

PMC-ND
(1.08.09.13)

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



RECIPIENT: Center for Energy and Environment

STATE: MN

PROJECT TITLE : Using Network Switches to Operate and Control Lighting and Plug Loads in Commercial Building Office Spaces

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0001518	DE-EE0008191	GFO-0008191-001	G08191

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:

A9 Information gathering, analysis, and dissemination 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.)

B5.1 Actions to conserve energy or water (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 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 the Center for Energy and Environment to demonstrate one or more Power over Ethernet (PoE) technologies in conjunction with renovation projects at a minimum of four sites to include office spaces, classrooms, and/or a government institutional office.

Project activities would include the installation of PoE technologies to power and control lighting, plug loads, and Heating, Ventilation and Air Conditioning (HVAC). The project would focus on defining and designing technology requirements, developing site criteria, recruitment of a minimum of four sites and completion of the design, permitting and buildout for those sites. Additionally, strategies to enhance market adoption would be tested. A minimum of four demonstration sites would be completed and analysis of the field data to determine the energy efficiency and economic benefits of the PoE technologies tested would be completed. Specific locations where proposed project activities would occur have yet to be identified but no ground disturbing activities, no changes in the use of existing facilities, and no installation of equipment outdoors would occur for project activities. Physical modifications to the

interior of the buildings would occur as part of the proposed project activities. These modifications could include installation of plate and keystone jacks; pulling and fastening or installing conduit for new electrical wires; installing new breakers; installation of hanging ceiling troffers, LED lights and controllers, and HVAC actuators and controllers; and installation of instrumentation and monitoring equipment.

Existing corporate health and safety policies and procedures would be followed including employee training, proper protective equipment, engineering controls, monitoring, and internal assessments. No hazardous waste would be generated and no licenses would be required for the anticipated changes to the interiors of the buildings. Any solid waste generated by the project would be normal construction waste associated with a commercial or institutional remodel or buildout project such as plaster and packaging materials.

The exact location of each demonstration has not yet been determined. Once building locations are finalized, each installation would require owner consent and possibly building permits. Under this DOE award, authorization of federal funds for individual building installations may be subject to additional Section 106 (National Historic Preservation Act) consultation by the DOE if the building modifications described above occur on or near any site, building, structure and/or district that is included in or eligible for inclusion in the National Register of Historic Places.

Based on the review of the proposal, DOE has determined the unrestricted tasks and subtasks listed below fit within the class of action(s) and the integral elements of Appendix B to Subpart D of 10 CFR 1021 outlined in the DOE categorical exclusion(s) selected above. DOE has also determined that: (1) there are no extraordinary circumstances (as defined by 10 CFR 1021.410(2)) related to the proposal that may affect the significance of the environmental effects of the proposal; (2) the proposal has not been segmented to meet the definition of a categorical exclusion; and (3) the proposal is not connected to other actions with potentially significant impacts, related to other proposals with cumulatively significant actions, or an improper interim action. The unrestricted tasks and subtasks listed below are categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:

Subtask 2.2: Design

Subtask 2.3: Buildouts

Task 3 (including all subtasks): Site Instrumentation and Baselineing

Subtask 4.2: Design

Subtask 4.3: Buildouts

Task 5 (including all subtasks): Site Monitoring and Savings Analysis

This restriction does not preclude you from:

Task 1 (including all subtasks): Technology and Program Development Overview

Subtask 2.1: Recruitment

Subtask 4.1: Recruitment

Task 6.0: Final Reporting

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Insert the following language in the award:

You are required to:

Prohibited actions listed above are prohibited unless and until the following conditions have been met:

(1) Once the Recipient selects the locations for the projects, the Recipient provides the list to the DOE NEPA Compliance Officer Casey Strickland at casey.strickland@ee.doe.gov;

(2) If DOE determines it necessary, DOE completes Section 106 (National Historic Preservation Act) consultations for the applicable project locations; and

(3) The Recipient receives written authorization from the DOE Contracting Officer to move forward with the activities stated above.

Note to Specialist :

Building Technologies Office

This NEPA determination requires a tailored NEPA provision.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____



Casey Strickland



Date: _____

8/3/2017

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

Date: _____