

## **FINDING OF NO SIGNIFICANT IMPACT**

### **PHOTOVOLTAIC DEVELOPMENT HOLLOMAN AIR FORCE BASE, NEW MEXICO**

Pursuant to provisions of the National Environmental Policy Act (NEPA), Title 42 United States Code (USC) Sections 4321 to 4347, implemented by Council on Environmental Quality (CEQ) Regulations, Title 40, Code of Federal Regulations (CFR) § 1500-1508, and 32 CFR § 989, Environmental Impact Analysis Process, the U.S. Air Force assessed the potential environmental consequences associated with the proposed development of a photovoltaic (PV) solar energy project on open military land in the northeast portion of Holloman Air Force Base (HAFB), Otero County, New Mexico. This Environmental Assessment (EA), incorporated by reference, analyzes the potential environmental consequences of the actions associated with the development of the PV solar energy project, and addresses all potential impacts of Alternative 1 (Preferred Alternative), Alternative 2, Alternative 3, Alternative 4, and the No Action Alternative.

#### **ALTERNATIVE 1 (PREFERRED ALTERNATIVE)**

The Preferred Alternative Site (PAS) for the construction of up to 400 acres of PV array is located to the southwest and northwest of the Atlas Power Substation and is bounded east of Vandergrift Road, northwest of Rita's Draw, at Atlas Road on the north, and at an existing 115 thousand volt (kV) transmission line along the eastern boundary of HAFB.

#### **ALTERNATIVE 2**

Under this Alternative, construction of the PV array would be located on about 270 acres of relatively level terrain, located to the southeast of Rita's Draw and west of the base eastern boundary. This smaller array size would be due to rougher surrounding terrain compared to the PAS. Alternative 2 would impact a much higher density of cultural resources.

#### **ALTERNATIVE 3**

Alternative 3 provides for development of a smaller array on approximately 190 acres of land located to the north of the PAS. The land is bordered by Atlas and Vandergrift Roads, the La Luz Gate, the eastern base boundary and the Atlas Substation. The area includes an historic Balloon Operations Area and White Sands Missile Range and Test Group Instrument stations.

#### **ALTERNATIVE 4**

In Alternative 4 the PV array would be sited southwest of the PAS in an area of approximately 350 acres, with only about 180 acres capable of reasonable development due to a weapons safety zone, steeper slopes and heavy erosion near Rita's Draw as well as two buildings housing White Sands Missile Range radar sites. It would also require at least 1.5 miles of new power line.

#### **ALTERNATIVE 5 (NO ACTION ALTERNATIVE)**

Under the No Action Alternative, the alternatives discussed above would not occur and the area would remain in its current and undeveloped status. There would be no ground disturbing activities with impacts to local natural and cultural resources, and the Green Energy Initiative would not be implemented. Further, the resulting increase in jobs in the HAFB area, reduction in

regional air pollutant emissions, and achievement of military renewable energy use to enhance national security would not occur.

#### **SUMMARY OF FINDINGS FOR PROPOSED ACTION:**

**Geology, Seismicity, and Soils.** The project would require clearing and grading of up to 400 acres. The negative long-term erosive impacts of disrupting the vegetative cover and soil crusts would be somewhat ameliorated as native vegetation re-establishes cover in the non-traffic areas of the site. Construction would adhere to Best Management Practices (BMP) to control erosion and soil loss.

**Air Quality.** Temporary impairment of air quality would occur from the operation of construction equipment (combustion emissions) and disturbance of soils (fugitive dust) during site grading and placement of the PV system. Construction and operation of a solar generating facility would contribute to long-term beneficial impacts on regional air quality through reduction of demand on carbon-fueled generators

**Aesthetic and Noise Resources.** The change in the visual character of the preferred development site would be distinctive, impacting primarily base personnel commuting past the location. There would be a short term noise increase during construction. Noise from operations and maintenance would be imperceptible away from the site.

**Water Resources.** No ground water and minimal potable water is required for construction or operation on the site. Execution of the BMPs would prevent potential impacts to surface water resources by controlling runoff from proposed action. Construction design features and BMPs would incorporate appropriate soil contouring, drainage controls and detention/retention swales.

**Biological Resources.** Several hundred acres of vegetation would be directly impacted by any PV array configuration. Some loss of vegetation would be permanent. Wildlife would be temporarily displaced by construction activities. Any wildlife species present in the project area at the time of construction are reasonably expected to avoid the disturbance. If present, active migratory bird nests would be protected until fledging is completed. No threatened, endangered or sensitive species known to occur in Otero County were observed during field surveys. There is no critical habitat in the PAS and the U.S. Fish and Wildlife Service has concurred with a determination of no effect to federally listed species.

**Cultural Resources.** The proposed action would adversely affect historic properties. Known cultural resources were resurveyed to confirm their extent within the PAS. The Mescalero Apache Tribe was consulted (2013, 2015 and 2016) and identified no concerns. Consultation with the New Mexico State Historic Preservation Officer (SHPO) resulted in a February 2016 Memorandum of Agreement (MOA) defining a course of action that will be completed prior to any impacts. Data and artifacts that would otherwise be lost to the construction activities will be captured, analyzed, reported and curated for posterity.

**Land Use.** Land use within the project site would change from previously open, undeveloped land to a solar energy generating facility. The 400 acre site, 0.007 percent of total HAFB acreage, used by the proposed action would not be available for other uses.

**Socioeconomics and Environmental Justice.** The action would be on Federal land with no adjacent population and would not disproportionately impact low-income or minority individuals, children or families. The local economy would benefit from a few high-tech jobs.

**Health and Safety.** Solar arrays meet or exceed Federal Communications Commission (FCC) Part 15 (Enphase Energy 2008) and Mil Std 461E (DOD 1999) for electromagnetic emissions and are not a health or spectrum hazard. OSHA guidelines would be followed in construction. No flight hazards of PV arrays have been reported at military or civilian airfields with PV solar facilities and there is no nearby population to be impacted.

**Solid Waste, Hazardous Materials and Wastes, Toxic Materials.** Operation of the PV array would generate little if any solid waste. Construction and operation of a PV array would not introduce hazardous or toxic materials or wastes in quantities that trigger regulatory concerns.

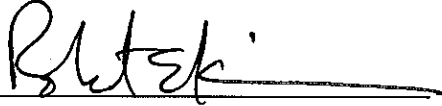
**Cumulative Finding.** The Air Force has concluded that the Proposed Action would cause no significant adverse impacts on the following resources: geology, seismicity, soils, air quality, aesthetics, noise, water resources, biological resources, land use, socioeconomics and environmental justice, health and safety, solid waste, hazardous materials and wastes, and toxic materials. In addition, the EA concluded that the action alternatives would not affect unique farmlands, wilderness and recreation, wild and scenic rivers, wetlands, flood plains, and coastal resources that are mentioned but not further analyzed. Actions as required by the MOA between SHPO and HAFB, would resolve adverse effects and result in an insignificant impact on cultural resources. No significant adverse cumulative impacts would result from actions associated with Alternative 1 when considered with past, present, or reasonably foreseeable projects at HAFB.

**SUMMARY OF FINDINGS FOR THE NO ACTION ALTERNATIVE:**

Under the No Action Alternative, existing sources of energy would continue to be used and HAFB would not contribute to the cumulative expansion of renewable energy production. No impacts would occur to any of the resource areas analyzed within this EA.

**FINDING OF NO SIGNIFICANT IMPACT:**

Based on my review of the facts and analysis in the EA which is attached and incorporated by reference, I conclude that none of alternatives or the proposed action will have significant direct, indirect or cumulative impacts upon the environment. Accordingly the requirements of NEPA and the CEQ Regulations and 32 CFR 989 have been fulfilled. An environmental impact statement is not required and will not be prepared.

  
ROBERT E. KIEBLER  
Colonel, USAF  
Commander, 49th Wing

MAR 18 2016  
Date