

PMC-ND
(1.08.09.13)

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



RECIPIENT: Department of Energy and all selected applicants

STATE: DC

PROJECT TITLE: Solar Energy Technologies Office FY 2018 FOA

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0001840		GFO-FOA1840-001	

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), 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.)

A11 Technical advice and assistance to organizations Technical advice and planning assistance to international, national, state, and local organizations.

Rationale for determination:

As part of Funding Opportunity Announcement (FOA) DE-FOA-0001840, the U.S. Department of Energy (DOE) intends to solicit applications from individuals, domestic entities, foreign entities, incorporated consortia, and unincorporated consortia to support early-stage research and development of solar technologies, while expanding workforce initiatives that support use and integration of solar technologies onto the electric grid.

DE-FOA-0001840 addresses the following four technical Topic Areas of interest related to project proposals that lower solar electricity costs to promote energy affordability, securely and reliably integrate more solar energy onto the grid, and enhance the use and storage of solar energy:

- Topic 1 – Adaptive Local grids, Advanced Systems Integration Technologies
- Topic 2 – Concentrating Solar Power Research and Development
- Topic 3 – Photovoltaic Research and Development
- Topic 4 – Improving and Expanding the Solar Industry through Workforce Initiatives

Each Topic Area consists of multiple subtopics. All individual awards would be made under one of the four Topic Areas and would fall within a specific subtopic as described in the FOA document (and listed herein). DOE has reviewed the descriptions of each Topic Area and associated subtopics, and concluded that this NEPA Determination will apply only to awards within the following five subtopics (including all subtopics within Topic 4):

- Subtopic 1.4 – Innovative Pathways: Systems Integration
- Subtopic 2.5 – Innovative Pathways: Concentrating Solar Power
- Subtopic 3.4 – Innovative Pathways: Photovoltaics
- Subtopic 4.1 – Increasing Inclusion in the Solar Workforce
- Subtopic 4.2 – Digital Adaptation Training for Distributed Energy Resources on the Grid

Federal funding provided by DOE to successful applicants to subtopics 1.4, 2.5, 3.4 and Topic 4 (subtopics 4.1, and 4.2) would exclusively support projects involving various office-based avenues of research, education, and/or outreach. All anticipated projects within these subtopics/Topic 4 would consist solely of intellectual, academic, and/or analytical activities. The scope of the proposed projects would be limited to: paper studies; outreach/customer

engagement; the use of computers to gather, analyze, model and disseminate data/information; and/or the development and provision of software products along with technical advice/assistance. It is anticipated that selected projects would be conducted from existing offices or computational facilities and use no materials beyond basic office supplies, software, and computer hardware.

Any work proposed to be conducted at a DOE laboratory may be subject to additional NEPA review by the cognizant DOE NEPA Compliance Officer for the specific DOE laboratory prior to initiating such work. Further, any work conducted at a DOE laboratory must meet the laboratory's health and safety requirements.

All other awards selected under the remaining subtopics (listed below) of DE-FOA-0001840 will require separate NEPA review:

Subtopic 1.1 – Adaptive Local Grids

Subtopic 1.2 – Solar Observability

Subtopic 1.3 – Solar + X

Subtopic 2.1 – Small Innovative Projects in Solar (SIPS): Concentrating Solar Power

Subtopic 2.2 – Advanced CSP Collectors

Subtopic 2.3 – Advanced Power Cycles for CSP

Subtopic 2.4 – Advanced CSP Thermal Transport Systems and Components

Subtopic 3.1 – Small Innovative Projects in Solar (SIPS): Photovoltaics

Subtopic 3.2 – Increasing Affordability, Reliability, and Manufacturability of PV Cells, Modules, and Systems

Subtopic 3.3 – Collaborative Cross-Cutting PV Research

Based on the review of the FOA document, DOE has determined that all projects selected under subtopics 1.4, 2.5, 3.4, 4.1, and 4.2 of DE-FOA-0001840 will fit within the class of action(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. All projects selected by DOE for funding under subtopics 1.4, 2.5, 3.4, 4.1, and 4.2 of DE-FOA-0001840 are categorically excluded from further NEPA review.

REVISION TO NEPA DETERMINATION

Prior to the issuance of Funding Opportunity Announcement (FOA) DE-FOA-0001840 in April of 2018, the U.S. Department of Energy (DOE) completed a conditional NEPA Determination (GFO-FOA1840-001; CXs A9, A11; 04/09/2018) for all projects selected under Subtopic Areas 1.4, 2.5, 3.4, 4.1, and 4.2. The original version of GFO-FOA1840-001 is included above. Selections for the Solar Energy Technologies Office Fiscal Year 2018 Funding Program were announced in October of 2018. Upon review of the award selections, DOE has concluded that GFO-FOA1840-001 requires certain revisions as incorporated herein:

- This NEPA Determination no longer applies to Subtopic Areas 1.4 and 2.5.
- DOE has reviewed the proposed Statement of Project Objectives for each award selected under Subtopic Areas 3.4, 4.1, and 4.2. DOE has concluded that the following projects would consist solely of intellectual, academic, and/or analytical activities and therefore fit within the class of actions selected above:

Groundswell: DE-EE-0008567

Arizona State University: DE-EE-0008570

Safer Foundation: DE-EE0008571

Midwest Renewable Energy Association: DE-EE0008573

Electric Power Research Institute: DE-EE-0008574

Blue Lake Rancheria: DE-EE0008575

Illinois Green Economy Network (Lewis and Clark Community College): DE-EE0008576

The Solar Foundation: DE-EE0008577

Federal funding provided by DOE to these specific awardees would exclusively support projects involving various office-based avenues of research, outreach, and classroom-based education. Covered actions would also include certain workforce development efforts such as hands-on training at purpose-built facilities and/or the facilitation of

internships with existing solar industry business partners. It is anticipated that the workforce development projects within this limited scope of activities would be conducted from existing offices, high school classrooms, vocational institutes, and/or various solar photovoltaic (PV) installation sites selected and managed independently by established 3rd party companies. These proposed projects would use no materials beyond basic office supplies, software, computers, and various forms of training equipment to include tools and small-scale prototype devices needed for the purposes of practicing solar hardware installation and maintenance. These projects would not involve the purchase or installation of operational solar power equipment or infrastructure, modification of existing facilities, or any activities that would directly enable the initiation of such work.

- DOE has concluded that individual NEPA review is required prior to providing funding to the following three proposed projects as the proposed activities are outside the scope of this NEPA Determination:

ICAST: DE-EE-0008568

Grid Alternative: DE-EE-0008569

Philadelphia Energy Authority: DE-EE-0008572

NEPA PROVISION

DOE has made a conditional NEPA determination.

The NEPA Determination applies to the following Topic Areas, Budget Periods, and/or tasks:

This NEPA Determination only applies to the following awards under Funding Opportunity Announcement (FOA) DE-FOA-0001840:

Groundswell: DE-EE-0008567

Arizona State University: DE-EE-0008570

Safer Foundation: DE-EE0008571

Midwest Renewable Energy Association: DE-EE0008573

Electric Power Research Institute: DE-EE-0008574

Blue Lake Rancheria: DE-EE0008575

Illinois Green Economy Network (Lewis and Clark Community College): DE-EE0008576

The Solar Foundation: DE-EE0008577

The NEPA Determination does not apply to the following Topic Area, Budget Periods, and/or tasks:

This NEPA Determination does not apply to ANY other award under Funding Opportunity Announcement (FOA) DE-FOA-0001840, including the following awards:

ICAST: DE-EE-0008568

Grid Alternative: DE-EE-0008569

Philadelphia Energy Authority: DE-EE-0008572

Include the following condition in the financial assistance agreement:

Any work proposed to be conducted at a federal facility may be subject to additional NEPA review by the cognizant federal official and must meet the applicable health and safety requirements of the facility.

Notes:

Solar Energy Technologies Office

This NEPA determination requires a tailored NEPA Provision.

NEPA review completed by Whitney Doss, 02/12/2019

This NEPA Determination has been modified since it was originally issued on 04/09/2018. Previously, this NEPA Determination applied to all projects selected under Subtopic Areas 1.4, 2.5, 3.4, 4.1, and 4.2 of DE-FOA-0001840. This NEPA Determination now applies only to specific projects selected under Subtopic Areas 3.4, 4.1, and 4.2 of DE-FOA-0001840. This NEPA Determination does NOT apply to any other projects funded by DE-FOA-0001840 (including three awards selected under Subtopic Areas 3.4 and 4.1) which will require individual NEPA review. Refer

to the NEPA conditions for a list of covered and restricted projects selected under Subtopic Areas 3.4, 4.1, and 4.2.

FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

A portion of the proposed action is categorically excluded from further NEPA review. The NEPA Provision identifies Topic Areas, Budget Periods, tasks, and/or subtasks that are subject to additional NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____


NEPA Compliance Officer

Date: 2/15/2019

FIELD OFFICE MANAGER DETERMINATION

- Field Office Manager review not required
 Field Office Manager review required

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

Field Office Manager's Signature: _____

Field Office Manager

Date: _____