

U.S. DEPARTMENT OF ENERGY OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY NEPA DETERMINATION



RECIPIENT: A. O. Smith Corporation

STATE: WI

PROJECT TITLE:

Demonstration of uCHP in Light Commercial Hot Water Applications

Funding Opportunity Announcement Number DE-FOA-0001084

Procurement Instrument Number DE-EE0006796

NEPA Control Number CID Number GFO-0006796-001

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:

gathering, analysis, and dissemination

A9 Information Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

enhancements

B2.1 Workplace Modifications within or contiguous to an existing structure, in a previously disturbed or developed area, to enhance workplace habitability (including, but not limited to, installation or improvements to lighting, radiation shielding, or heating/ventilating/air conditioning and its instrumentation, and noise reduction).

conserve

B5.1 Actions to (a) Actions to conserve energy or water, demonstrate potential energy or water conservation, and promote energy efficiency that would not have the potential to cause significant changes in the indoor or outdoor energy or water concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, manufacturers, and designers), organizations (such as utilities), and governments (such as state, local, and tribal). Covered actions include, but are not limited to weatherization (such as insulation and replacing windows and doors); programmed lowering of thermostat settings; placement of timers on hot water heaters; installation or replacement of energy efficient lighting, low-flow plumbing fixtures (such as faucets, toilets, and showerheads), heating, ventilation, and air conditioning systems, and appliances; installation of drip-irrigation systems; improvements in generator efficiency and appliance efficiency ratings; efficiency improvements for vehicles and transportation (such as fleet changeout); power storage (such as flywheels and batteries, generally less than 10 megawatt equivalent); transportation management systems (such as traffic signal control systems, car navigation, speed cameras, and automatic plate number recognition); development of energy-efficient manufacturing, industrial, or building practices; and small-scale energy efficiency and conservation research and development and small-scale pilot projects. Covered actions include building renovations or new structures, provided that they occur in a previously disturbed or developed area. Covered actions could involve commercial, residential, agricultural, academic, institutional, or industrial sectors. Covered actions do not include rulemakings, standard-settings, or proposed DOE legislation, except for those actions listed in B5.1(b) of this appendix. (b) Covered actions include rulemakings that establish energy conservation standards for consumer products and industrial equipment, provided that the actions would not: (1) have the potential to cause a significant change in manufacturing infrastructure (such as construction of new manufacturing plants with considerable associated ground disturbance); (2) involve significant unresolved conflicts concerning alternative uses of available resources (such as rare or limited raw materials); (3) have the potential to result in a significant increase in the disposal of materials posing significant risks to human health and the environment (such as RCRA hazardous wastes); or (4) have the potential to cause a significant increase in energy consumption in a state or region.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to A. O. Smith Corporation to verify that large-scale deployment of micro combined heat and power (µCHP) systems does indeed have the potential for significant energy savings in the commercial building sector.

The proposed activities would include market assessment, site selection, baseline evaluation and field testing of 12 µCHP units. It is expected that the 12 demonstration units would involve the retrofit, replacement, or installation of µCHP units within existing facilities. The project would not require any new facilities to be constructed or any change in use, mission, or operation of existing facilities arising out of or resulting from work under the project. The exact location of each installation has not yet been determined, however the proposed activities are not anticipated to cause environmental impacts irrespective of project location.

The only integral element of potential concern would be effects to a historic property if an installation location is included in or eligible for inclusion in the National Register of Historic Places. An "effect" is defined in the Advisory Council on Historic Preservation's Section 106 of the National Historic Preservation Act (NHPA) regulations as the alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register (36 CFR 800.16(i)). Any adverse impact to historic properties associated with the proposed installations already exists at this time and the replacement or retrofitting of existing hot water systems with more efficient µCHP units does not constitute an effect under the NHPA regulations, therefore DOE has determined that the proposed installations have "no potential to cause effects" (36 CFR 800.3 (a)(1)) to historic properties. Consultation under Section 106 of the NHPA is not required.

There is a possibility that hazardous materials could be encountered during installation. If this occurs, all materials would be handled and disposed of/recycled at an approved facility by personnel trained in how to handle these materials. All hazardous materials would be managed in accordance with federal, state, and local environmental regulations.

Based on review of the project information and the above analysis, DOE has determined the proposed project would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined that this project is consistent with actions outlined in DOE categorical exclusions A9 "Information gathering, analysis, and dissemination", B2.1 "Workplace enhancements", and B5.1 "Actions to conserve energy or water" and is therefore categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

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:

This NEPA determination does not require a tailored NEPA provision. Review completed by Rebecca McCord 09/08/2014.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

Signed By Kristin Kerwin NEPA Compliance Officer Signature: 9/11/2014 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: Field Office Manager