PMC-ND (1.08.09.13)

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



RECIPIENT: PARC, A Xerox Company

STATE: CA

PROJECT

TITLE:

Passively-Powered Adaptively-Located Flexible Hybrid Sensors

Funding Opportunity Announcement Number 0001383

Procurement Instrument Number DE-EE0007679

NEPA Control Number CID Number GFO-0007679-001 GO7679

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.)

B3.6 Small-scale research and development, 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 sample analysis); and small-scale pilot projects (generally less than 2 years) laboratory operations, frequently conducted to verify a 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.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to PARC to develop a low-cost system of peel-and-stick wireless sensors to enable widespread building environment sensor deployment and transform building operations.

The proposed activities would include the design, assembly, and in-lab testing of electronics for wireless power delivery and readout of sensors. Electronics design and assembly, installation and testing of radio frequency (RF) transceivers and sensor nodes, and transfer of data would be completed by PARC from their facility in Palo Alto, CA. Software development would be supported by Energy ETC from their facility in Union City, CA. All research and development activities would take place in existing facilities designed for this type of research; therefore, no modifications or new permits, additional licenses and/or authorizations would be necessary. The project would not require any change in the use, mission, or operation of existing facilities.

The proposed project would necessitate soldering, chemical work and power transmission. Soldering would be performed with appropriate ventilation and chemical work, if necessary, would be performed with proper personal protective equipment. PARC has established procedures and protocols to ensure safety and compliance with federal, state, and local environmental regulations. Wastes produced would be limited to non-hazardous varieties and would be recycled when possible and disposed of through normal municipal waste streams otherwise. No siting, construction or major expansion of waste storage, disposal, recovery, or treatment actions/facilities would be required.

Based on the review of the proposal, DOE has determined the proposal fits within the class of action(s) and the integral elements of 10 CFR 1021 subpart B 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. This proposal is 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 the Recipient intends to make changes to the scope or objective of this project, the Recipient is required to contact the Project Officer, identified in Block 15 of the Assistance Agreement before proceeding. The Recipient must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved. If the Recipient moves forward with activities that are not authorized for Federal funding by the DOE Contracting Officer in advance of a final NEPA decision, the Recipient is doing so at risk of not receiving Federal funding and such costs may not be recognized as allowable cost share. Note to Specialist: **Building Technologies Office** This NEPA determination does not require a tailored NEPA provision. Review completed by Rebecca McCord on 08/16/2016 SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION. NEPA Compliance Officer

School By: Lori Gray | Lori Gray | Date: 8/17/2016 NEPA Compliance Officer Signature: 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.

Field Office Manager

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BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:

Field Office Manager's Signature:

Date: __