

PMC-EF2a

(20102)

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



RECIPIENT: MI Department of Energy, Labor & Economic Growth

STATE: MI

PROJECT TITLE : Renewable Energy & Energy Efficiency Tech Demo - Nextek Power Systems

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	DE-EE0000166	GFO-09-148-024	GO0

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.

Rational for determination:

The Michigan Department of Energy, Labor & Economic Growth will provide \$224,167 in Recovery Act funds to Nextek Power Systems, Inc. (Nextek) to implement microgrid technology at the NextEnergy Center. The project is located at NextEnergy Center, 461 Burroughs, Detroit, Michigan 48202.

Nextek will install the DC microgrid system in operating facility lighting at the NextEnergy Center. The installation includes a unique photovoltaic – solar thermal unit in combination with a small wind turbine to power the DC lighting and other microgrid loads. Dynamic metering will be used to capture energy and cost savings verses pre-installation, baseline measurements.

New renewable energy inputs to the NextEnergy Center will comprise of increased solar PV capacity of 2.4 kW peak (3504 kWh per year), new solar thermal capacity of 10 kW (14,016 kWh per year), and a small wind turbine that will provide 2.2 kW of wind energy. The renewable energy systems being demonstrated are within the Michigan signed SEP Template. The microgrid system will integrate these renewable energy sources to power lighting, controls, circulating fans, etc. under DC power without drawing from the AC grid.

Based on the information provided by the State and recipient, DOE has determined that the work outlined is consistent with SEP Template guidelines and with activities identified in Categorical Exclusion B5.1.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

According to the project officer, funding for this project is \$224,167. Absent a significant change in the scope of this effort, a change in funding will not affect my determination.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

NEPA Compliance Officer

Date: _____

7/7/10

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: _____