

FINDING OF NO SIGNIFICANT IMPACT
DEPARTMENT OF ENERGY LOAN GUARANTEE TO COGENTRIX OF ALAMOSA,
LLC FOR CONSTRUCTION OF THE COGENTRIX SOLAR PROJECT NEAR
ALAMOSA, COLORADO

AGENCY: U.S. Department of Energy, Loan Programs Office

ACTION: Finding of No Significant Impact

SUMMARY: The U.S. Department of Energy (DOE) conducted an environmental assessment (EA) that analyzed the potential environmental impacts associated with the construction and operation of a 30-megawatt (MW) high-concentrating photovoltaic energy facility in Alamosa County, Colorado. DOE, through its Loan Programs Office, proposes to provide a Federal loan guarantee pursuant to Title XVII of the Energy Policy Act of 2005 (EPAct 2005) to Cogentrix of Alamosa, LLC (Cogentrix) to support construction of the facility.¹ The purpose and need for agency action is to comply with DOE's mandate under EPAct 2005 by selecting eligible projects that meet the goals of the Act. DOE is using the NEPA process to assist in determining whether to issue a loan guarantee to Cogentrix to support the proposed project.

Based on the facility's 30 MW net nominal output capacity rating, it is expected to generate approximately 76,000 megawatt-hours (MWh) of electrical power per year. When compared to a conventional power plant, the facility would displace the use of approximately 249 million cubic feet of natural gas that would have been used by a comparable natural gas-fired plant. This would eliminate the generation of approximately 43,250 tons per year of carbon dioxide (CO₂) emissions, a greenhouse gas pollutant, into the atmosphere, based on the U.S. Environmental Protection Agency estimate of 1,135 pounds of CO₂ generated per MWh.

The project would also displace the release of traditional air pollutants generated by natural gas-fired power plants. Annual air pollutant emissions that are expected to be avoided by the project, assuming the same amount of electrical energy were produced instead from an efficient combined cycle power plant firing natural gas, include: 97 tons of nitrogen oxides, 94 tons of carbon monoxide, 29 tons of volatile organic compounds, 13 tons of sulfur oxides, and 41 tons of particulate matter with an aerodynamic diameter of 10 microns or less.

The project would employ high-concentrating photovoltaic solar technology, which has higher solar-to-electrical efficiency than other commercial solar photovoltaic systems. It also requires less land than other commercial solar technologies to generate the same amount of electricity. In addition, the Cogentrix project would have low water use requirements, since water is only needed for periodic washing of the solar panel surfaces to remove dirt and deposits. The proposed facility would be the first utility-scale commercial installation of this technology in the United States.

¹ The amount requested for the loan guarantee is not being disclosed at this time because it is business sensitive. Moreover, should DOE approve a loan guarantee, the amount may differ from the original request.

All discussion and analysis related to the potential impacts of construction and operation of the proposed facility are contained in the Final EA (DOE/EA-1839), which is incorporated by reference. DOE examined potential impacts on the following resources and found none to be significant: land use and visual resources; air quality; noise; geology and soils; water resources; biological resources; cultural resources; socioeconomics and environmental justice; public health and safety, including impacts related to intentionally destructive acts; transportation; waste and hazardous materials management; and cumulative effects, including global climate change.

In accordance with applicable regulations and policies, DOE sent a notification letter regarding the Department's determination to prepare an EA to the Colorado Department of Public Health and Environment on October 1, 2010. The letter described the proposed action and stated that a draft EA would be sent to the state for review. On March 30, 2011, DOE sent the draft EA to the Colorado Department of Public Health and Environment and invited their comments on the draft. The draft EA was also posted on the Loan Programs Office website. No comments on the EA were received.

DETERMINATION: On the basis of the Final EA, DOE has determined that providing a Federal loan guarantee to Cogentrix of Alamosa, LLC to support construction of the proposed high-concentrating photovoltaic energy facility in Alamosa County, Colorado, will not have a significant affect on the human environment. The preparation of an environmental impact statement is therefore not required, and DOE is issuing this Finding of No Significant Impact.

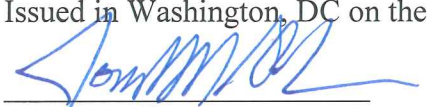
Copies of the Final EA are available at the DOE Loan Programs Office website at www.lgprogram.energy.gov/NEPA_DOC.html or from

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Additional information on the DOE NEPA process is available from

Office of NEPA Policy and Compliance
U.S. Department of Energy
1000 Independence Avenue, SW
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202-586-4600 or 1-800-472-2756

Issued in Washington, DC on the 28 day of APRIL in the year 2011.


Jonathan Silver
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