

PMC-EF2a

(2.04.02)

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



RECIPIENT: California Energy Commission

STATE: CA

PROJECT TITLE : SEP ARRA: Calisolar's Solar Manufacturing Capacity Expansion

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0000052	DE-EE0000905	GFO-10-599-003	EE221

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:

- B5.1** Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.
- B1.31** Relocation of machinery and equipment, such as analytical laboratory apparatus, electronic hardware, maintenance equipment, and health and safety equipment, including minor construction necessary for removal and installation, where uses of the relocated items will be similar to their former uses and consistent with the general missions of the receiving structure.

## Rational for determination:

The State of California will provide \$5,000,000 in Recovery Act funds to CaliSolar, Inc. to purchase equipment in support of the company's plans to expand its solar PV manufacturing capability. CaliSolar is located at 985 Almanor Avenue, Sunnyvale, CA 94085.

CaliSolar's manufacturing facility is located in an industrially zoned area of Sunnyvale, CA. Recovery Act funds will be used to purchase Two Casting Tools, One Bandsaw, One Grinder, One Diamond Wire Saw, One Slurry Wire Saw, and Diamond Wire Upgrades. The equipment will allow CaliSolar to expand its manufacturing capabilities from 65MW of output to 155MW. The project will not require new construction; the purchased equipment will fill free space in the existing manufacturing facility. Excavation will be limited to removal of existing concrete to re-pour concrete to meet structural requirements.

The project will require the company to obtain modified Air and Water Quality permits, Hazardous Materials Use/Storage permit, and miscellaneous architectural, plumbing, mechanical, and electrical permits. The expanded capacity will increase NOx emissions, which will be abated by wet-scrubbing and disposal; an estimated 120,000 gallons of liquid effluent per day, which will go through a treatment system; and an estimated 6,500 pounds of hazardous wastes a month, which will be discarded via a modified hazardous waste disposal permit. It is also noted that the site has a pre-existing groundwater contamination problem caused by a previous lessee. The site address is listed by the Regional Water Quality Control Board as an Open and Inactive cleanup project. CaliSolar is already listed as a Large Quantity generator with U.S. Environmental Protection Agency and the California Department of Toxic Substances Control.

The company will require a number of permits before commencing operations.

1) Chemical Storage, Use, and Disposal (modified with City of Sunnyvale to accommodate expansion)

Quantity: ~6000 gallons on site

Specific Types: Ammonia, Silane, Nitrogen, Argon, Hydrofluoric Acid, Sulfuric Acid, Nitric Acid, Hydrochloric Acid, Potassium Hydroxide, Calcium Hydroxide, Calcium Chloride.

2) Hazardous, Toxic, or Criteria Pollutant Air Emissions (modified with Bay Area Air Quality Management District to accommodate expansion)

Specific Type: Hazardous (corrosive) emissions abated by approved abatement technology (wet scrubbing).

3) Liquid Effluent (modified water discharge/treatment with City of Sunnyvale to accommodate expansion)

Quantity: ~120,000 gal/day

Specific Type: Process waste water treated by elementary neutralization and/or precipitation and discharged to sanitary sewer.

4) Hazardous Waste (modified permit and hazardous materials business plan with City of Sunnyvale to accommodate expansion)

Quantity: ~6500 lbs/month

Specific Type: Silver/aluminum waste, waste corrosive solids, waste corrosive liquids, inorganic and small quantities of non-RCRA hazardous waste.

Although the Recovery Act related work is one of equipment purchase, the totality of the project is much larger. DOE views Calisolar's expansion efforts and its purchase of equipment to support the expansion as connected actions. DOE has determined that the purchase of equipment to expand manufacturing capabilities is consistent with activities identified in Categorical Exclusion B1.31 and B5.1. The expansion effort will require the company to obtain permits from various local, state, and federal jurisdictions. If the permits are issued, the connected actions will also include Categorical Exclusion B1.23, B1.26 and B1.28.

The work proposed is a retooling effort and expansion of manufacturing capabilities. The work will not increase the footprint of the facility and building modifications will be confined within the existing building. The expansion will require the acquisition/modification of a number of local, state, and federal permits. DOE is basing its determination on the presumption that the company will acquire the necessary permits and meet or exceed the operation limits stated therein. Accordingly, DOE has determined that the proposed activities will present no significant impact to human health and/or environment and can be categorically excluded under B1.23, B1.26, B1.28, B1.31, and B5.1.

**NEPA PROVISION**

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Insert the following language in the award:

You are required to:

provide the DOE project officer and NEPA compliance officer with copies of the required local, state, and federal permits before commencing manufacturing operations.

Note to Specialist :

According to the DOE project officer, funding for this project is \$5,000,000. Absent a significant change in the scope of this effort, a change in funding will not affect my determination.

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature: \_\_\_\_\_  
NEPA Compliance Officer

Date: 8/30/10

**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: \_\_\_\_\_