

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



RECIPIENT: Multiple

STATE: DC

PROJECT TITLE : Solar Technologies' Rapid Integration and Validation for Energy Systems (STRIVES)

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0003331	DE-FOA-0003331	GFO-FOA-0003331-001	

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.)

B1.7 Electronic equipment

Acquisition, installation, operation, modification, and removal of electricity transmission control and monitoring devices for grid demand and response, communication systems, data processing equipment, and similar electronic equipment.

B1.31 Installation or relocation of machinery and equipment

Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts.

Rationale for determination:

The U.S. Department of Energy (DOE) Solar Energy Technologies Office (SETO) and Wind Energy Technologies Office (WETO) issued the "Solar Technologies' Rapid Integration and Validation for Energy Systems (STRIVES)" funding opportunity (DE-FOA-0003331) soliciting applications for projects to improve power systems simulation software tools and demonstrate new business models for distribution systems operations to integrate and optimize the value of inverter-based resources (IBRs) and distributed energy resources including solar generation, wind generation, energy storage, and other technologies such as buildings and electric vehicles.

The STRIVES FOA addresses two topic areas of interest. Projects in Topic Area 1 (Robust Experimentation and Advanced Learning for Distribution System Operators) would design and perform field demonstrations of distribution system operator models. Projects in Topic Area 2 (Improved Simulation Tools for Large-Scale IBR Transient and Dynamic Studies) would develop and demonstrate software tools and methodologies to improve the ability of power systems engineers to model the dynamics of power systems with large amounts of geographically dispersed IBRs.

The types of activities associated with STRIVES FOA projects would primarily include data analysis, computer modeling, and software development. Topic 1 demonstration activities would include upgrading fielded controllers, such as IBR firmware or hardware, installing new sensors and communication equipment in solar facilities or on the electric grid, operating and monitoring fielded equipment during a pilot test phase, or testing how software responds to real-time data from field measurements. Topic 2 activities would be limited to research and development of software tools, which would be tested within purpose-built laboratory environments.

Topic Area 1 awardees are expected to partner with existing utilities to demonstrate the ability of developed tools to control assets in the field. Demonstration activities would occur at a substation yard or control house. The scope of field work for most projects would be limited to software installations making use of existing utility-owned equipment, while new hardware (sensing, data collection and processing, and communications equipment) may be installed to augment utility data streams. Such devices would be consistent with the general purpose of the respective site and may continue to be used after project work concludes.

None of the selected projects in either topic area would involve the interruption of power services or modifications to energy infrastructure. No change in the use, mission, or operation of existing facilities would arise out of these efforts. DOE has considered the scale, duration, and nature of proposed activities to determine potential impacts on other resources, including those of a biological, ecological, historical, cultural, and socioeconomic nature. DOE does not anticipate impacts on these resources which would be considered significant or require DOE to consult with other agencies or stakeholders.

This NEPA Determination applies to all awards selected under Funding Opportunity Announcement DE-FOA-0003331 "Solar Technologies' Rapid Integration and Validation for Energy Systems (STRIVES)" provided the scope of the selected awards remains consistent with the intent of the FOA as currently described. If selected applicants propose to use project funds for activities outside the scope of this NEPA Determination, additional NEPA review will be required.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Solar Energy Technologies Office (SETO)
This NEPA determination requires legal review of the tailored NEPA provision.
Review completed by Whitney Donoghue on 6/10/2024.

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.

The proposed action is categorically excluded from further NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:



Andrew Montano

NEPA Compliance Officer

Date: 6/17/2024

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: