

PMC-EF2a

(20402)

**U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION**

**RECIPIENT:**Hawaii Renewable Energy Development Venture (PICHTR)**STATE:** HI**PROJECT
TITLE :** Sopogy subcontract

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	GO88146	GFO-GO88146-007	GO88146

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.)
B5.15 Small-scale renewable energy research and development 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 accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rational for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to the Hawaii Renewable Energy Development Venture (PICHTR) to develop and test technologies that create viable renewable energy systems and to develop policies to promote those systems in the State of Hawaii. PICHTR proposes to make a sub-award to Sopogy to conduct research, development and pilot project demonstration activities to advance Micro-scaled Concentrating Solar Power technologies (MicroCSP) by demonstrating and testing Sopogy' s new SopoTitan MicroCSP collector design. DOE and cost share funding would be used to design and implement improvements based upon prior model Sopogy MicroCSP collectors, develop testing protocols, identify best practices for fabrication and assembly, test and evaluate system performance for optimal conditions, and develop installation specifications and package for commercial project replication.

There are a larger number of sub-awards under the Hawaii Renewable Energy Development Venture (PICHTR) DOE award. A previous NEPA determination (GFO-08-143-002, CX A9 and B5.1) for a PICHTR sub-award to Sopogy was made on 10/6/2011, to design, construct, and demonstrate their Micro Concentrating Solar Power (MicroCSP - TM) collectors at the Maui Ocean Center in Hawaii. This NEPA determination only applies to the revised scope of work and project location for the Sopogy sub-award.

Proposed tasks/activities would include engineering design, testing protocol development, installation and demonstration of 14 new SopoTitan MicroCSP collectors, collection and delivery of performance data and delivery of a commercialization business plan. The demonstration test period would be 50 days of sunlight (approximately 60 days total).

Demonstration, research and laboratory activities would take place at the current Sopogy testing site at the Natural Energy Laboratory of Hawaii Authority (NELHA) located at 73-4501 Kahilihili Street, Kailua-Kona, Hawaii, 96740. The NELHA site is designated by the State of Hawaii for testing renewable energy technologies. NELHA leases the space to Keahole Solar Power, which operates the site for Sopogy. At the testing site there are currently over 1000 older model Sopogy concentrated solar thermal collectors in operation. After removing two rows of the older collectors at the current site, Sopogy' s new SopoTitan MicroCSP collectors would be installed on the existing row foundations of the older collectors. The collectors contain mineral oil within a closed-loop system and any small leaks within the system would be addressed by the facility's Spill Prevention, Control and Countermeasure (SPCC) plan in accordance with 40 CFR 112. Sopogy has completed an R&D questionnaire addressing the protocols for laboratory safety, risk management, and waste disposal at the facility. The laboratory complies with standard safety procedures and all processes and procedures are monitored by senior staff and are subject to OSHA standards. No toxic or hazardous waste would be produced and NELHA has all applicable permits in place to conduct research, demonstration and testing at the lab.

The U.S. Fish and Wildlife Service Endangered Species Program website identified multiple species of flora and fauna as a threatened or endangered species within Hawaii County. DOE has determined that these species would not be affected because the proposed project would occur at a previously disturbed site, would involve replacing existing equipment with new equipment in the same location and would utilize existing foundations and supports. The proposed project would not have adverse effects on wetlands, floodplains, or cultural resources, as these resources are not known to occur at the proposed sites.

There are a larger number of sub-awards under the Hawaii Renewable Energy Development Venture (PICHTR) DOE award; therefore, this NEPA determination only applies to the Sopogy sub-award. Any other PICHTR actions and/or sub-awards are subject to further NEPA review.

Based on review of the project information and the above analysis, DOE has determined the demonstration, research and development activities would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined the proposed project is consistent with actions contained in DOE categorical exclusion A9 "information gathering, analysis and dissemination," and B5.15 "small-scale renewable energy research and development and pilot projects," and 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 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 only applies to the Sopogy sub-award under DOE award number DE-FG36-08GO88146. Any other PICHTR actions and/or sub-awards are subject to further NEPA review.

Obadiah Broughton 11/26/2012

DOE Funding: \$268,870
Cost Share: \$272,760
Total Funding: \$541,630

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____



NEPA Compliance Officer

Date: _____

11/28/2012

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: _____