PMC-ND

(1.08.09.13)

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



RECIPIENT: Austin Energy City of Austin

STATE: TX

PROJECT TITLE Sustainable and Holistic Integration of Energy Storage and Solar PV (SHINES)

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number DE-FOA-0001108

DE-EE0007177

GFO-0007177-001

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:

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.

## Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Austin Energy to install solar photovoltaic (PV) systems, distributed battery storage, smart solar inverters, a distributed energy resource (DER) control platform, and other enabling technologies utilizing customer and utility locations and multiple aggregation models.

The proposed project is comprised of three Budget Periods (BP) each with one main task and multiple subtasks. There would be a Go/No-Go decision at the end of BP 1 and there would be a Go/No-Go decision at the end of BP 2.

BP 1 activities would consist of design of the communications system and algorithms for the DER, design of the utility-scale energy storage system (ESS), design of utility-controlled residential and commercial PV and energy storage, modeling and analysis of existing and proposed PV systems on the electrical distribution circuit, stakeholder meetings, analysis of the levelized cost of energy (LCOE), obtaining permits for the ESS, lab testing of a smart inverter, recruitment of home and commercial building owners with existing PV systems, and design and lab testing of aggregated residential and commercial PV and energy storage. BP 1 activities consisting of desktop research, design, computer modeling and other analysis would occur at the existing locations of Pecan Street, Inc. in Austin, TX and 1Energy Systems in Seattle, WA. The facilities in which indoor laboratory testing would occur would be vendor owned and are purpose-built for the type of activities being proposed so there would be no change in the use, mission or operation of existing facilities; therefore, no adverse impacts to sensitive resources are expected as a result of BP 1 activities.

BP 2 activities would consist of deployment and field testing of all communications and ESS equipment, and solar PV installations at residences and commercial buildings. Deployment and PV installation activities would potentially include facilities construction, site preparation and excavation or other ground disturbing activities. Locations for deployment of ESS and PV installation have not been identified at this time; therefore, BP 2 activities are prohibited until additional NEPA review has been completed.

BP 3 activities would consist of the demonstration of the community ESS, DER, and associated controls as well as data collection for system analysis. BP 3 activities are reliant on completion of BP 2 activities; therefore, BP 3 activities are prohibited until additional NEPA review has been completed.

Based on review of the project information and the above analysis, DOE has determined that BP 1 activities would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined BP 1 activities are consistent with actions contained in DOE categorical exclusion A9 "information gathering, analysis and dissemination," and B3.6 "small-scale research and development, laboratory operations and pilot projects" and 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:

Budget Period 2: Deployment and Connection

Budget Period 3: Demonstrate, Evaluate, Refine and Report

This restriction does not preclude you from:

Budget Period 1: Design Procurement and Pre-Deployment

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:

Submit a new EQ-1 for BP 2 and 3 prior to beginning work on BP 2 and 3 activities. No work on BP 2 and 3 activities can begin until DOE has completed an additional NEPA review for those activities.

Note to Specialist:

Solar Energy Technologies Office

This NEPA determination requires a tailored NEPA provision. Please see above.

Review completed by Logan Sholar on 12/14/2015

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NEPA Compliance Officer Signature:

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

Field Office Manager's Signature:

Date: