FINDING OF NO SIGNIFICANT IMPACT
FOR THE
CENTER FOR COMMERCIALIZATION OF ELECTRIC TECHNOLOGY (CCET), REESE TECHNOLOGY CENTER (RTC) WIND AND BATTERY INTEGRATION PROJECT LUBBOCK COUNTY, TEXAS

AGENCY: U.S. Department of Energy (DOE)

ACTION: Finding of No Significant Impact (FONSI)

SUMMARY: DOE completed the final environmental assessment (EA) for the *Center for Commercialization of Electric Technology (CCET), Reese Technology Center (RTC) Wind and Battery Integration Project, Lubbock County, Texas (DOE/EA-1939).* Based on the analysis in the EA, DOE determined that its proposed action of providing $1.85 million in financial assistance to CCET for construction and operation of a wind and battery integration project would not result in any significant adverse impacts. CCET would use its project to demonstrate battery technology integration with wind generated electricity by deploying and evaluating utility-scale lithium battery technology to improve grid performance, thereby aiding in the integration of wind generation into the local electricity supply. The project would also provide long-term energy related cost savings, create temporary and permanent jobs, generate power through alternative energy sources, and reduce the RTC's carbon footprint. RTC is a campus-centered technology, research, and education facility that supports renewable energy-related economic development in West Texas. RTC is used regularly by wind turbine manufacturers to test and certify turbine design and operation.

BACKGROUND: As part of the *American Recovery and Reinvestment Act of 2009* (Recovery Act) (Public Law 111-5, 123 Stat. 115), DOE's National Energy Technology Laboratory (NETL), on behalf of the Office of Electricity Delivery and Energy Reliability, is providing up to $435 million in federal funding through competitively awarded agreements to facilitate the

deployment of Smart Grid Program demonstrations, specifically: (1) regionally unique demonstration projects to quantify costs, benefits, and cost effectiveness; verify technology viability; and validate new business models; and (2) energy storage projects for major utility-scale storage installations to determine costs and benefits, verify technical performance, and validate system reliability and durability.

The federal proposed action of providing funding for these projects requires compliance with the *National Environmental Policy Act (NEPA) of 1969,* as amended (NEPA; 42 U.S.C. Section 4321 et seq.), Council of Environmental Quality regulations (40 CFR Parts 1500 to 1508), and DOE NEPA implementing regulations (10 CFR Part 1021). DOE prepared an EA to evaluate the potential environmental consequences of providing a grant for CCET's proposed project under the Smart Grid Program.

PURPOSE AND NEED: The overall purpose and need for DOE's proposed action, pursuant to the Smart Grid Program and the American Recovery and Reinvestment Act, is to accelerate the development and production of a smarter, more efficient, more resilient, electrical grid. The program would help verify smart grid technology viability, quantify smart grid costs and benefits, and validate new smart grid business models at a scale that can be readily adapted and replicated around the country. DOE considers CCET's project to be one that can meet these objectives.

DESCRIPTION OF THE PROPOSED ACTION: DOE's proposed action is to provide financial assistance to CCET to partially fund construction of: (1) above ground and underground distribution lines; (2) a 1.5-MW storage battery facility and associated foundation; (3) an access road; and (4) site clearing. Two wind turbines and associated foundations would also be constructed as part of the proposed action. Although DOE is not funding the wind

turbines, the environmental effects were assessed as a connected action, as it is part of the overall action. The project covers approximately three acres and would be located at RTC near Lubbock, Texas, on land formerly occupied by the Reese Air Force Base. DOE's proposed action would award $1.85 million as a financial assistance grant in the form of a cooperative agreement to CCET. The estimated total cost of the entire project is $5.4 million.

ALTERNATIVES CONSIDERED: In addition to the proposed project, DOE considered the no action alternative, as required under NEPA. Under the no action alternative, DOE would not provide funds for the proposed project. For the purposes of the analyses in the EA, DOE assumed that the project would not proceed without federal funding. This assumption establishes a baseline against which the potential environmental impacts of the proposed project can be compared. For comparison purposes, it is assumed no impacts to the existing environment would occur and the beneficial impacts discussed above would not be realized.

ENVIRONMENTAL CONSEQUENCES: DOE evaluated the potential environmental consequences of the proposed project and the no action alternative. DOE considered 17 environmental resource areas in the EA; however, not all areas were evaluated at the same level of detail. A sliding-scale approach was used so that those actions with greater potential effect were evaluated in greater detail than those that have little potential for impact. To this end, those resource areas with the higher potential for impacts and greater potential need for mitigation measures were given more emphasis. The areas DOE evaluated in detail include: aesthetics and visual resources; air quality and climate; and biological resources, including wildlife, surface water, noise, and areas of environmental concern. For these resource areas, DOE determined there would not be significant environmental impacts during the construction and operation phases of the proposed project.

Operation of the storage batteries, distribution lines, and wind turbines would not have any meaningful or detectable impacts on land use; geology and soils; groundwater; cultural resources; socioeconomics; environmental justice; occupational health and safety; transportation and traffic; utilities, energy, and materials; or waste generation.

The proposed project is located in Lubbock County, Texas, which is in an attainment area for all six National Ambient Air Quality Standard criteria pollutants. The proposed project would produce air emissions during construction. Once completed, the proposed project would produce a quantity of electricity via wind energy, thereby reducing the amount of pollutants produced from burning fossil fuels via conventional electricity generation. The proposed project would contribute to reducing regional greenhouse gas emissions and aid in keeping the area in attainment for air quality.

Any associated noise from operation of the proposed project would be similar to the existing noise levels at the RTC and the noise produced by the adjacent wind turbine and distribution lines. The distribution lines' noise level may approach a maximum of 48 decibels, which is comparable to typical office noise levels.

The aesthetics of the RTC community would change with the addition of the 12.5-kilovolt distribution lines, storage battery facility, and wind turbines. However, the proposed project would not result in significant aesthetics and visual resource impacts, because it would not create a visual interruption that would dominate a unique viewshed or scenic view. Existing electric infrastructure, such as distribution lines, transmission towers, substations, and a wind turbine are already scattered throughout the landscape.

The whooping crane, which is an endangered species protected under the federal *Endangered Species Act*, resides in Lubbock County; however, the project would take place within areas that

do not contain suitable habitat for this federally-listed endangered species. There would be a potential risk for bird and bat mortality due to collisions with wind turbines.

Operation of the proposed project would involve no discharge of liquids or wastes of any type to the ground, and operations and maintenance would not impact surface water. There would be no impacts to groundwater from the proposed project, as it would not involve use of groundwater or discharges that could adversely affect groundwater quantity or quality.

According to the National Wetland Inventory, there are two wetlands adjacent to the project site on RTC and one wetland within the project site of the above ground distribution line. All best management practices would be applied to mitigate impacts to the wetlands. The project is not located in a 100-year floodplain.

PUBLIC AVAILABILITY: DOE issued the draft EA on November 18, 2012, and advertised its release in *The Avalanche-Journal* on November 18-20, 2012. In addition, DOE sent copies of the draft EA to the Mahon Library in Lubbock, Texas for public review. DOE established a 30-day public comment period that began November 18, 2012, and ended December 17, 2012, and announced it would accept comments by mail, email, or fax. DOE distributed the draft EA to the applicable federal, state, and local agencies and to Native American Tribes.

DOE conducted consultations by mail with the responsible U.S. Fish and Wildlife Service (USFWS) field office, the Texas State Historic Preservation Office (SHPO), and Native American Tribes in Oklahoma. DOE received an email comment on the draft EA from the USFWS dated October 4, 2012, stating that the USFWS had determined that the project site is not suitable habitat for federally-listed endangered species in Lubbock County and that the proposed project would not adversely affect such species. SHPO concurred with DOE's determination by letter

dated October 11, 2012, stating that no historic properties would be affected by the proposed project. DOE did not receive a response from any of the tribes.

The Texas Parks and Wildlife Department (TPWD) responded to the draft EA by letter to DOE dated December 17, 2012, requesting that RTC incorporate several recommendations to protect wildlife. DOE responded to TPWD outlining what measures RTC must implement to protect wildlife during project siting, construction, and operation. These recommendations address power-line protection devices, prairie dog concerns, western burrowing owls, wind energy development guidelines, and post-construction monitoring.

The final EA and this FONSI will be provided to stakeholders and resource agencies that provided comments or consultation, and the documents will be available at DOE's NETL web site at http://www.netl.doe.gov/publications/others/nepa/ea.html. Copies of the final EA and FONSI can also be obtained by sending a request to:

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DETERMINATION: Based on the findings of this EA and after careful consideration of all public and agency comments, DOE has determined that its proposed action of providing $1.85 million in the form of cost-shared federal funding and CCET's construction and operation of the RTC Wind and Battery Integration Project would not significantly affect the quality of the

human environment. Therefore, preparation of an environmental impact statement is not required and DOE is issuing this FONSI.

Issued in Pittsburgh, PA, this 25 day of April 2013.

Anthony V. Cugini, Director
National Energy Technology Laboratory