

PMC-EF2a

(2.04.02)

**U.S. DEPARTMENT OF ENERGY  
EERE PROJECT MANAGEMENT CENTER  
NEPA DETERMINATION**



RECIPIENT: City of Toledo

STATE: OH

**PROJECT TITLE :** Toledo City ARRA- EECBG Act 1-Collins Park Solar Photovoltaic Project - 1 Megawatt

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
EE0000707	DE-EE0000707	GFO-0000707-003	0

**Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:**

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

## Description:

- B3.6** Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).
- B5.1** Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

## Rational for determination:

The Project Activity Sheet titled "Photovoltaic Electric Generation System at the Collins Park Water Treatment Plant" submitted by the City of Toledo, Ohio, involves the purchase and installation of a ground-mounted 1MW photovoltaic (PV) electric generation system at the 125-acre Collins Park Water Treatment Plant (WTP). The Collins Park WTP uses in excess of 5MW of power every day. The 1MW PV system would be tied directly to the WTP at the High Service Pump Facility, which runs all day, every day.

The proposed PV system would be comprised of thin-film design 4'x6' panels grouped together in sets called arrays, and placed in rows to create a field of arrays (the PV field). Each array is secured to a prefabricated metal support with concrete footings. The PV field would be connected to an inverter that would tie directly to the Pump Facility electrical system. The PV field, together with the inverter, connective wiring and monitoring equipment, comprise the PV system. Preliminary design drawings depict the PV field as three separate arrays covering approximately 3.16 acres. A gravel access road approximately 1000' in length would be installed to connect an existing paved roadway at the WTP to the PV field for use during construction and ongoing operations/monitoring, and would be located along the long side of one of the PV fields.

The Collins Park WTP is fenced and has 24-hour security. The majority of the WTP acreage is improved with roadways, parking lots, and other paved areas, as well as treatment buildings, administration buildings; pump houses, support structures, underground storage reservoirs, treatment lagoons, and other equipment. The currently unused acreage is graded and improved with groomed grass. The approximately 3.16 acre total area proposed for the PV field is an optimal use of the flat land located between treatment lagoons, underground reservoirs, support structures, and underground utilities. No visual impacts will result, and no critical habitat or threatened and/or endangered species will be affected. No wetlands or floodplains are affected. A solar site analysis was conducted for the Collins Park WTP and the proposed location of the PV field was determined to have good solar access (89% and greater) with minimal shade obstacles.

The University of Toledo, GreenEnergy Ohio, and other entities will be provided access to the PV system for the opportunity to study system engineering and operational economics, and to illustrate the environmental benefits of renewable energy to the general public.

Based on preliminary design information provided, and the existing environmental conditions at the Collins Park WTP, the purchase and installation of the 1MW PV system is categorically excluded from further NEPA review under B3.6

and B5.1.

**NEPA PROVISION**

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF2a completed by Logan Sholar

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

NEPA Compliance Officer Signature:  Date: 12/22/10  
NEPA Compliance Officer

**FIELD OFFICE MANAGER DETERMINATION**

Field Office Manager review required

**NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:**

- Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
- Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

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

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