

FINDING OF NO SIGNIFICANT IMPACT
FINAL ENVIRONMENTAL ASSESSMENT
FOR THE
PROPOSED CONSTRUCTION AND OPERATION
OF A
SOLAR PHOTOVOLTAIC ARRAY
AT
LOS ALAMOS NATIONAL LABORATORY
LOS ALAMOS, NEW MEXICO

June 2019

RESPONSIBLE AGENCY: U.S. Department of Energy National Nuclear Security Administration

ACTION: Finding of No Significant Impact

SUMMARY: Los Alamos National Laboratory (LANL) located in north-central New Mexico is a multidisciplinary, multipurpose research institution owned and managed by the United States Department of Energy's (DOE) National Nuclear Security Administration (NNSA), Los Alamos Field Office. NNSA is proposing to construct and operate at LANL a 10 megawatts (MW) ground-mounted solar photovoltaic system (PV) and associated power transmission line within an existing power transmission line corridor. Baseload on-site power generation would be able to increase on-site LANL electrical power generation with efficient and sustainable electrical power capability and resilience. Environmental management adherence with EO 13834, *Efficient Federal Operations* and DOE Order 436.1 *Departmental Sustainability*, includes installing renewable energy on-site and reducing DOE's carbon footprint and greenhouse gas emissions. The *Environmental Assessment for the Proposed Construction and Operation of a Solar Photovoltaic Array at Los Alamos National Laboratory Los Alamos, New Mexico* (EA) analyzed the potential environmental impacts of this proposal was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969; Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 Code of Federal Regulations [CFR] 1500-1508); and DOE National Environmental Policy Act Implementing Procedures (10 CFR Part 1021).

PURPOSE AND NEED: NNSA requires a reliable, efficient, diversified and sustainable electrical supply to support programs and activities conducted in LANL facilities, essential to maintaining the nation's nuclear deterrent and to meet on-site renewable energy goals with an overarching goal of reducing greenhouse gases.

PROPOSED ACTION: Construction and operation of a PV system would include photovoltaic panels, racking, electrical junction boxes, wiring, direct current to alternating current inverters,

transformers, and associated power lines to West Testing Area (WTA) [electrical] Substation. There would be approximately 450 photovoltaic tracking panels about 3 feet x 6.5 feet and 1.5 inches in width, configured to prevent self-shading. Depending upon the most cost-effective option, the photovoltaic panels would be ground-mounted fixed tilt, single axis tracking rotating from east to west, or dual axis tracking from both east to west and north to south.

The proposed 55-plus acre location is at the northwest corner of Technical Area (TA)-16 with a minor inclusion of TA-8 adjacent to and east of West Jemez Road and west of and adjacent to Anchor Ranch Road. Approximately 50 acres was used as a soils borrow pit. Available, if required, and adjacent just south of the proposed location, is an additional 5.4 acres. The chosen site was the only location that met the selection criteria and which had been previously and substantially disturbed by other activities (i.e., borrow site); all others were greenfield sites. Site preparation would require tree and shrub grubbing and leveling and grading in keeping with the natural terrain. Shrubs and trees would be chipped and spread onsite for dust control. Site preparation is expected to be a balanced cut and fill; thus, no importation or export of soils would be required. There are two feasible PV power line routes for a 13.8 kilovolt line from the proposed PV site to the WTA Substation. New power poles would be erected within a LANL power line corridor adjacent to existing power poles from the PV site to the WTA Substation. Either route would require some remedial work, such as brush clearing and filling of washouts prior to installation of the new power poles. Routing will be determined after technical, cost-effective, and security analyses are performed.

In consideration of the lack of data regarding PV structure effects on birds and the potential for development of other PV sites on LANL a project Mitigation Action Plan has been developed as specified in Section 3.4 of the Final EA. The Mitigation Action Plan consists of a long-term avian monitoring study at the proposed PV array site and adjacent habitat that will be implemented prior to construction and conducted for a minimum 10 year study period. This study would add to the limited body of literature on these types of bird effects.

NO ACTION ALTERNATIVE: The No Action Alternative is not to construct a PV array and associated power transmission line.

EA REVIEW AND COMMENT: The State of New Mexico, Northern New Mexico Citizen's Advisory Board, local governments (City of Espanola, Los Alamos County, and City of Santa Fe) and potentially affected Tribal governments of the Pueblo de Cochiti, Pueblo de San Ildefonso, Pueblo of Jemez, and Santa Clara Pueblo were notified about the proposed project by mail June 18, 2018, in accordance with 10 CFR 1021.301. The draft EA was available for a 30 day review and comment period from April 8 to May 7, 2019 via distribution to the same recipients of the notification letter; placed in the LANL Public Reading Room located at 94 Cities of Gold Road, Pojoaque, New Mexico; distributed to over 8,000 recipients on the LANL GovDelivery listserve; and posted on the DOE National Environmental Policy Act (NEPA) website: <http://energy.gov/nepa/nepa-documents/environmental-assessments-ea>.

Comments were received from the State of New Mexico Environment Department that provided a review of the proposed project with web links to their programs and reminders of permitting

requirements, a company interested in bidding on the installation of the solar panels, and a statement of project support from a private citizen.

DETERMINATION: NNSA has reviewed the final EA and determined that the analysis meets President's Council on Environmental Quality and DOE NEPA regulations and adequately assesses and discloses the environmental impacts of the Proposed Action and No Action Alternatives. Based on the analysis presented in the EA and public comments, NNSA has determined there would be no significant impact from proceeding with the Proposed Action. The basis of this determination is that there are no identified significant adverse effects likely to result from implementing the Proposed Action. Therefore, NNSA is issuing this Finding of No Significant Impact pursuant to the *National Environmental Policy Act* of 1969 (42 U.S.C. 4321 et seq.), the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500), and DOE NEPA Implementing Procedures (10 CFR 1021).

FOR FURTHER INFORMATION CONTACT: For further information on this EA and FONSI, contact Kristen Dors, NEPA Compliance Manager, U.S. Department of Energy, National Nuclear Security Administration, Los Alamos Field Office (NA-LA), 3747 W. Jemez Road, Los Alamos, NM 87544 or via email at NA-LA_NCO@nnsa.doe.gov.

For further information on the DOE NEPA process contact the Office of NEPA Policy and Compliance (GC-54), U.S. Department of Energy, 100 Independence Avenue, SW, Washington DC 20585; telephone (202) 586-4600 or (800) 472-2756.



William S. Goodrum
Los Alamos Field Office Manager



Date

