

Environmental Assessment for the Lease of Property to Support Construction and Operation of a Solar Photovoltaic System at Naval Weapons Station Earle, New Jersey

The Proposed Action

In accordance with the National Environmental Policy Act (NEPA), the Navy is preparing an environmental assessment (EA) for the lease of property to support construction and operation of a solar photovoltaic (PV) system at Naval Weapons Station (NWS) Earle, New Jersey.

The Navy proposes to lease up to approximately 227 acres of land at NWS Earle to be developed by an independently operated commercial power utility provider for a solar PV system. The generated electricity would supply the existing commercial electrical grid.

Purpose and Need for the Proposed Action

The purpose of the proposed action is to increase NWS Earle energy security and resource availability through the development of renewable-energy generating assets. The proposed action is needed to assist in meeting the federal policies, goals, and standards for renewable energy.

Alternative Site Locations on Base

The power utility provider and/or solar PV developer would construct and operate solar facilities at one or more sites. The sites selected would be connected to existing electrical transmission lines outside the base boundary. A 0.3-mile (3.6 acre) transmission line would be constructed on-base if Combined Site 5/6 is selected.

| Site | A Current Land Use | pproximate Size (Acres) | Estimated Electrical Generation (Megawatts [MW]) |
|--------------|---|----------------------------|--|
| 1 | Open Field | 3.2 | 0.6 |
| 2 | Former Housing | 34.7 | 6.4 |
| 3A and 3B | Capped Landfill and Open St | orage 10.0 | 1.6 |
| 4 | Capped Landfill | 9.7 | 1.9 |
| Combined 5/6 | Open Area/Mixed Vegetation Wooded Area | / 162.7 | 21.7 |
| 12 | Open Field | 3.4 | 0.6 |

The proposed development areas at the sites have been selected to avoid wetlands and potential archaeological resources. Selective tree clearing and protective measures will be used to minimize potential impacts to sensitive species such as bats.

Scope of the EA

The EA will present the existing conditions at the proposed project sites and evaluate the potential consequences of the proposed action on the natural and human environment. The EA will evaluate potential impacts of the proposed action on the following resource areas: land use, visual resources, utilities and infrastructure, socioeconomics and environmental justice, cultural resources, air quality, biological resources, water resources, hazardous materials and waste, topography and soils, noise, traffic and transportation, and public safety.

The Navy is consulting on the proposed action with key agencies, including the U.S. Fish and Wildlife Service and the New Jersey Historic Preservation Office.

Proposed Project Sites



The EA will analyze all parcels identified for potential development of a solar PV facility. However, the parcel boundaries may not be representative of the final project footprint. The project would be developed by the power utility provider and/or developer within the identified parcels.



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Solar PV Technology

Solar PV technology uses solar cells to convert energy from solar radiation into electricity. The ground-mounted facility to be constructed at one or more sites would include solar PV panels assembled in arrays, as well as electrical equipment (such as inverters, facility components, and electrical lines and wiring) to complete the generation of electricity and connect the solar PV facility to existing electrical infrastructure.

Ballasted Solar Arrays



Federal Policies, Goals, and Standards for Renewable Energy

To enhance energy security, efficiency, and sustainability, the federal government has established rigorous policies, goals, and standards for the production and use of alternative and renewable energy by federal facilities, including:

- Secretary of the Navy renewable energy goals:
 - 1 Gigawatt (GW) Initiative: Deploy 1 GW of renewable-energy generating capacity Navy-wide by 2020.
 - By 2020, produce or procure at least 50% of electricity consumed by shore-based facilities from alternative energy sources, and 50% of Navy installations must be "net zero" (i.e., use alternative energy sources to meet or exceed the electricity they consume).
- Executive Order 13693, Planning for Federal Sustainability in the Next Decade (March 19, 2015): By 2025, increase the share of electricity the federal government consumes from renewable sources to 30%.
- Other Standards: Energy Policy Act of 2005; 10 U.S.C. 2911(e).

Fixed-Tilt Ground-Mounted Solar PV Construction



For more information or to provide comments on the proposed action, please contact:

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