

**U.S. DEPARTMENT OF ENERGY  
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY  
NEPA DETERMINATION**



RECIPIENT: WI Office of Energy

STATE: WI

PROJECT TITLE : Rooftop PV: Pierce Manufacturing and Edward Demmer Library - Three Lakes Wisconsin

<b>Funding Opportunity Announcement Number</b> SEP-ALRD-2020	<b>Procurement Instrument Number</b> DE-EE-0008669	<b>NEPA Control Number</b> GFO-0008669-002	<b>CID Number</b>
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Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:

**CX, EA, EIS APPENDIX AND NUMBER:**

Description:

- A9 Information gathering, analysis, and dissemination** Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
- B5.16 Solar photovoltaic systems** The installation, modification, operation, and removal of commercially available solar photovoltaic systems located on a building or other structure (such as rooftop, parking lot or facility, and mounted to signage, lighting, gates, or fences), or if located on land, generally comprising less than 10 acres within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to the State of Wisconsin Department of Energy Innovation for roof mounted solar photovoltaic (PV) installations with battery storage systems at Pierce Manufacturing in Appleton, WI and Demmer Library in Three Lakes, WI.

Proposed activities at Pierce Manufacturing would include the installation of a 281kW PV system with a 100kW battery storage system at their facility located at 2600 American Drive in Appleton, WI. The PV panels would be at a 10-degree fixed tilt on the roof of the building. A 10-foot long container would be placed on the property and contain the battery storage system, inverters, controls, as well as HVAC and fire protection equipment. Although the exact placement of the storage container is not known, it would be placed on the existing paved surface of the property, along with the possible addition of a concrete pad to support the container. Underground wiring would require trenching through the parking lot to connect the battery storage system to the PV system on the building. Beyond the addition of the electrical connections, no other building modifications would be required.

The solar array at the Pierce Manufacturing facility would be installed approximately 2 miles east of the Appleton International Airport (ATW). To ensure that the proposed project would not result in an impact on aviation safety as a result of the potential for glare and ocular impacts, a glare and ocular impact analysis was completed in accordance with Federal Aviation Administration (FAA) guidelines and policy. PV modules would be installed at a 10 degree tilt facing south. To demonstrate that a proposed solar project would not result in an impact to aviation safety, the FAA stipulates there should be no potential for glare to the Air Traffic Control Tower (ATCT) and no potential for glare or "low potential for after-image" along the final approach path for any existing or future landing thresholds (including any planned interim phases). The final approach path is defined as 2 miles from 50 feet above the landing threshold using a standard 3° glide path. At ATW, there is an ATCT and the final approach paths for incoming aircraft are for Runways 3/21 and 12/30. The conclusion of the analysis was that the PV installation would have no potential to cause glare to the ATCT or Runways 21 and 12/30. The analysis showed there could be glare to incoming aircraft on final approach to Runway 3 at an intensity of "low potential for after-image" but this level of glare meets the FAA standard for no objection to construction of the project if it were occurring on-airport. Based on this analysis, DOE does not anticipate impacts to aviation safety as a result of project activities.

Demmer Library proposes to install a 17.8kW rooftop PV system with a 42kW battery storage system. The battery storage system would be wall mounted panels located within the library. Structural improvements to the roof may be required to address sagging and vents on the ridge line of the roof, once an evaluation is completed. Minor electrical modifications for connections would also be required for the PV installation and the battery storage systems, as well

as for a video monitor that would be installed in the entry of the library to show solar production and energy consumption of the PV system.

The State of Wisconsin has a Programmatic Agreement with their State Historic Preservation Office. This Programmatic Agreement exempts the undertaking at Pierce Manufacturing from Section 106 review. Accordingly, DOE has determined that there would be no potential to affect historic properties. Although the Demmer Library is 50 years old, due to significant renovations, the SHPO declined to review the DOE funded activity.

Both proposed project sites are located outside of the 100-year floodplain.

Any changes to the project activities or locations are subject to additional NEPA review by DOE and are not authorized for Federal funding unless and until the Contracting Officer provides written authorization on those additions or modifications.

## NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Weatherization and Intergovernmental Programs Office – State Energy Program  
This NEPA determination does not require a tailored NEPA Provision.  
NEPA review completed by Diana Heyder, 10/07/2021

## FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

The proposed action is categorically excluded from further NEPA review.

## SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: \_\_\_\_\_



Casey Strickland

NEPA Compliance Officer

Date: 10/7/2021

## FIELD OFFICE MANAGER DETERMINATION

- Field Office Manager review not required  
 Field Office Manager review required

## BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: \_\_\_\_\_

Date: \_\_\_\_\_