

U.S. Department of Energy Office of Legacy Management

DOE/EA 1770

FINDING OF NO SIGNIFICANT IMPACT

Photovoltaic Solar Project at the Durango, Colorado, Disposal Site, La Plata County

AGENCY: U.S. Department of Energy (DOE), Office of Legacy Management (LM)

ACTION: Finding of No Significant Impact (FONSI)

SUMMARY: LM prepared an Environmental Assessment (EA) (DOE/EA-1770) that evaluated two action alternatives related to the installation, operation, and removal of a photovoltaic (PV) solar energy system on the Durango, Colorado, Disposal Site and the No Action Alternative. Alternative 1 evaluated the use of the 18-acre (ac) vegetated surface of the disposal cell for the installation of a PV system. The second action alternative (Alternative 2, the Preferred Action) considered the use of the surface of the disposal cell but also the use of approximately 3.5 ac of previously disturbed areas adjacent to the disposal cell. Under this alternative, which is the maximum solar development scenario, approximately 21 ac of the disposal site will contain solar panels. Based on preliminary estimates, it could support a potential to generate 4.5 megawatts or more of energy.

LM intends to award a 20-year lease with one 5-year option to a qualified lessee who will install, operate, and maintain a PV system and remove it at the end of the lease term. The lessee will also be responsible for reclaiming all disturbed areas at the end of the lease. The lessee will have full responsibility for all aspects of the system. LM will retain oversight responsibilities and will be able to terminate the lease if unexpected damage occurs to the disposal cell or its components.

LM revised its Long-Term Surveillance Plan (LTSP) to include the placement of a renewable energy facility, such as a PV system, on its Durango disposal site. The U.S. Nuclear Regulatory Commission (NRC) accepted the LTSP in May 2011. Protective stipulations related to the integrity of the disposal cell are stated in the LTSP and will be stated in the lease.

All analysis and discussion of potentially affected resource components related to the installation, operation, and removal of a PV system are provided in the Final EA, which is hereby incorporated by reference.

Based on the information and analysis in the EA, LM has determined that its Preferred Action (Alternative 2) will not constitute a major federal action that would significantly affect the quality of the human environment within the meaning of the National Environmental Policy Act (NEPA). Therefore, an Environmental Impact Statement is not required, and LM is issuing this FONSI. This FONSI was prepared in accordance with NEPA; the Council on Environmental Quality regulations for implementing NEPA, as amended, at Title 40 *Code of Federal Regulations* Part 1500 (40 CFR 1500) to 40 CFR 1508; and the DOE NEPA regulations at 10 CFR 1021.322.

ENVIRONMENTAL IMPACTS: The EA describes and evaluates impacts on a sliding scale of importance. No impacts were associated with environmental justice, noise, occupational worker health and safety, or intentional destructive acts. An explanation was provided in the text. In addition, none of the following resources were found to be either present or of concern to areas potentially affected by the proposed PV system on the disposal site: floodplains and wetlands, prime and unique farmlands or soils, wild and scenic rivers, state or national parks or forests or other areas of scenic or aesthetic importance,

and threatened or endangered species. For this reason, these resources were eliminated from detailed consideration in the EA.

In response to either local interest or other considerations, a detailed evaluation of impacts was completed on the following resources: climate, air quality, and greenhouse gas; visual resources; wildlife; vegetation; cultural resources; recreation and Lake Nighthorse; and transportation. Based on the more detailed evaluation, only minor impacts associated with some of these resources were found, and they are described as follows.

During the lease term, it is expected that there will be minor, short-term impacts associated with greenhouse gas related to vehicular travel to the site. During the installation and removal of the PV system, workers are expected to commute several miles from the city of Durango. During the system's operation, inspection and maintenance actions will include travel not only from local areas but also from Grand Junction, Colorado. It is anticipated that one or two trips per month will be made when the system is operating. PV solar panels require minimal maintenance, and no chemicals will be used for cleaning.

The La Plata County Planning Department was concerned that the PV system will be visually intrusive. A detailed visual-resource evaluation determined that the top of the disposal cell and adjacent areas near the footprint that will contain PV panels will not be noticeable from known public areas within a 5-mile radius of the disposal cell, with the exception of the view from the adjacent County Road (CR) 212. CR 212 is a lightly used dirt road that provides access to the disposal site and is used to access a communication tower to the north of the disposal site. This road does experience casual use by area residents but does not provide a through passage to other destinations.

It is expected that there will be minor impacts to wildlife, such as potential short-term displacement related to noise and activity in the area during the installation and removal of the PV system components. It is expected that most wildlife will return. The surrounding Bodo State Wildlife Area will not be impacted by the presence of solar panels. A potential positive impact is the possible use of the areas under the panels for cover or protection by various small mammals or birds during the lease term.

It is expected that there will be a change in up to 12.5 ac of vegetation related to the presence of the panels and activities related to accessing the panels. The moisture regime beneath the panels is expected to change due to the presence of the panels, but whether the change will represent a completely positive or negative impact is unknown. An estimated 21.5 ac may be available for a PV system and, of the 12.5 ac affected, it is estimated that 3.5 ac may lose surface vegetation. Stipulations to control erosion related to water runoff from the panels will be in the lease.

There is one cultural resource site near the disposal cell that is eligible for inclusion in the National Register of Historic Places. LM will require the lessee to avoid the site, and specific avoidance stipulations will be included in the lease.

Area recreation and Lake Nighthorse will not be affected by the presence of the PV system or by any activities related to the system. However, the increased number of people in the area related to future recreational activities at Lake Nighthorse might result in increased nuisance activities on the disposal site (e.g., removing or shooting signs, littering).

During the PV system's installation and removal, an estimated 30 trips per day will be required to access and transport supplies to and from the disposal site. As necessary for public and worker safety, temporary traffic controls might be needed at the intersection of the frontage road and CR 210 and at the intersection of CR 210 and CR 212 during the installation and removal of system components. The traffic during installation is expected to be light, but traffic is expected to significantly increase by the time the system is removed. During the system's operation, there will be an estimated one or two trips per month related to inspections and possible maintenance actions.

PUBLIC PARTICIPATION IN THE EA PROCESS: In accordance with applicable policies and practice, LM invited representatives from state, federal, Tribal, and local governments and members of the public to attend a scoping meeting that was held on May 3, 2010. The Notice of Intent to prepare an EA was published in a local newspaper as well as on the DOE NEPA website. Seventeen people attended the public scoping meeting and had various concerns and questions related to the proposed PV system on the disposal site. La Plata County Planning Department subsequently provided written comments. All concerns were addressed in the Draft EA and are included in the Final EA. A 30-day comment period was provided for scoping.

The Southern Ute and Ute Mountain Ute Indian Tribes were invited to attend preliminary meetings that DOE held with various local governments prior to the public scoping meeting. On July 19, 2010, LM met with representatives of the Southern Ute Tribe and representatives of related tribal enterprise groups to provide information on the proposed project. LM also sent consultation letters to the Pueblo of Picuris and to the Ohkay Owingeh (Pueblo of San Juan). Additional cultural resource consultations were conducted with the State Historic Preservation Officer and representatives of the Native American Graves Protection and Repatriation Act.

The Draft EA was published on the DOE and LM NEPA websites for a 30-day review period that ended September 17, 2010. A Notice of Availability of the Draft EA was provided to known interested parties. DOE received one public comment, which was in favor of having a PV system on the disposal site. Several comments were received from the La Plata County Planning Department, NRC, and the Colorado Department of Public Health and Environment. These comments are addressed in this Final EA.

DETERMINATION: LM has concluded that the proposed action of using the surface of the disposal cell and previously disturbed areas surrounding the disposal cell footprint for a PV system will not impact the performance of the disposal cell or constitute a major federal action significantly affecting the human or natural environment as defined by NEPA. The NRC accepted the revised LTSP, which includes provision for renewable energy use on the disposal cell. Design criteria are described in the LTSP that are protective of the disposal cell and human health and the environment.

The Environmental Assessment uncovered only minor and expected impacts (e.g., vehicle emissions related to travel to the site, minor loss of vegetation, minor displacement of wildlife), which will be short-term and related to installation and removal actions. No long-term impacts related to the operation of a PV system were identified. Therefore, preparation of an Environmental Impact Statement is not required, and LM is issuing this FONSI. Copies of the EA and FONSI are available through the following contact:

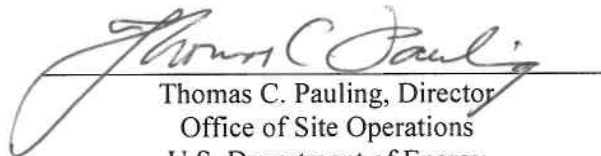
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Copies of the Final EA and FONSI are also available on the DOE website:
http://nepa.energy.gov/DOE_NEPA_documents.htm.

For further information about the DOE NEPA process, contact:

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Issued at Washington, D.C., on this 9th day of June 2011.

A handwritten signature in cursive script, reading "Thomas C. Pauling", is written over a horizontal line.

Thomas C. Pauling, Director
Office of Site Operations
U.S. Department of Energy
Office of Legacy Management