

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 :**

Clean Energy Advanced Manufacturing Phase 2 - Grid Logic

Funding Opportunity Announcement Number

DE-FOA-0000052

Procurement Instrument Number

DE-EE0000166

NEPA Control Number

GFO-09-148-015

CID Number

G00

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.
- B1.31** Relocation of machinery and equipment, such as analytical laboratory apparatus, electronic hardware, maintenance equipment, and health and safety equipment, including minor construction necessary for removal and installation, where uses of the relocated items will be similar to their former uses and consistent with the general missions of the receiving structure.

Rational for determination:

The State of Michigan will provide \$5,000,000 in Recovery Act funds to Grid Logic, Inc. to establish the capability to manufacture advanced clean energy efficiency devices called Fault Current Limiters (FCLs). FCLs are the equivalent of surge protectors. They can be used by utility companies to improve the performance of the electric grid and assist in the incorporation of alternative energy sources. GridLogic is located at 3380 South Lapeer Road, Metamora, MI 48455.

Recovery Act funds will enable Grid Logic to establish an end-to-end facility for producing fault current limiters. The new manufacturing systems will include capabilities for 1) fabrication of superconducting nanocomposite materials using Grid Logic's proprietary technology; 2) production of current limiting components built from Grid Logic's materials; and 3) construction of FCLs through the assembly of third-party sub-systems and components built in-house by Grid Logic. Funds will be used to purchase capital equipment for the production line such as annealing furnaces, powder milling equipment, general machining equipment, assembly equipment, and materials characterization equipment as well as materials and supplies. In general, the manufacturing process includes: 1) Synthesis of the nano-composite powder from raw materials, 2) Fabrication of the FCL superconducting component from the nano-composite powder, 3) fabrication of the chassis, and 4) installation of sub-systems and assembly of the complete enclosure to utility specifications. Grant funding will support the development of manufacturing and fabrication methods specific to items 1) and 2). The complete system will be assembled with the equipment and expertise of Grid Logic's employees within the existing facility.

Grid Logic will establish the manufacturing capabilities in a newly acquired facility located at 3287 Metamora Road, Oxford, Michigan 48371. This facility was constructed in 1984 and is located in a light industrial zone north of Oakwood Road and east of M-24. Grid Logic's existing facility and the facility into which the company will move for the project currently meet all Federal and Michigan State environmental laws and regulations for airborne emissions, waterborne effluents, external radiation levels, outdoor noise, solid and bulk waste disposal practices, and handling of toxic and hazardous materials. The Michigan Department of Natural Resources and Environment believes that the proposed production and/or manufacturing process does not require additional permits.

Grid Logic is required to work with the governing authorities and the Michigan Hazardous and Liquid Industrial Waste Program to manage, store, and dispose of all waste according to Part 111, Hazardous Waste Management of the Natural Resources and Environmental Protection Act 1994 PA 451 as amended. The processes involved do not generate criteria pollutants. The company is required to characterize and accumulate in the appropriate, approved containers all waste generated by the manufacturing process. Impermeable secondary containment vessels will be

utilized as needed. Grid Logic is required to follow standard accumulation time limits as set by the amount of generated waste and will maintain a detailed manifest of the accumulated hazardous waste. It is anticipated that Grid Logic will qualify as a Conditionally Exempt Small Generator (R 299.9205 Rule 205) during the CEAM project. At the required times, Grid Logic will contract a licensed hazardous waste disposal service (e.g., Safety Kleen) to collect and dispose of accumulated waste in Grid Logic's facility. Grid Logic will comply with all federal, state, and local regulations for waste disposal at all times. Grid Logic has submitted a Waste Management Plan that will be followed throughout the manufacturing process.

The project will not expand the footprint of the existing building, nor will it require significant construction or repairs of the building. There are no impacts to archaeological resources, based on consultation with the Michigan State Historic Preservation Office. A review of the Michigan Natural Features Inventory database and mapping indicates that there are no current protected plant or animal species documented within or adjacent to the project area. This project will have no impact to migratory birds or other protected species.

Michigan's State Energy Office shall not award sub-grants for Projects that would:

1. Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including requirements of DOE and/or Executive Orders;
2. Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment 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; or
4. Adversely affect environmentally sensitive resources. Environmentally sensitive resources include, but are not limited to:
 - i. Property (e.g., sites, buildings, structures, objects) of historic, archeological, or architectural significance designated by Federal, state, or local governments or property eligible for listing on the National Register of Historic Places;
 - ii. Federally-listed threatened or endangered species or their habitat (including critical habitat), Federally- proposed or candidate species or their habitat, or state-listed endangered or threatened species or their habitat;
 - iii. Wetlands regulated under the Clean Water Act (33 U.S.C. 1344) and floodplains;
 - iv. Areas having a special designation such as Federally- and state-designated wilderness areas, national parks, national natural landmarks, wild and scenic rivers, state and Federal wildlife refuges, and marine sanctuaries;
 - v. Prime agricultural lands;
 - vi. Special sources of water (such as sole-source aquifers, wellhead protection areas, and other water sources that are vital in a region); and
 - vii. Tundra, coral reefs, or rain forests.

Waste Stream Conditions

Michigan's State Energy Office shall obtain a waste management plan addressing waste generated by a proposed Project prior to the sub-grantee spending any funds for their Project. This waste management plan will describe the Sub-recipient's plan to dispose of any sanitary or hazardous waste generated as a result of the proposed Project. Michigan's State Energy Office shall make the waste management plan and related documentation available to DOE on DOE's request. Michigan's State Energy Office shall ensure through specific contract terms that the Sub-recipient complies with all Federal, state and local regulations for waste disposal.

NHPA Conditions

Prior to awarding a sub-grant for a Project, Michigan's State Energy Office and the Sub-recipient shall comply with Section 106 of the National Historic Preservation Act (NHPA). If applicable, the Sub-recipient must contact the State Historic Preservation Officer (SHPO), and the Tribal Historic Preservation Officer (THPO). Michigan's State Energy Office shall retain sufficient documentation, from the Sub-recipient or other sources, to demonstrate that the Sub-recipient has received required approval(s) from the SHPO or THPO for the Project. Michigan's State Energy Office has entered into an Interagency Agreement with the State Historic Preservation Office to screen potential grantees for compliance with Section 106 of the NHPA. Michigan's State Energy Office shall make this documentation available to DOE upon request.

Based on the information provided by the State and recipient, DOE has determined that the work outlined is consistent with activities identified in Categorical Exclusion B5.1 and B1.31."

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:

Provide the DOE project officer with evidence that the company will properly handle the hazardous waste generated in the process and related the permits for the handling and processing of hazardous material, if applicable. Such evidence may consist of contracts signed with a licensed hazardous waste handling company or invoices from such a company showing the proper disposal of hazardous material. This requirement is to exist for a period of three years after start-up of the manufacturing process and is subject to extension if DOE warrants the need.

Note to Specialist :

According to the project officer, funding for this project is \$5,000,000. Absent a significant change in the scope of this effort, a change in the funding will not affect my determination.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____
NEPA Compliance Officer

Date: 6/30/10

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: _____