

PMC-EF2a

(20102)

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



RECIPIENT: Science Applications International Corporation (SAIC)

STATE: IN

**PROJECT TITLE :** Market 4: Accelerating Consumer and Commercial Clean Energy Deployment

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0000052		GFO-10-129	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.

## Rational for determination:

The Indiana Office of Energy Development (OED) will use SEP ARRA funds to provide a \$1.5M grant to SAIC to purchase commercially available, off the shelf equipment to complete the build-out of a mobile, clean energy power source called the Micro-Grid System. The system will be located at the Naval Support Activity Crane site (also known as the Dept of the Navy, Crane Division, Naval Surface Warfare Center (NSWC), Crane, IN). The system is to operate for approximately six weeks as a means to collect operation data in support of the technology.

The SEP ARRA funds are to purchase and integrate the following components:

- System Integration/Control Software,
- Biomass Conversion (processing system consisting of a 65 kW biogas generator and a PyroGen pyrolyser) and Electrical Generation equipment which will be mounted in a semi-trailer,
- Photovoltaic system components to power the Micro-Grid,
- A bank of lithium-ion batteries for energy storage, power smoothing, and gradual discharge into the Micro-Grid,
- Hybrid Vehicle Plug-in (charging and discharging) and Pyro-fuel Filling Station; used to fill the flex-fuel tank with a mixture of standard diesel or other compatible fuel and the liquid fuel produced by the Pyrolytic biomass process,
- Inverters to link between Micro-Grid components,
- Portable sub-station.

The Micro-Grid will be a mobile, small-scale, fully integrated solid waste conversion system that will convert renewable feedstock such as municipal solid waste into electricity. The Micro-Grid would be installed at NSWC Crane behind building 2045 on a previously disturbed gravel lot and used to supply power to a mock Forward Operating Base.

Operation of the system may result in localized noise and odors associated with the handling and processing of waste material. As this site was selected as much for convenience as for the operation data the six week test will provide, the following steps are being taken to alleviate any possible short term impacts:

- 1) Potential air emissions would be regulated under the existing NSWC Crane Title V Air Permit. No modifications to the permit are needed.
- 2) Potential adverse noise impacts associated with operating the Micro-Grid would be mitigated through the use of hearing protection for workers within 7 meters of the system. No employees are stationed at building 2045 and no adverse impacts to employees in nearby buildings are expected.
- 3) All odors would be mitigated through the use of best management practices and good housekeeping. Feedstock would be used on an as-needed basis and fully contained when not in use to minimize potential odors.

The location of the Micro-Grid is not near any known roosting areas and should not have an effect on the federally listed endangered species, such as the Indiana bat. The operation of the mobile Micro-Grid is exempt from formal consultation between the Department of the Navy and the SHPO due to the location on a previously disturbed gravel lot that is not considered historic and is not within view of any historic district, site, or structure. In addition, the Micro-Grid is a non-permanent, portable system. No ground disturbing activities are proposed, therefore an Indiana Department of Environmental Management Rule 5 storm water permit "is not required." Best management practices for the site would be implemented in accordance with the NSW Crane Storm Water NPDES permit and Storm Water Pollution Prevention Plan. All feedstock would be fully covered and contained when not in use and during precipitation events. All liquid by-products would be stored within covered, secondary containment storage units that are 110% of the largest container stored inside.

This is a short-term project intended to provide operation data in support of the technology. In view of the information provided by the State, Applicant, and Department of Navy, I have determined that the work is classified as Categorical Exclusion B5.1.

**NEPA PROVISION**

DOE has made a final NEPA determination for this award

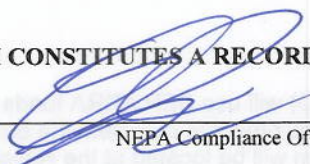
Insert the following language in the award:

Note to Specialist :

According to the Project Officer, the funding for this project is \$1,500,000. Unless the scope of this effort changes significantly, any change in funding total will not affect my determination.

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

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



NEPA Compliance Officer

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

2/23/10

**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: \_\_\_\_\_