



Department of Energy

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FINDING OF NO SIGNIFICANT IMPACT

THE SENECA NATION WIND TURBINE PROJECT

DOE/EA-2004

AGENCY: U.S. Department of Energy (DOE), Office of Energy Efficiency and Renewable Energy

ACTION: Finding of No Significant Impact (FONSI)

SUMMARY: DOE is proposing to authorize the expenditure of federal funding to the Seneca Nation of Indians (SNI) to design, permit, and construct up to a 2.0-megawatt wind turbine on Tribal common lands in the Cattaraugus Territory, New York (Proposed Project)¹. In compliance with the National Environmental Policy Act (NEPA), DOE and SNI jointly prepared and completed the *Environmental Assessment for the Seneca Nation Wind Turbine Project Cattaraugus Territory Erie County, New York* (DOE/EA-2004) that identified and evaluated the potential environmental impacts of providing federal funds to SNI for this proposed project. The analysis completed in the environmental assessment (EA) supports DOE's finding that providing federal funding for the Proposed Project will not significantly affect the quality of the human and natural environment. The EA is hereby incorporated into this FONSI by reference.

SNI's proposed project involves the construction, operation and maintenance, and eventual decommissioning of a single wind turbine of up to 2.0 megawatts on 1.5 acres of SNI-owned sovereign land located northeast of Lucky Layne, within the western portion of the Cattaraugus Territory, Erie County, New York. Examples of the type of wind turbine being considered by SNI include the GE 103 1.7 megawatt and the Vensys 1.5 megawatt models. The proposed project includes the construction of a gravel access road, temporary crane pad, turbine foundation, and installation of transmission equipment and cables. Regardless of which wind turbine model is selected, it would have a maximum rotor diameter of approximately 330 feet and would connect at its hub (midpoint) to an approximately 265-foot-tall tower (maximum). The total maximum height of the wind turbine from the bottom of the tower to the blade tip at its highest point is expected to be approximately 430 feet. The current estimated project cost is \$6 million. The project would reduce electrical demands on the existing electricity service provider from the existing SNI administrative buildings and be credited back to the Cattaraugus Territory residents and electricity users. The project would also equalize rates among SNI territories. Once installed, the turbine is anticipated to produce approximately 5,000 megawatt-hours of electrical power annually.

¹ Prior to the issuance of this FONSI, DOE authorized SNI to use a percentage of the federal funding for preliminary activities, which included initial planning and design, environmental studies, and preparation of the EA. These activities are associated with the Proposed Project and do not significantly impact the environment nor represent an irreversible commitment by DOE in advance of this finding for SNI's wind energy project.

DOE places a strong emphasis on avoiding, minimizing, and mitigating potential adverse environmental impacts. SNI has committed to minimize or avoid potential environmental effects to air quality, visual resources, biological resources, cultural resources, health and safety of workers and the public, land uses, noise, socioeconomics and environmental justice, transportation, and utilities and energy through the implementation of best management practices (BMP) detailed in Section 3.4 of the EA. These commitments by SNI shall be incorporated through DOE's financial assistance agreement.

Context of Potential Impacts

DOE must evaluate the significance of an action in several different contexts, such as society as a whole (human and national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

The proposed project would be located on approximately 1.5 acres of SNI-owned sovereign land in the Cattaraugus Territory (approximately one acre of previously disturbed land will be graded). The project site lies approximately 630 feet northeast of Lucky Layne Road, is immediately east of New York State Route (NY) 5 and west of existing railroad tracks. Lake Erie is located approximately 1.5 miles west of the project site. The project site is currently undeveloped, consisting of some previously cleared land, grasses, shrub vegetation, and forested woodland. The site is adjacent to a larger parcel of land consisting of surface parking and a mix of commercial/industrial structures. These physical structures include a 135-foot-tall water tower immediately south of the project site, the Gil Lay Memorial Sports Arena, the SNI Bingo Hall and associated structures, roadway NY 5 directly west of the project site and a rail line directly east.

Based on the analysis in the EA, impacts of the Proposed Project would range from negligible to minor due to the nature of the proposed activities. The effects are limited to the local geographic area and are temporary and small-scale in nature. In addition, SNI has committed to implementing the BMPs listed in Section 3.4 of the EA to minimize or avoid potential environmental effects. The Proposed Project itself would not cause any significant or cumulative adverse effects nationally, regionally, locally, or at the statewide level.

Intensity of Potential Impacts

The determination of impact significance also considers the intensity, or severity or extent, of the impact. Intensity is evaluated against the factors listed in 40 CFR 1508.27, including:

1) Impacts that may be both beneficial and adverse:

In the EA, DOE considered and analyzed the beneficial and adverse impacts of the Proposed Project. Construction and operation of the Proposed Project would result in negligible to minor direct and indirect adverse impacts on the environment and would have slight beneficial impacts on air quality and socioeconomics in the area. The BMPs committed to by SNI would further minimize or eliminate the potential for adverse impacts to environmental resources.

The EA evaluated adverse effects of the Proposed Project separately from beneficial effects, to determine whether such adverse effects would have been significant in their own right, and no such effects were found to be significant. The Proposed Project would have potential beneficial, yet minimal or unmeasurable effects to air quality, the local economy, and to SNI's electric utility consumption. In no cases did the analysis in the EA use beneficial effects to offset the potential significance of any adverse effect. In addition, the EA did not use any long-term beneficial effects to offset the potential significance of any short-term adverse effects.

Accordingly, DOE concludes the Proposed Project will not have any significant adverse impacts and that the Proposed Project would have negligible to minor beneficial impacts to the resources evaluated in the EA.

2) The degree to which the proposed action affects public health or safety:

The EA evaluated whether the Proposed Project would have disproportionately high or adverse human health or environmental effects, and whether it would be a likely target for intentional destructive acts that could affect public safety. The EA addressed several potential impacts that the Proposed Project could have on public and worker health and safety – tower collapse and blade throw, shadow flicker and blade glint and glare, severe weather, exposure to electromagnetic fields, and hazards to roadways, railways, and airspace and aircraft. Analysis in the EA determined that the impacts to these resources would be non-existent to minimal.

SNI's committed BMPs for health and safety will further reduce the potential for adverse impacts to occur. SNI will ensure that all contractors adhere to construction- and operation-specific health and safety plans and that the wind turbine would be marked according to Federal Aviation Administration airspace safety regulations. SNI would prepare a health and safety plan to ensure that established policies and procedures are followed for a safe work environment.

Based on the findings in the EA and implementation of SNI's committed BMPs, DOE concludes that there will be no adverse effects to public and worker health or safety. The Proposed Project would not be a likely target for intentional destructive acts and it will not cause any significant, cumulative or long-term effects on health and safety.

3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas:

The Proposed Project is not located in any unique geographic or ecologically critical area, and there are no park lands, wet areas/wetlands, or protected rivers nearby that would be affected.

The New York State Cultural Resources Identification System (CRIS) lists an archaeological site in the Cattaraugus Territory located within approximately one mile of the proposed project site that is eligible for listing on the National Register of Historic Places (NRHP). SNI Tribal Historic Preservation Office (THPO) staff conducted an onsite preconstruction survey to evaluate the proposed site for the presence of archaeological or historic resources. Pursuant to Section 106 of the *National Historic Preservation Act*, the THPO made a finding of "no effect" to cultural resources from the SNI Wind Turbine Project.

Based on the analysis provided in the EA, DOE has concluded that the Proposed Project would not cause any adverse effects on unique characteristics of the geographic area.

4) The degree to which the effects on the quality of the human environment are likely to be highly controversial:

The analysis in the EA demonstrates that the effects of the Proposed Project on the natural and human environment would be minimal. During both the public scoping and public comment period, no factual evidence was presented that questioned the technical and scientific analyses of the EA or supporting documents.

5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks:

The possible effects on the human environment from wind turbine installation have been fully analyzed and supported by previous projects, studies, and publications (EA, Section 5.0). The Proposed Project does not involve new technology, and therefore, possible effects are readily ascertainable and would not involve unique or unknown risks.

6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration:

Neither scoping nor public comment for the Proposed Project raised any disputes pertaining to the appropriate scope of the Proposed Project, connectedness of other actions, or reasonably foreseeable future actions. The Proposed Project would increase the energy independence of SNI as a whole and create electrical utility rate cost equivalency between two SNI territories (Cattaraugus and Allegany), as well as result in energy cost stabilization and savings, which could motivate other Tribal communities to seek similar energy independence and long-term access to reasonably priced electric power. However, the impacts associated with the Proposed Project would be minimal, and it is unlikely that the project would establish a precedent for future actions with significant effects in other communities.

7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts:

DOE considered and analyzed in the EA the cumulative effects of the Proposed Project with other past, present, and reasonably foreseeable future actions. Information on existing and planned wind energy facilities was obtained from the New York State Department of Environmental Conservation renewable energy website. The Proposed Project would add one additional wind turbine to 314 existing wind turbines and 62 proposed wind turbines associated with several projects located within approximately 40 miles of the SNI wind turbine site. Also, the site is adjacent to several SNI business and industrial buildings and would result in grading and development of approximately one acre of forested land. Additional possible SNI development in the immediate area could include industrial or business parks and greenhouses.

The impacts of the Proposed Project are expected to be minor and localized so the spatial extent of potential cumulative impacts was limited to adjacent areas of the project location. Based on the above summary and the analysis in the EA, DOE has determined that there are no potential impacts to resources identified in the EA that would be cumulatively significant.

8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources:

CRIS identifies historic structures in the vicinity that are listed or eligible for listing on the NRHP and include numerous residential and other buildings in the Village of Silver Creek near the shore of Lake Erie, approximately 3.5 miles southwest of the proposed wind turbine location. In addition, CRIS identifies eight buildings and structures listed on the NRHP that are associated with the SNI administrative office location approximately six miles southeast of the project site. The potential historic context and experiences associated with the resources located in the Village of Silver Creek and in the area of the SNI offices would not be affected by the proposed wind turbine due to the general inability to see the turbine structure because of large distances involved and terrain and vegetation obstructions.

Based on analysis provided in the EA and consultations with the SNI THPO, DOE has concluded that the Proposed Project will not adversely affect cultural or historic resources in the area.

9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973:

DOE consulted with the U.S. Fish and Wildlife Service (USFWS) regarding the potential presence of listed species and critical habitat in the area. One species, the northern long-eared bat (*Myotis septentrionalis*), that occurs in Erie County in the region surrounding the project site has recently been listed as threatened by the USFWS (80 FR 17974, April 2, 2015). Although suitable summer and roosting habitat does exist for this species in a wider region from the project site in western New York, there is no known suitable hibernacula habitat in the immediate project area. DOE believes that mortality of a northern long-eared bat is extremely unlikely to occur because of project construction and operating procedures and BMPs (EA, Section 3.4). There are no critical habitat areas designated by the USFWS for any federally endangered or threatened species in Erie County.

Based on analyses provided in the EA and consultations with the USFWS, DOE has concluded that the Proposed Project “may affect, but is not likely to adversely affect” the northern long-eared bat. The USFWS concurred with DOE’s finding on July 24, 2015.

10) Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment:

DOE recognizes the sovereign nature of Native American governments and lands, specifically SNI and the Cattaraugus Territory, in defining and regulating the environmental resources associated with proposed actions on SNI lands. As such, SNI regulatory agencies and processes comprise the main environmental compliance responsibilities associated with this project and are entirely consistent with other federal regulatory requirements for protection of the environment. SNI has committed to protecting the environment by implementing the BMPs as detailed in Section 3.4 of the EA. These commitments shall be incorporated through DOE’s financial assistance agreement.

CONCLUSION: Based on the analysis in the EA and the above considerations, DOE finds that the decision to provide federal funding for the Proposed Project is not a major federal action that constitutes a significant effect on the human environment. This finding and decision are based on the considerations of DOE's regulations (10 CFR Part 1021) implementing NEPA (42 U.S.C. 4321 *et seq*) and the Council on Environmental Quality's criteria for significance (40 CFR 1508.27), both with regard to the context and intensity of impacts analyzed in the EA. Accordingly, the Proposed Project does not require the preparation of an environmental impact statement.

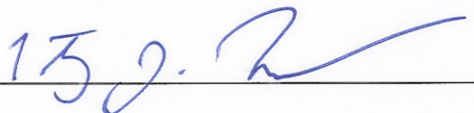
For questions about this FONSI or the final EA, please contact:

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