take effect and be in full force from and after the earliest date allowed by law.

Passed: November 8, 2010


James S. Wyse, Mayor

Attest:


Laurie J. Storrer, Clerk of Council

I hereby certify this to be a true and original copy.


Laurie J. Storrer, Clerk of Council

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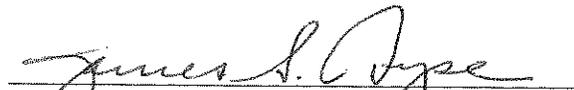
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Section 5. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulting in such formal action were in meetings open to the public, in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 6. This ordinance shall take effect and be in full force from and after the earliest date allowed by law.

Passed: November 8, 2010


James S. Wyse, Mayor

Attest:


Laurie J. Storrer, Clerk of Council

I hereby certify this to be a true and original copy


Laurie Storrer, Clerk of Council

COUNCIL MINUTES

November 8, 2010

On Monday, November 8, 2010 at 7:00 p.m., a Public Hearing was held in Council Chambers for public comment regarding conditional use by Archbold Area Schools for a wind turbine. There being no comment from anyone present, Village Mayor, Jim Wyse, closed the public hearing, and opened the regular Council meeting. Present were Kevin Eicher, Ed Leininger, Jeff Fryman, Vaughn Bentz and Kevin Morton. Kenny Cowell was absent.

Village Administrator, Dennis Howell, then presented the following item of legislation:

ORDINANCE 10-65: ACCEPTING A CONDITIONAL USE FOR A WIND TURBINE.

Present for discussion were school board members John Lugbill, Phil Nofziger, and Scott Miller, as well as Dave Deskins, Superintendent of Archbold Area Schools. Dennis Howell presented a slide showing the location for the wind tunnel, and Village Zoning Inspector, Carma Grime stated the location and plans met all the requirements of the United States Dept. of Energy. Following discussion, Kevin Eicher moved to pass Ordinance 10-65, seconded by Vaughn Bentz.

Roll: Yeas: Eicher, Leininger, Fryman, Bentz, Morton

Nays: None. **Ordinance 10-65 passed.**

Mr. Howell then presented the next item of legislation as follows:

RESOLUTION 10-68: ACCEPTING ANDREW P. MOSER AND KALEB C. TORBET AS PROBATIONARY PART-TIME POLICE OFFICERS AND DECLARING AN EMERGENCY.

Chief of Police, Martin Schmidt, was present as was Kaleb Torbet. Following discussion, Kevin Morton moved to suspend the rule that requires a resolution of general nature to be read on three separate days. Ed Leininger seconded the motion.

Roll: Yeas: Leininger, Fryman, Bentz, Morton, Eicher

Nays: None. Motion carried.

Jeff Fryman then moved to pass Resolution 10-68, seconded by Vaughn Bentz.

Roll: Yeas: Fryman, Bentz, Morton, Eicher, Leininger

Nays: None. **Resolution 10-68 passed.**

There being no additions or corrections to the minutes of the October 25, 2010 Council meeting, Kevin Eicher moved to approved, seconded by Kevin Morton.

Roll: Yeas: Bentz, Morton, Eicher, Leininger, Fryman

Nays: None. **Motion carried.**

Following review of the invoices by members of the Finance Committee, Ed Leininger moved to pass the Claims Ordinance, seconded by Vaughn Bentz.

Roll: Yeas: Morton, Eicher, Leininger, Fryman, Bentz.

Nays: None. **Claims Ordinance passed.**

Kevin Eicher then moved that Council go into **Executive Session** to discuss Personnel and Property matters. Jeff Fryman seconded the motion.

Roll: Yeas: Eicher, Leininger, Fryman, Bentz, Morton

Nays: None. **Motion carried.**

Mayor Wyse recalled the meeting to order following the session. No action was taken on issues discussed.

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Dennis Howell presented the following item next:

RESOLUTION 10-62: ACCEPTING BIDS FOR THE PURCHASE OF CHEMICALS FOR 2011 AND DECLARING AN EMERGENCY.

Following discussion, Kevin Morton moved to suspend the rule that requires a resolution of general nature to be read on three separate days. Kevin Eicher seconded the motion.

Roll: Yeas: Leininger, Fryman, Bentz, Morton, Eicher

Nays: None. Motion carried.

Vaughn Bentz then moved to pass Resolution 10-62, seconded by Ed Leininger.

Roll: Yeas: Fryman, Bentz, Morton, Eicher, Leininger

Nays: None. **Resolution 10-62 passed.**

The next item presented is as follows:

RESOLUTION 10-63: ACCEPTING THE BID OF RODNEY BUEHRER FOR THE RENT OF FARM GROUND AND DECLARING AN EMERGENCY.

Dennis Howell mentioned that Mr. Buehrer is the current renter and the contract is for three years. Following discussion, Ed Leininger moved to suspend the rule that requires a resolution of general nature to be read on three separate days. Kevin Eicher seconded the motion.

Roll: Yeas: Bentz, Morton, Eicher, Leininger, Fryman

Nays: None. Motion carried.

Vaughn Bentz then moved to pass Resolution 10-63, seconded by Kevin Morton.

Roll: Yeas: Morton, Eicher, Leininger, Fryman, Bentz

Nays: None. **Resolution 10-63 passed.**

The following item was then presented to Council:

RESOLUTION 10-64: ACCEPTING THE BID OF HANK'S PLUMBING AND HEATING FOR CONTRACT 4-10 CLEAR WELL VALVE CHAMBER, AND DECLARING AN EMERGENCY.

Following discussion, Jeff Fryman moved to suspend the rule that requires a resolution of general nature to be read on three separate days. Kevin Eicher seconded the motion.

Roll: Yeas: Eicher, Leininger, Fryman, Bentz, Morton

Nays: None. Motion carried.

Ed Leininger then moved to pass Resolution 10-64, seconded by Kevin Morton.

Roll: Yeas: Leininger, Fryman, Bentz, Morton, Eicher

Nays: None. **Resolution 10-64 passed.**

Mr. Howell presented the following item of legislation next.

ORDINANCE 10-66: REGULATING THE USE OF LICENSING OF GOLF CARTS WITHIN THE VILLAGE.

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Jeff Fryman informed Council that the Police and Fire Committee had discussed this and gave their recommendation, and Dennis Howell said Village Solicitor, Mark Hagens, had also reviewed it. Following discussion, Kevin Eicher moved to pass Ordinance 10-66, seconded by Jeff Fryman.

Roll: Yeas: Fryman, Bentz, Morton, Eicher, Leininger
Nays: None. **Ordinance 10-66 passed.**

Dennis Howell then presented the following item:

RESOLUTION 10-67: AUTHORIZING THE VILLAGE ADMINISTRATOR TO EXECUTE A CONTRACT WITH FULTON COUNTY FOR TORNADO SIREN MAINTENANCE AND DECLARING AN EMERGENCY.

Dennis Howell noted that the terms are identical to the current contract. Following discussion, Vaughn Bentz moved to suspend the rule that requires a resolution of general nature to be read on three separate days. Kevin Morton seconded the motion.

Roll: Yeas: Bentz, Morton, Eicher, Leininger, Fryman
Nays: None. Motion carried.

Ed Leininger then moved to pass Resolution 10-67, seconded by Kevin Eicher.

Roll: Yeas: Morton, Eicher, Leininger, Fryman, Bentz
Nays: None. **Resolution 10-67 passed.**

Council then reviewed the minutes of the October meetings of the Utility and Finance Committees.

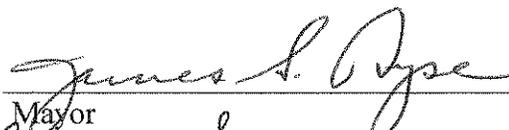
Council also reviewed the following October 2010 reports:

- Street Department Report
- Finance Report
- Police Report
- Income Tax Report
- Zoning Permits

There were two items of correspondence; one from the Ohio EPA, and the other the FCBDD newsletter.

There being no further business to discuss, Kevin Eicher moved to adjourn the meeting, seconded by Jeff Fryman. All agreed; motion carried.


Clerk


Mayor

I hereby certify this to be a true and original copy.


Laurie J. Storer, Clerk of Council