

PMC-EF2a

(2014.02)

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



RECIPIENT: City of Toledo, Toledo, Ohio

STATE: OH

PROJECT TITLE : Toledo City ARRA- EECBG Act1 Collins Park Solar Photovoltaic Project

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0000707		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:

- 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.
- 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).

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 250kW 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 each day, every day. This project constitutes Phase 1 of a 4-phase long-range 1MW PV project. EECBG funds would be matched 1:1 by the City to fund the installation of Phase 1. The City is funding the design. The 250kW 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 28 rows of 5 arrays each placed end-to-end, covering an approximately 550'x100' area. 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 the PV field.

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 550'x100' area proposed for the PV field is an optimal use of the flat strip of 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 Phase 1 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 250kW 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:

Insert the following language in the award:

You are required to:


If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____


NEPA Compliance Officer

Date: _____

4/7/10

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: _____

Field Office Manager

Date: _____