

PMC-ND

(1.08.09.13)

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



RECIPIENT: Sunfolding, Inc.

STATE: CA

PROJECT TITLE SUNFOLDING MASS-MANUFACTURED TRACKERS FOR HIGH PERFORMANCE PHOTOVOLTAIC SYSTEMS

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0007594	GFO-0007594-002	

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, 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 sample analysis); and small-scale pilot projects (generally less than 2 years) 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.
- B5.16 Solar photovoltaic systems** The installation, modification, operation, and removal of commercially available solar photovoltaic systems located on a building or other structure (such as rooftop, parking lot or facility, and mounted to signage, lighting, gates, or fences), or if located on land, generally comprising less than 10 acres 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.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Sunfolding Inc. to optimize the design of their actuation technology (trackers) to increase the speed and ease and reduce the cost of manufacturing.

A previous final NEPA Determination (GFO-0007594-001; CX A9, B3.6, B5.16) reviewed all project activities in August of 2016. Associated activities include: the design, modeling, fabrication, and in-lab and field testing of components for simplified manufacturing of actuators and polymeric bellows; project management, market research and business development; and field demonstrations of optimized trackers.

Since that time, changes were made to the Statement of Project Objectives that require additional NEPA review:

Component manufacturing improvements (design, data analysis/modeling and fabrication) and testing of improved components would be completed by new project partners at changed locations. Polymeric bellows would be fabricated and tested on-site at Custom-Pak Inc. in Clinton, IA. Steel actuator components would be fabricated and tested on-site at MRE Automotive Systems USA in Columbia, TN. The partners would complete these activities from fully licensed and permitted manufacturing facilities purpose-built for the type of activities being proposed. No change in the use, mission or operation of existing facilities would arise out of this effort.

The nature and locations of the following activities associated with the proposed project would remain the same:

In-lab testing, design, modeling and simulation of further improvements, business development, engineering support for installations, and general project management tasks would be completed by Sunfolding at their headquarters in San Francisco, CA. These activities would be purely analytical/intellectual and would use no materials other than computers and standard office supplies. Outdoor field testing of trackers would be hosted by PVUSA at their fully permitted test site in Davis, CA. These activities would include swapping out actuators on existing foundations to test

for quality and reliability. No new construction or ground disturbance would be required.

The proposed project would not necessitate the use or handling of any hazardous materials. All input materials and wastes generated would be comprised of recyclable materials such as steel, elastomers, various polymeric materials, and packaging. These materials would be recycled when possible and otherwise 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 the review of the proposal, DOE has determined the proposal fits within the class of action(s) and the integral elements of Appendix B to Subpart D of 10 CFR 1021 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 :

Solar Energy Technologies Office
This NEPA determination does not require a tailored NEPA Provision.
NEPA review completed by Whitney Doss, 07/28/2017

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  Date: 7/31/2017
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's Signature: _____ Date: _____
Field Office Manager