

**FINDING OF NO SIGNIFICANT IMPACT
FOR THE
WEST TENNESSEE SOLAR FARM PROJECT
HAYWOOD COUNTY, TENNESSEE**

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

ACTION: Finding of No Significant Impact (FONSI)

SUMMARY: DOE completed the *Final Environmental Assessment for the West Tennessee Solar Farm Project, Haywood County, Tennessee* (DOE/EA-1706). Based on the analyses in the Environmental Assessment (EA), DOE determined that its proposed action – allowing the State of Tennessee to use some of its State Energy Program (SEP) funds to assist in the development of the West Tennessee Solar Farm Project (Solar Farm) – would not result in any significant adverse impacts. DOE further determined that there could be beneficial impacts, as the Solar Farm would demonstrate the low-carbon production of electricity on a highly visible and significant scale, create jobs, educate the public on the benefits of solar energy, encourage future renewable-energy investment in Tennessee and the region, reduce greenhouse gas emissions, and increase renewable-energy generation.

BACKGROUND: Under the American Recovery and Reinvestment Act of 2009 (ARRA), Public Law 111-5, DOE's National Energy Technology Laboratory (NETL), on behalf of the Office of Energy Efficiency and Renewable Energy, provides federal funds to states for the development of projects that further the objectives of the SEP. In Tennessee, the state agency that selects projects for funding is the Department of Economic and Community Development (ECD). DOE must comply with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. §§ 4321 *et seq.*), the Council on Environmental Quality's regulations (40 CFR Parts 1500-1508), DOE's NEPA implementing procedures (10 CFR Part 1021), and DOE's Compliance with Floodplain and Wetland Environmental Review Requirements (10 CFR Part 1022) in deciding whether to allow states to use SEP funds for selected projects. DOE prepared an EA to evaluate the potential environmental consequences of allowing ECD to provide a grant to this project.

PURPOSE AND NEED: The purpose and need for DOE action is to ensure that states use their SEP funds for activities that further the objectives and meet the requirements of the SEP. The objectives of the SEP are to improve energy efficiency, reduce dependence on imported oil, decrease energy consumption, and promote renewable energy. However, DOE's role is not to dictate how Tennessee should allocate its funds among these objectives or to select the projects the state pursues. The purpose and goals established for the proposed project are also consistent with the objectives of the ARRA, which are to create jobs and improve the nation's infrastructure.

DESCRIPTION OF THE PROPOSED ACTION: DOE's proposed action is to allow Tennessee to use some of its SEP funds, as a grant, to assist in the development of the West Tennessee Solar Farm project. The proposed project comprises the following: (1) installation and operation of a 5-10 megawatt photovoltaic array, including required utility transmission lines, and (2) development of educational programs on solar energy production, which would be conducted at an Information and Welcome Center developed by the Tennessee Department of Transportation. The Solar Farm would be located on approximately 200 acres of state-owned property in Haywood County directly adjacent to Interstate 40 between mile markers 43 and 45. Power generated by the solar array would be transmitted to the Chickasaw Electric Cooperative's utility system and purchased by the Tennessee Valley Authority. The Information and Welcome Center would be a pull-through interstate welcome center connected to I-40 by

entrance and exit ramps. The Center is estimated to be 6,000 – 10,000 square feet in size, with separate parking areas for cars, buses and recreational vehicles, and tractor trailers. The EA analyzes the construction and operation of the Center as a connected action; it would be adjacent to the Solar Farm. The Tennessee Department of Transportation is the lead agency for the Information and Welcome Center.

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 allow the State of Tennessee to use its SEP funds for the proposed project. For the purposes of the analyses in the EA, DOE assumed that the project would not proceed without SEP funding. This assumption establishes a baseline against which the potential environmental impacts of the proposed project are compared.

ENVIRONMENTAL CONSEQUENCES: DOE evaluated the potential environmental consequences of the proposed project and the No Action Alternative, including the activities associated with the construction and operation of the Information and Welcome Center that would be funded by a combination of Federal and State Highway Administration funds rather than by SEP ARRA funds.

DOE considered fifteen 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 are 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 more detail included air quality, noise, and water resources. For those areas, DOE determined there would be minimal potential adverse environmental impacts, generally during the installation and construction phase. DOE determined that the proposed action is not a wetland or floodplain action as defined in 10 CFR Part 1022, Compliance with Floodplain/Wetlands Environmental Review Requirements, and accordingly no wetland or floodplain assessment was required.

The other environmental areas DOE evaluated for potential impacts were: land use/visual resources, geology and soils, biological resources, cultural resources, socioeconomics and environmental justice, utilities, transportation, waste management, health and safety, and cumulative impacts. DOE determined that there would be no potential for adverse impacts for these resource areas, or that the impacts would be minimal, temporary, or both.

Under the No Action Alternative, the project would not proceed unless other funding was obtained. If the project did not proceed there would be no impacts on the resource areas evaluated in the EA; there would also be no beneficial impacts.

DOE is issuing a Mitigation Action Plan (MAP) in conjunction with this FONSI. The MAP sets out obligations on the State of Tennessee to ensure mitigation of any potential for adverse environmental impacts. No impacts were identified as potentially significant, even in the absence of mitigation. The purpose of the MAP is to provide a concise document explaining how mitigation measures must be implemented, who is responsible for their implementation, and at what time during the project they are to be implemented.

PUBLIC AVAILABILITY: DOE issued the draft EA on September 23, 2010, and advertised its release in the *Fayette Falcon* on September 22 and the *Jackson Sun* and *Brownsville States Graphic* on September 23. In addition, DOE sent a copy of the EA to the Elma Ross Public Library in Brownsville, Tennessee. DOE established a 30-day public comment period that began September 23 and ended on October 22, 2010. A public meeting was held on October 5, 2010 at the Haywood County Courthouse.


Many of the comments received suggested that the West Tennessee Megasite is a connected action. DOE determined the Megasite is not a connected action based on the definition in 40 CFR § 1508. Neither the Megasite nor the Solar Farm would automatically trigger the other. Similarly, neither requires the other to be undertaken previously or simultaneously. Finally, they are not interdependent parts of a larger action that depends on the larger action for their justification. Although the plans for the Megasite are largely speculative based on the existing information, it was evaluated in the Cumulative Impacts section of the EA. The draft EA was distributed to various federal, state, and local agencies. DOE conducted formal consultations by mail with the responsible U.S. Fish and Wildlife Service (USFWS) field office and the State Historic Preservation Officer (SHPO) in Tennessee. DOE received correspondence from the USFWS stating that no significant impacts to wetlands are anticipated from the project and that no federally listed endangered or threatened species, or habitat suitable for such species, are known to exist in the project area. The SHPO concurred with DOE's determination that no historic properties would be affected by the Solar Farm project.

Through the course of the public meetings, consultation process, and public comment period, many comments were submitted for consideration. DOE revised various sections of the EA and updated information as appropriate in response to these comments. These changes were incorporated into the final EA, as were responses to comments prepared by DOE as to issues within its purview, and by Tennessee as to issues within the state's responsibilities and decision-making authority.

Copies of the final EA and this FONSI have been sent to individuals and organization that provided comments or participated in the consultation process. Copies are available at DOE's NETL web site at <http://www.netl.doe.gov/publications/others/nepa/ea.html>.

DETERMINATION: Based on the findings of this EA, and after careful consideration of all public and agency comments, DOE has determined that the use of SEP funds for the proposed West Tennessee Solar Farm Project does not constitute a major federal action that would significantly affect the quality of the human environment within the context of NEPA. Therefore, preparation of an environmental impact statement is not required and DOE is issuing this FONSI.

Issued in Pittsburgh, PA, this 2 day of February 2011.



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National Energy Technology Laboratory