



Department of Energy

Golden Field Office
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DOE/EA-1802

FINDING OF NO SIGNIFICANT IMPACT

Chicago View Wind Project, Chicago Heights, Cook County, Illinois

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 Chicago View Wind Project (the proposed project), a 1.5-megawatt wind turbine that would be sited on top of a construction debris landfill (approximately 60 acres) in Chicago Heights, southern Cook 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 proposed project under the National Environmental Policy Act (NEPA) before DCEO may issue a subgrant to provide SEP funding to Chicago View Wind LLV (CVW) for the construction of the proposed 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, operations, and eventual decommissioning of the proposed 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 proposed project, which DOE assumes for purposes of the EA, would not be constructed or operated.

The CVW Project would be constructed and operated at the Chicago Heights construction debris landfill located north of Sauk Trail and west of Cottage Grove Avenue in Chicago Heights, Cook County, Illinois. The turbine rotor diameter would be 253 feet, which would connect at its hub



(midpoint) to a 202-foot-tall tower. The total height of the wind turbine would be 328 feet, from the bottom of the tower to the blade tip at its highest point. A 5,540-foot underground transmission line would connect the turbine to the 12.47-kilovolt distribution line owned by Commonwealth Edison at the nearby Bloom Trail High School. This 1-mile underground transmission line would follow the landfill property boundary, within a road right-of-way, until it was directionally drilled under the road and into the school property. The proposed turbine is estimated to produce 3,143 MW-hours of electricity per year. The Bloom Township High School District 206 would purchase all of the electricity generated by the proposed project, pursuant to a purchase agreement between CVW and the School District.

Areas of potential environmental impacts analyzed in the EA include land use, biological resources, visual resources, noise, human health and safety, transportation, water resources, geology and soil, air quality and climate change, socioeconomics and environmental justice, utility and energy impacts, cultural and historic resources, , waste management, and intentional destructive acts. DOE identified no potentially significant environmental impacts on these resource areas. The discussion below summarizes impacts for select resources areas that were notable but not significant.

Implementation of the project would permanently commit 0.5 acre and temporarily disturb 3 acres of a site which was previously a demolition debris landfill. The area is currently zoned heavy industrial and is just within the eastern corporate limit of the city of Chicago Heights. 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)

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 proposed project would have no adverse effects on any federally 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 CVW wind project. CVW has committed to perform post-construction monitoring for one year for migratory birds. 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 3.2.2.7 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 indicate that the residences to the northeast of the site would experience shadow flicker for between 30 and 60 hours per year. Mature trees are abundant and surround these residences and other dwellings on 219th Street. The theoretical hours of shadow flicker would be further reduced by the trees during leaf-on periods. The nearest industrial receptor west of the wind turbine (600 feet away) would experience a maximum 120 theoretical hours of shadow flicker per year. 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 CVW Wind Energy Project. (See Section 3.2.2.2.2 of the EA).

The turbine manufacturer specifications state that the sound level of the wind turbine is 104 decibels when operating at 95 percent-rated power. At the closest residence (1,000 feet northeast of the wind turbine), the estimated maximum outdoor noise level from wind turbine operation would be 45 decibels (A-weighted). At these noise levels, the project would not exceed Illinois' noise regulations at the nearest receptor during nighttime operation even if the turbine operated at maximum load. (See Section 3.2.2.3 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 the Project. (See Section 3.2.2.8 of the EA)

No historic properties or any sites on the National Registry of Natural Landmarks were identified in the aboveground 1-mile radius Area of Potential Effect (APE). Since the likelihood of a clear, unobstructed vista of the wind turbine beyond 1 mile is small and diminishes rapidly as one travels farther away from the site, any visual impacts to historic properties outside of the APE would be negligible. Therefore, the construction and installation of the proposed CVW turbine would not adversely affect the cultural or historic resources in the area. (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 CVW's proposed project, and requested assistance in identifying potential issues that could be evaluated in the EA. A legal notice for the project was placed in the *Southtown Star* newspaper on August 15, 16, and 17, 2010, requesting comments on the scope of the project. 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. Appendix D of the EA contains a copy of the scoping letter and the Stakeholder Distribution list.

DOE posted the draft EA on the DOE Golden Field Office Reading Room website at http://www.eere.energy.gov/golden/Reading_Room.aspx on October 1 and the DOE NEPA website at <http://nepa.energy.gov> on September 28. The Notice of Availability was sent to stakeholders and interested parties and also published in the *Southtown Star* and the *Northwest Indiana Times*. Stakeholders and interested parties were afforded the opportunity to comment via email or written correspondence to the postal address provided therein. The public comment period closed on October 18, 2010. DOE received comments on the draft EA from the USFWS, and those comments were addressed in the final EA.

DETERMINATION: Based on the information presented in the final EA (DOE/EA 1802), DOE determines that providing funding to CVW to design, permit, construct, and operate a single 1.5 MW wind turbine in Cook County, Illinois, does not constitute a major Federal action that would significantly impact the quality of the human environment within the context of NEPA. Therefore, preparation of an environmental impact statement is not required, and DOE hereby issues this FONSI.

CVW'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.

The final EA is available 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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For further information about the DOE NEPA process, contact:

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