

**NATIONAL ENVIRONMENTAL POLICY ACT**

**FINDING OF NO SIGNIFICANT IMPACT**

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
PROPOSED SOLAR PHOTOVOLTAIC SYSTEM AT THE  
EPA EDISON FACILITY**

**EDISON, NEW JERSEY**



**U.S. Environmental Protection Agency  
Facilities Management and Services Division  
Architecture, Engineering, and Asset Management Branch  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460**

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## **1. INTRODUCTION**

The United States (U.S.) Environmental Protection Agency's (EPA) Edison Facility is a complex of laboratories and offices in Edison, New Jersey (hereafter referred to as the Edison Facility), located in the southern portion of Edison Township at 2890 Woodbridge Avenue. The Edison Facility resides on a 205-acre parcel consisting of 20 permanent buildings and numerous temporary trailers, including laboratories, administrative offices, and storage buildings. The 205 acres were historically part of the U.S. Army Raritan Arsenal.

The National Environmental Policy Act (NEPA) Environmental Assessment (EA) for the Proposed Action described herein was prepared as an independent document. The purpose of the EA is to assess whether the Proposed Action would pose a potential for creating significant impacts on the environment and to determine whether an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FNSI) is required for the Proposed Action. The NEPA EA is incorporated by reference and attached to this FNSI.

## **2. THE PROPOSED ACTION**

EPA is proposing to lease a portion of their Edison Facility property to an Independent Power Producer (IPP) to build and operate a solar photovoltaic system (SPVS) or solar panel array. The IPP would be solely responsible for the construction, operation and maintenance, and the dismantling of the SPVS when the lease expires. The IPP and the EPA would enter into a Power Purchase Agreement (PPA), which would set a price per kilowatt-hour (kWh) for the electricity generated by the SPVS. The Edison Facility would agree to purchase the energy generated from the SPVS to meet the facility's energy demands.

### ***Leasing Action***

A Request for Proposal (RFP) will be circulated publicly requesting IPPs to develop a proposal for the leasing, construction, operation and maintenance, and dismantling of an SPVS for a 10-year term.

### ***SPVS and Electrical Connections to the Utility Grid***

The Edison Facility would purchase the energy generated by the SPVS, and the power generated from the system would be directly tied to the Edison Facility downstream of the existing electrical meters. In addition, the local utility, Public Service Electric and Gas Company (PSE&G), would connect the SPVS to the utility grid. The electricity generated by the SPVS would offset, in whole or in part, the electrical needs of the Edison Facility for the foreseeable future. Depending on the location(s) selected on the Edison Facility campus and the type of solar

arrays chosen (e.g., fixed or tracking arrays) for the development of the SPVS, the SPVS could have a rated capacity of 2,530 kilowatts (kW) of solar power.

### ***SPVS Installation***

Installation of the SPVS would require the installation of panels with foot mountings on ground surfaces or existing slab foundation. Depending on the location chosen, overhead utility lines may be used to connect the SPVS to the utility grid, or underground trenches may be required to run utility lines to connect to the main grid circuits. Additionally, a staging area for solar panel assembly and dismantling activities would be placed in the project area. Heavy equipment would be used for clearing and grading of the land and for potential trenching activities.

### ***Operation and Maintenance***

The entire SPVS would be enclosed by a security fence with gate. Operation and maintenance of the SPVS would be the responsibility of the IPP, which includes regular inspections, cleaning, and any repairs or maintenance activities. All maintenance activities would occur on an as-needed basis and would not require the use of any heavy equipment.

### ***Dismantling***

At the end of the lease term, the SPVS would be dismantled and removed by the contractor. An SPVS installed on an open area would require surface restoration. The Edison Facility would continue with normal operations and would continue to obtain service from a local electrical utility company.

## **3. ALTERNATIVES CONSIDERED**

The Edison Facility was previously evaluated in a feasibility study conducted by the Department of Energy (DOE) to determine the potential for cost-effective photovoltaic installations. As a result of this analysis and consultation with EPA personnel, one site, hereafter referred to as Site 1, was identified as the best possible location for the construction and operation of the proposed SPVS. Six other sites were considered as possible SPVS siting locations, but due to limiting characteristics and other land use constraints they were eliminated from further consideration.

### ***Site 1***

Site 1 is located in an open field along Woodbridge Avenue and is approximately 6.5 acres in size, of which approximately 6.3 acres would be available for the SPVS. Since this site is an open grassy area, the construction of the SPVS would require the installation of concrete footings. While the local electrical utility transmission lines are readily available within 25 feet, connection to the grid at 480 volts would require the installation of a step-up transformer.

### ***No Action Alternative***

Under the No Action Alternative, the SPVS would not be installed on the Edison Facility grounds nor would there be a renewable energy source. The current grid supplied energy source would continue to supply power to the Edison Facility.

#### **4. ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES OF THE PROPOSED ACTION**

Although the NEPA EA has indicated that the Proposed Action would not have significant impact on the environment, the following potential issues and concerns have been identified based on the construction, operation and maintenance, and dismantling of a SPVS.

- Temporary and localized, but not significant, impacts to ground resources are expected in the land disturbance areas, such as soil erosion and sedimentation during construction.
- Temporary adverse, but not significant, impacts to air quality are expected from heavy equipment emissions and increases in fugitive dust and airborne particulates from construction and dismantling related activities.
- Adverse, but not significant, impacts to biological resources (i.e., vegetation) are expected as a result of the Proposed Action.
- Temporary impacts, but not significant, to ambient noise are expected from construction and dismantling related activities.
- Adverse, but not significant, impacts to visual resources are expected as a result of the Proposed Action.
- Utilities services (i.e., electricity demand, potable water demand, stormwater management, and storage tank management) would not be expected to increase significantly as a result of the Proposed Action.
- Adverse, but not significant, impacts to waste management are expected from construction and dismantling activities.
- Local roadways and parking are adequate to support movement of construction equipment and materials to the project area and there would be a minor and temporary impact to traffic accessing the Edison Facility grounds during the construction and dismantling phases.

An analysis of available information also presents the following findings:

- Water resources, including wetlands and floodplains, are not expected to be affected by the Proposed Action because proper utilization of best management practices (BMPs) would protect against erosion impacts and leaks and spills.
- Threatened and endangered species are not expected to be affected by the Proposed Action due to the lack of species and species habitat within or near the vicinity of the Proposed Action.
- Land use impacts would be expected to be consistent with existing and future land use planning.
- No impacts to cultural resources are expected because any impacts to the buildings associated with the Former Raritan Arsenal Historic District would be managed through an existing Memorandum of Agreement between the Edison Facility and the New Jersey Historic Preservation Office.
- Socioeconomics are not expected to be affected by the Proposed Action.

- The goals of Executive Order (EO) 12898 related to environmental justice for minorities and the goals of EO 13045 related to the protection of children are expected to be maintained.

Potential benefits of the Proposed Action include:

- Reduction in greenhouse gas emissions from the utilization of renewable energy source.
- Provide the Edison Facility with a cost-efficient renewable energy source that would offset energy requirements for years into the future while meeting government renewable energy directives.

Although no significant impacts to the environment are anticipated, EPA would ensure the following mitigation measures are implemented to minimize potential impacts. These measures would be implemented through provisions stipulated in design and construction contracts and lease agreements. The potentially adverse environmental impacts related to the construction, operation, and dismantling of the Proposed Action could be minimized, mitigated and controlled to acceptable levels by implementation of the following measures:

- EPA would require the contractor to use dust abatement measures, such as wetting, mulching, or seeding exposed areas, where appropriate, to address any air quality concerns.
- EPA would require the contractor to mitigate vehicle emissions impacts as much as possible by prohibiting truck idling.
- EPA would require the contractor to provide lay down (i.e., temporary material storage) areas for construction equipment and materials within existing cleared and paved areas to minimize disturbance to existing land and vegetation.
- EPA would require contractor compliance with erosion and sediment control measures related to stabilization of disturbed areas.
- EPA would require the contractor to provide silt fencing, or other suitable control device, to be placed around the construction area to mitigate erosion and sediment runoff.
- EPA would require the contractor to implement BMPs for erosion/sediment control and stormwater management to minimize impacts to the existing stormwater collection system, wetlands, and other environmental resources.
- EPA would require all necessary measures be taken by the contractor to prevent, control, and mitigate the release of oils, trash, debris, and other pollutants to air, water and land.
- EPA would require contractors to safely handle and dispose of solid and hazardous waste in accordance with applicable local, state and federal regulations.
- EPA would require contractors to provide appropriate health and safety training, precautions and other protection for their workers.
- EPA would require contractors to recycle or reuse materials to the greatest extent possible, and to dispose of construction debris in accordance with federal, state and local waste disposal regulations.

- EPA would require that the Proposed Action not commence without the concurrence of the New Jersey Historic Preservation Office regarding any National Register-eligible historic structure.
- EPA would require, in the event that unexpected cultural resources were found during construction activities, the contractor to stop work and consult with the New Jersey Historic Preservation Office.
- EPA would require that the transportation of construction equipment and materials over local roads be scheduled to occur after peak traffic periods, whenever possible.
- EPA would require contractors to minimize construction-related noise impacts by limiting construction-related activities to the hours between 7:00 a.m. and 5:00 p.m. on weekdays.
- EPA would require that, upon commencement, the construction phase be executed expeditiously to minimize the period of disturbance to the affected environment.

Consideration of the activities involved in the construction, operations and maintenance, and dismantling of an SPVS at the Edison Facility would have no significant impacts on the quality of the human environment or on local natural resources.

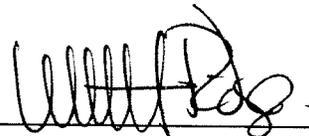
## 5. PUBLIC COMMENT PERIOD

Interested persons and agencies were provided the opportunity to comment on the NEPA EA and preliminary FNSI from August 18, 2011, through September 9, 2011. On August 18, 2011, a legal notice was placed in the New Jersey Star Ledger announcing the availability of the EA and preliminary FNSI for a 30-day comment period. The legal notice directed interested parties to review the EA and preliminary FNSI at the public reading room of the Edison Township Public Library, Edison, New Jersey. The notice also provided an EPA website where an electronic copy of the EA and preliminary FNSI were located. Upon close of the public comment period, EPA received no substantive comments.

## 6. CONCLUSION

Based on the considerable environmental impact analysis and review presented in the NEPA EA for the activities involved in the construction, operations and maintenance, and dismantling of an SPVS at the Edison Facility, it has been determined that the Proposed Action would have no significant impacts on the quality of the human environment or on local natural resources. As a result, it is determined that an EIS is not required for the Proposed Action and that a FNSI (this document) is hereby published for the Proposed Action.

Date: 10.26.11



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