**Department of Energy**
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**DOE/EA-1804**

# FINDING OF NO SIGNIFICANT IMPACT

## SAUK VALLEY COMMUNITY COLLEGE'S WIND ENERGY PROJECT

**AGENCY:** U. S. Department of Energy, Golden Field Office

**ACTION:** Finding of No Significant Impact (FONSI)

**SUMMARY:** The U. S. Department of Energy's (DOE) Proposed Action is to authorize the expenditure of Federal funding appropriated under the *American Recovery and Reinvestment Act of 2009* (Recovery Act) to design, permit, and construct the Sauk Valley Community College Wind Energy Project (Wind Energy Project), a 2.5-megawatt wind turbine on the northern end of the Sauk Valley Community College (SVCC) campus in Dixon, Lee County, Illinois.

DOE has already made these funds available to the Illinois Department of Commerce and Economic Opportunity (DCEO) through the State Energy Program (SEP); however, DOE must complete review of the Wind Energy Project under the National Environmental Policy Act (NEPA) before DCEO may issue a subgrant to provide SEP funding for the construction of the Wind Energy Project.

Based on the information and analyses in the EA, DOE has determined that its Proposed Action does not constitute a major federal action that would significantly affect the quality of the human environment within the meaning of National Environmental Policy Act (NEPA). Therefore, an environmental impact statement (EIS) is not required, and DOE is issuing this FONSI.

All discussion, analysis, and findings related to the potential impacts of construction, operation, and eventual decommissioning of the Wind Energy Project, including the applicant-committed measures, are contained in the Final Environmental Assessment (EA). The Final EA is hereby incorporated by reference.

DOE prepared this FONSI in accordance with the *National Environmental Policy Act* (42 U.S.C. 4321 et seq.; NEPA), the Council on Environmental Quality NEPA regulations (40 CFR Parts 1500 to 1508), and DOE's NEPA implementing regulations (10 CFR Part 1021).

**ENVIRONMENTAL IMPACTS:** The EA examined the potential environmental impacts of the Proposed Action and of a No-Action Alternative. Under the No-Action Alternative, DOE would not authorize the use of SEP funds for the Wind Energy Project, which DOE assumes for purposes of the EA would not be constructed or operated.

The SVCC Wind Energy Project would be constructed and operated on previously disturbed land located on SVCC property 0.27 kilometer (0.17 mile) directly southwest of the intersection of IL-2 and Sauk Road, near Dixon, Illinois. The turbine would have a 99-meter (322-foot) rotor diameter, a maximum height of 127 meters (418 feet), and would be sited in a large field of unmaintained grass north of SVCC



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buildings and south of IL-2. The SVCC Wind Energy Project is could offset approximately 100 percent of the facility's annual electricity needs using a 1.5-megawatt wind turbine. Using the planned 2.5-megawatt wind turbine would enable SVCC to meet their needs, while also allowing SVCC to sell surplus electricity to the electric grid. SVCC anticipates that its project would generate as many as 16 jobs during the selection, evaluation, and construction phases; in addition, the project would retain one permanent faculty position during the operation phase.

Based on the information presented within the EA, DOE concludes that the design, permitting, construction, operation, and eventual decommissioning of the Wind Energy Project would not have significant impacts to the following resources: land use, noise, visual, human health and safety, cultural and historic, biological, transportation, water, geology and soils, air quality and climate change, socioeconomics and environmental justice, utilities and energy, waste management, or impacts related to intentional destructive acts. The discussion below summarizes impacts for select resources areas that were notable but not significant.

Implementation of the project would permanently commit 0.33 acre and temporarily disturb 5 acres of greenspace owned by SVCC. The College currently maintains this area of unmaintained grass for possible future expansion, though no plans to develop the area further currently exist. SVCC would continue to use the area immediately surrounding the turbine as undeveloped greenspace. DOE determined that the project would not result in any direct or indirect land use impacts or any irretrievable commitment of land. (See Section 3.2.2.1 of the EA)

Noise would be generated by construction equipment during the project's short-term construction phase. However, the construction noise would not be expected to significantly increase ambient noise levels. During operations, estimated turbine noise levels at the nearest residence would be below Illinois Pollution Control Board (IPBC) nighttime noise standards. IPCB sets and enforces limits on allowable sound levels from and to different land classifications. Turbine noise levels at the nearest residence would also be lower than U.S. Environmental Protection Agency noise level design goals of 55 to 65 decibels (A-weighted) for the Day Night Average Sound Level. In addition, turbine noise levels are expected to be lower than existing ambient noise levels at the nearest residence. Therefore, no significant noise impacts are expected. (See Section 3.2.2.9 of the EA)

Implementation of the project would introduce a new and dominant vertical feature into the existing viewshed. However, the visual impact of the wind turbine is reduced because of other already existing vertical elements in the area such as transmission lines and radio/cellular towers. The results of the shadow flicker study commissioned by SVCC for this project indicates shadow flicker would affect; traffic on IL Route 2, Sauk Road, campus buildings, the entrance road to the campus, and potentially the North Illinois Surgery Center. However, if shadow impacts were to become an annoyance for any receptor not participating in the project, SVCC would assist those receptors by installing awnings and planting trees. No residences or other campus buildings are expected to experience shadow flicker effects. Significant adverse visual impacts that would affect nearby residences or users of the project area and surrounding areas are not anticipated as a result of the SVCC Wind Energy Project. (See Section 3.2.2.2 of the EA)

The project was designed to completely avoid residences that could be affected by the extremely low likelihood of tower collapse and ice throw. Appropriate safety training, precautions, and best management practices would be applied during construction, operation, and decommissioning of the turbine in an effort to reduce or eliminate health and safety issues. No residences or public access areas are located within the fall zone of the turbine (1.1 times the total turbine height). Any party who executes a project in the future within the fall zone would do so with full knowledge of the risks posed to human health and safety from SVCC's Wind Energy Project. (See Section 3.2.2.8 of the EA)

There are no historic properties within the project site. The closest known historical property is approximately 5.5 miles from the project location. In accordance with Section 106 of the National Historic Preservation Act (NHPA), DOE determined that the project would have no adverse impacts on the subject property or other historic properties or cultural resources. The Illinois Historic Preservation Agency also concluded that no historic properties would be affected by the project. (See Section 3.2.2.5 of the EA)

A primary area of environmental concern for the operation of wind turbines is the potential to injure or kill birds and bats. Analysis in the EA indicates that the project may affect, but is not likely to adversely affect the federally-listed Indiana bat and would have no adverse affects on other federal or state listed species. Recommendations as described in the United States Fish and Wildlife Service (USFWS) *Interim Guidelines to Avoid and Minimize Wildlife Impacts from Wind Turbines* (2003) were considered in the siting, design, and installation plans for the SVCC Wind Energy Project. SVCC has also committed to conduct voluntary avian and bat mortality monitoring during the first post-construction fall migration season. This monitoring would provide data to the USFWS, Illinois Department of Natural Resources, and DOE on potential levels of avian and bat mortality associated with single turbines. SVCC will also comply with the conditions stated in the Special Use Permit issued by Lee County, by cataloging and reporting annually to the Lee County Zoning Office any birds discovered injured or killed by the project. Based on the analysis in the EA, and in consideration of USFWS recommendations, DOE determined that impacts to biological resources were not significant. (See Section 3.2.2.4 of the EA)

**PUBLIC PARTICIPATION IN THE EA PROCESS:** In accordance with the applicable regulations and policies, DOE prepared and sent a Notice of Scoping on July 16, 2010 to federal, state, and local agencies, tribal governments, elected officials, businesses, organizations, and special interest groups for comments regarding the scope of the EA. DOE published the Notice of Scoping online at the DOE Golden Field Office Public Reading Room. The scoping notice described DOE's Proposed Action and SVCC's proposed project, and requested assistance in identifying potential issues that could be evaluated in the EA. The public comment period for scoping closed on August 2, 2010. In response to the scoping notice, DOE did not receive any comments from individuals, organizations, or agencies.

DOE posted the draft EA and the Notice of Availability (NOA) on the DOE Golden Field Office Reading Room website at http://www.eere.energy.gov/golden/Reading_Room.aspx and the DOE NEPA website at http://nepa.energy.gov for a 15-day review period which ended October 1, 2010.Postcards announcing the NOA were mailed to identified stakeholders. The NOA was also published in the *Dixon Evening Telegraph* and the *Sterling Gazette* on September 17, 2010. By the close of the public comment period on October 1st, 2010, no comments were received.

**DETERMINATION:** Based on the information presented in the Final EA (DOE/EA 1804), DOE determined that the Proposed Action would not constitute a major federal action that would significantly impact the quality of the human environment within the context of NEPA. Therefore, the preparation of an EIS is not required, and DOE is issuing this FONSI.

SVCC's commitment to obtain and comply with all appropriate Federal, State, and local permits required for construction and operation of the wind turbine, and to minimize potential impacts through implementation of best management practices and various mitigation measures detailed in the final EA, shall be incorporated and enforceable through DOE's financial assistance agreement. Necessary permits and applicant committed measures can be found in Sections 2.4 and 2.5 of the EA.

The final EA is available at: the Golden Field Office Public Reading Room at http://www.eere.energy.gov/golden/Reading_Room.aspx and the DOE NEPA Website at http://nepa.energy.gov. .

For questions about this FONSI, please contact:

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Issued in Golden, CO, this 2nd day of February, 2011.

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