

TENNESSEE VALLEY AUTHORITY

Environmental Assessment or Environmental Impact Statement for Purchase of Renewable Energy from CPV Ashley Wind Power Project in North Dakota

AGENCY: Tennessee Valley Authority

ACTION: Notice of Intent

SUMMARY: This notice of intent is provided in accordance with the Council on Environmental Quality's regulations (40 CFR parts 1500-1508) and Tennessee Valley Authority's (TVA) procedures for implementing the National Environmental Policy Act (NEPA). TVA will prepare either an environmental assessment (EA) or an environmental impact statement (EIS) in order to address the potential environmental impacts associated with its proposal to execute a 20-year power purchase agreement (PPA) for the purchase of up to 200 megawatts (MW) of renewable energy from CPV Ashley Renewable Energy Company LLC (CPV), a direct subsidiary of CPV Renewable Energy Company LLC (CPV REC). In order to supply this renewable energy, CPV is proposing to construct and operate a wind-powered generating facility in McIntosh County, North Dakota, known as the Ashley Wind Energy Project (the proposed Project). The proposed Project would interconnect to the Midwest Independent Transmission System Operator (MISO) electric grid via a 230-kilovolt (kV) Montana Dakota Utility Company transmission line.

TVA's Strategic Plan includes the objective to reduce its environmental footprint through demand reduction and by increasing clean energy resources in its generation mix. The TVA Board of Directors (TVA Board) recently authorized the purchase of as much as 2,000 MW of renewable and clean energy by 2011 as part of TVA's plan to have half of its power supply from clean and renewable energy sources by 2020. Accomplishing this goal will require increasing the availability of clean generation such as wind power to TVA. Achieving these goals would also assist TVA in meeting potential renewable portfolio standards (RPS), broadening its generation mix, sustaining grid reliability, and meeting future consumer demand for electricity through low or no carbon-emitting facilities.

DATES: Public comments on the scope of the review are invited. In order to ensure their consideration, scoping comments must be received on or before February 28, 2010. It is anticipated that a draft EA or EIS will be available in late spring or early summer 2010. If TVA decides that preparation of an EIS is warranted, a notice of availability of the draft EIS will be published in the *Federal Register*, as well as announced in local news media.

ADDRESSES: Information about the environmental review may be obtained by contacting Bruce Yeager, NEPA Program Manager, Tennessee Valley Authority, 400 West Summit Hill Drive, Mail Stop WT 11D, Knoxville, Tennessee 37902; by e-mailing to blyeager@tva.gov; or by visiting the TVA Web site <http://www.tva.gov>.

FOR FURTHER INFORMATION, CONTACT: For information about the wind power proposal, contact Wayne Hilson, Power Supply and Fuels Organization, Tennessee Valley Authority, 1101 Market Street, Mail Stop SP 6A, Chattanooga, Tennessee 37402 (e-mail: dwhilson@tva.gov).

SUPPLEMENTARY INFORMATION:

TVA Power System

TVA is an agency and instrumentality of the United States, established by an act of Congress in 1933, to foster the social and economic welfare of the people of the Tennessee Valley region and to promote the proper use and conservation of the region's natural resources. One component of this mission is the generation, transmission, and sale of reliable and affordable electric energy. TVA operates the nation's largest public power system, producing 4 percent of all electricity in the nation. TVA provides electricity to most of Tennessee and parts of Virginia, North Carolina, Georgia, Alabama, Mississippi, and Kentucky. It serves about 9 million people in this seven-state region through 157 power distributors and 58 directly served large industries and federal facilities. The TVA Act requires the TVA power system to be self-supporting and operated on a nonprofit basis, and the TVA Act directs TVA to sell power at rates as low as are feasible.

Dependable capacity on the TVA power system is about 37,000 MW. TVA generates most of this power with three nuclear plants, 11 coal-fired plants, nine combustion-turbine plants, a combined-cycle plant, 29 hydroelectric dams, a pumped-storage facility, a wind farm, a methane-gas cofiring facility, and several small renewable generating facilities. A portion of delivered power is obtained through long-term PPAs. About 60 percent of TVA's annual generation is from fossil fuels, predominantly coal; 30 percent is from nuclear; and the remainder is from hydro and other renewable energy resources. TVA transmits electricity from these facilities over almost 16,000 miles of transmission lines. Like other utility systems, TVA has power interchange agreements with utilities surrounding the Tennessee Valley region and purchases and sells power on an economic basis almost daily.

In the mid-1990s, TVA developed an Integrated Resource Plan (IRP) with extensive public involvement. This process was completed with publication of the *Energy Vision 2020 Integrated Resource Plan and Final Environmental Impact Statement* (IRP/FEIS) in 1995 and the associated record of decision in 1996. Based on the extensive evaluation, TVA decided to adopt a flexible portfolio of supply- and demand-side energy resource options to meet the growing demand for electricity in the region and achieve the goals of the TVA Act and other congressional directives. The portfolio of alternatives analyzed in the IRP/FEIS encompassed the current proposal to purchase power from renewable energy resources such as wind power. On June 15, 2009, TVA announced its intent to conduct a new comprehensive study and EIS entitled the *Integrated Resource Plan*. As appropriate, TVA expects to

continue to implement the existing portfolio of resource options during this EIS process.

CPV Ashley Wind Power Project

TVA is proposing to execute a 20-year PPA for the purchase of up to 200 MW of renewable energy from CPV, a direct subsidiary of CPV REC. In order to supply this renewable energy, CPV is proposing to construct and operate a wind-powered generating facility in McIntosh County, North Dakota.

CPV has not identified the specific turbine model to be utilized at the site, but it is expected that the selected turbine will range between 1.5–3.0 MW in generating capacity, 80–90 meters in hub height, and 80–103 meters in rotor diameter. In addition to the wind turbines, the proposed Project will involve improvements to existing roads (possibly including widening); construction of new gravel access roads; installation of underground electrical collection lines; construction of an operation and maintenance building; construction of an electrical switchgear facility; and construction of an interconnection substation facility. A temporary construction staging area is also planned for the construction phase of the proposed Project.

Three 60-meter-tall temporary meteorological towers and one temporary 2-meter-tall Triton Wind Profiler have already been installed within the proposed Project area, and two additional 60-meter meteorological towers were installed in November 2009.

Two existing high-voltage transmission lines, a Montana Dakota Utility Company 230-kV line, and a Basin Electric Power Cooperative 345-kV line pass through the

proposed Project area. The proposed Project would interconnect to the MISO electric grid via the 230-kV Montana Dakota Utility Company transmission line. TVA has requested a transmission capacity study be conducted by the MISO to more fully evaluate the transmission capacity in the region for carrying the power from the site substation to a TVA transmission grid interconnect. Any utility line upgrades or future transmission lines in the proposed Project area would be subject to appropriate review under NEPA.

The proposed Project is located in south-central North Dakota, approximately 6 miles north of the city of Ashley. This location was selected due to the energetic wind resource of the area and its proximity to two existing high-voltage transmission lines, which give the proposed Project access to the regional electric grid. The proposed Project area is defined as approximately 17,400 acres of private land under easement with CPV where the proposed Project facilities will be located, primarily consisting of pasture and cultivated cropland (wheat, soybeans, sunflowers, and corn) with a few rural residences and farmsteads. Some conservation easements, including Conservation Reserve Program land, U.S. Fish and Wildlife Service (USFWS) grassland easements, and USFWS wetland easements, are known to be present within the proposed Project area, which is characterized by rolling hills, interspersed with many isolated glacial pothole wetlands.

Construction of the proposed Project would commence in mid-2011, with a commercial operation date anticipated in late 2012. CPV has a total of over 37,000 acres under easement agreements in McIntosh County. Subject to the market for

renewables and the success of CPV in that market, future phases could be developed; however, there is currently no indication that any expansion will occur, and predicting whether or not the land would ever be further developed involves substantial speculation beyond that need to support the TVA power purchase.

Proposed Action and Alternatives

TVA's long-term Strategic Plan includes the objective to reduce its environmental footprint through demand reduction and by increasing clean energy resources in its generation mix. To address the need for additional low or zero carbon-emitting generation beginning in the 2011 to 2012 time frame and for up to 20 years thereafter, the TVA Board recently authorized the purchase of as much as 2,000 MW of renewable and clean energy. TVA plans to have half of its power supply from clean and renewable energy sources by 2020. Accomplishing this goal will require increasing clean generation such as wind power at TVA. Achieving these goals would also assist TVA in meeting potential RPS, broadening its generation mix, sustaining grid reliability, and meeting future consumer demand for electricity through low or no carbon-emitting facilities. The present environmental review would evaluate at least the No Action and the Proposed Action Alternative of executing a 20-year PPA for the purchase of up to 200 MW of renewable energy from CPV, a direct subsidiary of CPV REC.

No determination on the environmental acceptability of proceeding with a decision to implement the proposed action has been made at this time. In making its final

decision, TVA will consider the assessment in the environmental review, including input provided by reviewing agencies and the public.

Preliminary Identification of Environmental Issues

The impact analyses of the environmental review will include, but not necessarily be limited to, evaluating the potential for impacts to such resources and issues as geology, topography, and soils; water resources including surface water and groundwater, wetlands, and floodplains; biological resources such as wildlife (including avian species) and vegetation (such as native prairie); threatened and endangered species; cultural resources; land use; recreational resources; visual resources; noise; air quality; socioeconomics; transportation; communication resources; and public safety and services. The scope of analysis for the proposed Action Alternative would include construction and operation as described above for the proposed Project.

Public and Agency Participation

The EA or EIS is being prepared to inform decision makers and the public about the potential environmental impacts of the proposed power purchase and resulting construction and operation of the proposed Project. The process also will provide the public an opportunity to comment on TVA's analyses. Other federal, state, and local agencies and governmental entities will be asked to provide scoping

comments. These agencies will include, but not limited to, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, the North Dakota Game and Fish Department, and the North Dakota State Historic Preservation Office.

TVA invites the review agencies and the public to submit written or e-mail comments on the scope of the environmental review and alternatives. It is anticipated that a draft environmental review will be available in the late spring or early summer of 2010. If an EA is prepared, notice of availability of the draft environmental document will be publicized in local news media, and if an EIS is prepared, notice will be published in the *Federal Register* and announced in local news media. TVA expects to release a final environmental document in the late summer to fall of 2010.

Original signed by

1/22/10

Anda A. Ray, Senior Vice President and
Environmental Executive
Environment and Technology
Tennessee Valley Authority

Date