Environmental Assessment for Construction and Operation of a Solar Photovoltaic System at Naval Station Newport, Newport County, Rhode Island

The Proposed Action

In accordance with the National Environmental Policy Act (NEPA), the Navy is preparing an environmental assessment (EA) for construction and operation of a solar photovoltaic (PV) system at Naval Station (NAVSTA) Newport.

The Navy proposes to allow up to 80 acres of land at NAVSTA Newport to be developed by an independently operated commercial power utility for a solar PV system. The generated electricity would provide power directly to NAVSTA Newport.

Purpose and Need for the Proposed Action

The purpose of the proposed action is to increase Navy installation energy security, strategic flexibility, and resource availability through the development of renewable-energy generating assets at NAVSTA Newport. The proposed action is needed to assist in meeting federal policies, goals, and standards for renewable energy.

Alternative Site Locations on Base

The power utility and/or solar PV developer would construct and operate solar facilities at one or more sites. The proposed project sites were formerly used for industrial activities and meet Navy criteria for development for renewable energy purposes.

Tank Farm 4: About 41 acres would be developed for an approximately 8-MW solar PV facility at this former tank farm.

Tank Farm 5: About 31 acres would be developed for an approximately 6-MW solar PV facility at this former tank farm.

McAllister Point Landfill: About 8 acres would be developed for an approximately 2.8-MW solar PV facility at this closed landfill. Special ballasted construction would be used to ensure that the landfill cover is not penetrated.

The proposed development areas at the sites have been selected to avoid wetlands, specific areas where hazardous materials cleanup is being finalized, and potential archaeological resources. Selective tree clearing and protective measures will be used to minimize potential impacts to sensitive species such as bats. As well, the Navy and the solar developer will use natural and manmade barriers to provide visual screening for off-base residents and recreationists, where appropriate.

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, coastal zone management, 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, U.S. Environmental Protection Agency, Rhode Island Department of Environmental Management, Rhode Island Coastal Resources Management Council, and Rhode Island Historical Preservation & Heritage Commission.

Proposed Project Sites

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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.

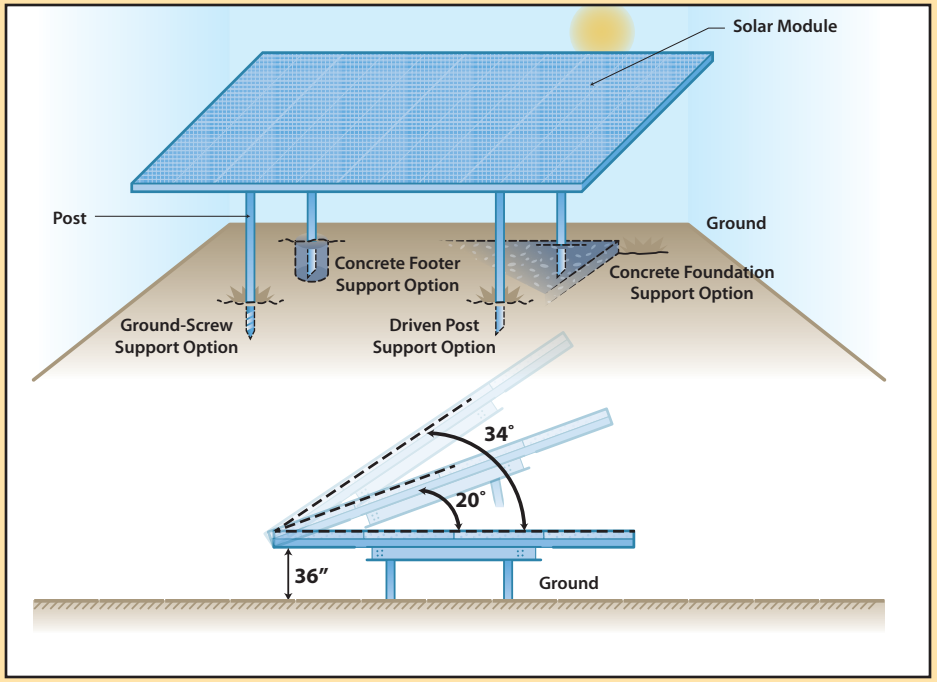
Ballasted Solar Arrays

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



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