PMC-ND

(1.08.09.13)

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



RECIPIENT: EdgePower

STATE: CO

PROJECT TITLE Predictive Solar-Integrated Commercial Building Load Control

DE-FOA-0001225

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number DE-EE0007180

GFO-0007180-001

GO7180

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,

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 analysis, and dissemination (including, but not limited to, document publication and distribution, and classroom training dissemination and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

B3.6 Smallscale laboratory operations, and pilot projects

Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and research and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a development, concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

B5.15 Smallscale renewable energy and pilot projects

Small-scale renewable energy research and development projects and small-scale pilot projects, provided that the projects are located within a previously disturbed or developed area. Covered actions would be in research and accordance with applicable requirements (such as local land use and zoning requirements) in the proposed development project area and would incorporate appropriate control technologies and best management practices.

## Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Edge Power to develop a fully functional and installed forecast-integrated system that would provide predictive load management for commercial solar customers, and reduce demand charges.

Proposed project activities would include firmware development, building-level forecasting, and demonstration of the finished product. Design, development, and fabrication would occur at the Edge Power offices in Prescott, AZ and Aspen, CO. Forecasting development work would take place at Clean Power Research's office in Kirkland, WA. The facilities proposed for development and forecasting activities are purpose-built for the type of activities being proposed; therefore, no adverse impacts to sensitive resources are expected as a result of the proposed project. No change in the use, mission or operation of existing facilities would arise out of this effort. The facility has all applicable permits in place, and would not need additional permits for the proposed activities.

A specific site has not been selected for field testing, however field testing would occur at an existing solar-equipped commercial building. Field testing would involve installation of (or upgrade to) an Edge Power energy management control gateway. Edge Power intends to select a host site that would accommodate tie-in with an existing solar monitoring system either inside the building or through a back-end database connection (all software). However, if the existing solar monitoring system cannot accommodate tie-in, testing activities would necessitate the installation of solar monitoring hardware on the roof of the building. The hardware dimensions would be approximately 12" x 12" and would be mounted in a UL-listed enclosure measuring 20" by 20" with communications cable running to monitoring

equipment located inside the building. All other installations or upgrades would be contained within the interior of the structure. Interior installations/upgrades would be comprised of a small, wall-mounted enclosure which would be mounted in either an electrical room or office using 4 standard drywall anchors. No modification or demolition of the structure or finishes of the building would be required. Therefore, due to the small scale, minimal visual impact and lack of required demolition or remodeling associated with this project, DOE has determined that the proposed activities do not have the potential to cause effects to historic properties.

The proposed project would not use, result in, or require the management, storage, transport or disposal of radioactive, toxic, or hazardous chemicals, waste, or other materials that require special handling. Minor packaging waste would be generated by this project, including packaging boxes and packing materials which would be collected and disposed of through normal municipal waste streams. No siting, construction or major expansion of waste storage, disposal, recovery, or treatment actions/facilities would be required.

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", B5.15 "Small-scale renewable energy research and development and pilot projects", and B3.6 "Small-scale research and development, laboratory operations, and pilot projects" 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:

|                                   | Note to Specialist.  |            |              |  |
|-----------------------------------|--|------------|--------------|--|
|                                   | Solar Energy Technologies Office This NEPA determination does not require a tailored NEPA provision. Review completed by Rebecca McCord on 8/31/2015   |            |              |  |
|                                   | PA Compliance Officer Signature:  NEPA Compliance Officer  NEPA Compliance Officer   | Date:      | 9/4/2015     |  |
| FIE                               | ELD OFFICE MANAGER DETERMINATION   |            |              |  |
|                                   | Field Office Manager review required   |            |              |  |
| NC                                | O REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASO   | ON:        |              |  |
|                                   | 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. |            |              |  |
|                                   | severagement and formulating adjustes are guerora-built for the type of activities being   | iew and de | terrimation. |  |
| BA                                | SED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:   |            |              |  |
| Field Office Manager's Signature: |  |            | Date:        |  |
|                                   | Field Office Manager   |            | _            |  |
|                                   |  |            |              |  |