

PENNSYLVANIA GAME COMMISSION

Wind Energy Review Guidelines for State Game Lands
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Date: 25MAR2005

Background:

Recently the Bureau of Land Management has been solicited by numerous “wind energy ” companies who are seeking opportunities to erect windmill turbines on Game Lands in order to harvest pronounced and consistent wind patterns and convert those wind’s energy into electric power. These multiple windmill sites and affiliated infrastructure are commonly referred to as “wind farms” and are recognized as clean energy sources. The intent of the wind farm is to convert the wind energy into electric power by causing the wind to turn fixed blades (normally 3 blades, each blade approximately 70 feet in length) atop a turbine structure (reaching some 240-440 feet overall height.) The rotation of the blades (at a 17 rpm maximum) mechanically turns an electric generator unit housed within the windmill. Each windmill’s electric generator produces electricity that is then directly connected to a fixed electric transmission line used to collect and transport the power to a local electric grid for sale and redistribution. This sale is often to an existing public electric utility to supplement local and regional public electric needs. These proposals usually encompass large areas of ridge tops where winds are most prevalent and may entail numerous windmill site locations (as many as 180+ proposed locations each approximately 15 feet in diameter base) with large support area requirements for infrastructure needs such as access roads (18-31 feet wide during construction, 15 feet wide final design) and electric transmission right of ways either overhead or buried. These wind energy projects can generate as much as 1.5 megawatts of electricity. In some rare cases, the windmill(s) electric generation power is for private needs to provide electric power for a local business, often with any unused residual electric to be sold to a public utility. These proposals are usually much less intrusive both in electric generation capabilities (normally 10 kilowatts or less) and the overall aerial extent of the supporting infrastructure impacts.

The Pennsylvania Game Commission (PGC) recognizes the need to explore alternate energy resources and overall supports the “clean energy” concepts of electric generation. Likewise, the Commonwealth of Pennsylvania has expressed its support of clean energy sources by mandating that a minimum of 18% of the Commonwealth’s consumptive power use come from these types of energy sources by the year 2020. However, the protection of the inherent recreational use of the Game Lands and its associated wildlife habitat values are to remain the highest priority with regard to the Commission’s review of wind energy project proposals on State Game Lands throughout the Commonwealth. Therefore, the use of Game Lands to accommodate such types of wind energy projects must not only be reviewed and approved within strict accordance of Title 34 Game & Wildlife Code, but also reviewed to ensure the protection and

conservation of the Commonwealth's wildlife resources. Likewise, the sportsmen and women who paid for and use these lands must receive better than equal compensation in both wildlife/recreational and monetary compensation values should a wind energy project on Game Lands ultimately be approved by the Commission.

Guidelines:

The following is the Commission's guidelines to reviewing wind energy project proposals on State Game Lands throughout the Commonwealth which are not encumbered with Federal Aid Funds:

1. Inquiries regarding wind energy projects shall be directed to the Pennsylvania Game Commission, Bureau of Land Management, ATTN: Chief, Division of Environmental Planning & Habitat Protection, 2001 Elmerton Avenue, Harrisburg, PA 17011-9797. All subsequent coordination with appropriate PGC Harrisburg & Regional Staff shall be the responsibility of the Bureau of Land Management.
2. Prior to initiating any proposed project site selection on Game Lands, a wind energy applicant (Applicant) may wish to first conduct preliminary data collection via installing an anemometer structure, or other such type of weather data collection device on Game Lands. Approval for such data collection equipment shall be made in writing by the PGC through an application approval process designed and administered by the PGC's Bureau of Land Management's Real Estate Division. The noted application approval process shall include a recommendation from the PGC's respective Regional Office having responsibility of the subject Game Lands complex and include, at a minimum, the results of the PGC's site selection criteria, as more clearly set forth in the PGC's "Initial Site Selection Criteria Guidelines for Wind Energy Projects on Game Lands." (See attached.) Applications for installing weather data collection equipment on Game Lands shall be approved under the auspice that the PGC would, if further solicited by the Applicant, authorize the Applicant to conduct an alternative site analysis regarding any future proposed wind energy project in the vicinity of the data collection.

An Applicant may elect to forgo preliminary data collection efforts on Game Lands and directly solicit the PGC to review the overall feasibility of pursuing a proposed wind energy project on the subject Game Lands. Should the same occur, the PGC's respective Regional Office having responsibility of the subject Game Lands complex shall complete and forward to the PGC's Bureau of Land Management, the results of the "Initial Site Selection Criteria Guidelines for Wind

Energy Projects on Game Lands”. Upon having reviewed the same, the Bureau will provide the Applicant with a written determination of the overall feasibility of pursuing the proposed wind energy project on the subject Game Lands and if applicable, authorize the Applicant to conduct an alternative site analysis.

3. An Applicant, must have first received written authorization from the PGC prior to utilizing the Game Lands to conduct an alternative site analysis, or must have received prior written approval from the PGC by way of the application process noted in Item #2 above allowing for the installation of weather collection data equipment on Game Lands. Applicant’s conducting an alternative site analysis shall include at least two other potentially feasible project locations, not on Game Lands, in order for the PGC to more adequately determine whether a feasible alternative exists which would otherwise generally meet the project’s intended goals and requirements while simultaneously avoiding the use of Game Lands. The alternative analysis shall be presented to the PGC in a written report from the Applicant including, but not limited to, the following information:

- a detailed site comparison of all potential project locations as pertaining to recently measured pertinent analytical wind/weather data from each
- a detailed site comparison of all potential project locations as related to surface impacts from the proposed project locations site configuration and related infrastructure needs, accompanied by applicable maps/diagrams
- a comprehensive environmental and wildlife impact analysis from each of the potential project locations with special emphasis given to potential bird and bat impacts and the avoidance and minimization measures applicable to each as more clearly defined by the United States Department of Interior Fish & Wildlife Service’s “Interim Guidelines to Avoid and Minimize Wildlife Impacts from Wind Turbines.” (website reference is <http://www.fws.gov/r9dhcbfa/windenergy.htm>.)
- a detailed site comparison of all potential project locations as relates to potential public benefits that would be derived from the project, to include any known impacts to Federal, State, or public lands and/or natural resources, and how those noted impacts would comply with any known regulations or policy governing the use of those lands or natural resources for wind energy projects.
- all additional comparative analysis information as per the written request of the PGC.

Upon the final review of the submitted report, and at the sole discretion of the PGC, the PGC will make a determination in writing to the

Applicant as to whether or not the proposed project is deemed to have enough justifiable merit for the Applicant to pursue more formal negotiations for the project's development on Game Lands.

4. Should the "alternative analysis report" warrant more formal negotiations for project development on Game Lands, the PGC will proceed with those negotiations by way of a land exchange process. The land to be exchanged to the PGC shall be deemed to be greater in aerial extent, wildlife habitat value, and recreational use potential than that of the Game Lands parcel proposed for exchange to the Applicant. Those lands to be exchanged from the PGC shall not create an interior holding or large indenture on the respective Game Lands complex. Further all land exchanged from the PGC shall include a perpetual easement allowing for public hunting and access as the same would have been enjoyed had the land remained under PGC ownership, conditioned if need be, to ensure the public health and safety of the use of the land compatible to the project's intended design and purpose. The land exchanged from the PGC shall also limit the development of the surface to that of the intended project only and shall have a \$1 right of first refusal to the PGC should the project be abandoned in whole or in part such that the project's electric generation output falls below 25% of the average of the highest three years on record. Further, all timber, oil/gas & mineral rights currently owned by the PGC shall be excepted and reserved from the parcel for the future use of the PGC providing the same is not incompatible with the project's intended use.
5. A comprehensive 2-year pre-construction, and 2-year post-construction monitoring proposal for measuring the potential adverse impacts to birds and bats shall be developed by the Applicant and approved in writing by the PGC. The monitoring plan shall include currently available best management practices (BMP's) regarding monitoring techniques, time/frequency of monitoring periods, and complete description of all analytical equipment and designated personnel which will be utilized to conduct the monitoring. The monitoring plan, upon written approval of the PGC shall be made part of the conditions of the land exchange agreement noted in Item #4 above.
6. In addition to the land exchanged noted in Item #4 above, the Applicant may be required to make a negotiated minimum annual payment to the PGC for each windmill constructed on lands formerly owned by the PGC regardless of their construction date and electric generation output. Additional payments to the PGC may also be required by the PGC and payment due on a monthly basis as a set negotiated royalty rate based upon the sale price of each kilowatt of electricity generated from each windmill(s) located on lands formerly owned by the PGC. In lieu of this royalty payment the PGC may opt to receive electricity to one or more

of its buildings within the Commonwealth. Payment schedules and rates will be based on the PGC's sole discretion and the PGC's comparison estimate of wildlife/recreational values associated with the lands proposed to accommodate the exchange and the project development.

7. The Pennsylvania Game Commission's Board of Commissioners must make final approval for any proposed action relating to windmill projects on Game Lands.

NOTE: This policy does not address Game Lands acquired, developed or managed with Federal Aid funds (including lands used as match for acquisition or development.) In the event that "Federal Aid funds" were used, hunting license revenue consideration of the proposal will be in part governed by Federal Aid in Wildlife Restoration regulations at 50 CFR 80 and U.S. Fish & Wildlife Service policy on commercial use in addition to the Game & Wildlife Code. When applicable, additional documentation to comply with other Federal compliance requirements such as the National Environmental Policy Act, National Historic Preservation Act and Section 7 of the Endangered Species Act will be required.