

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



**RECIPIENT:** Industrial Efficiency and Decarbonization Office

**STATE:** DC

**PROJECT TITLE :** Industrial Energy Storage Prize Phase 1 Rules

**Notice of Funding Opportunity Number**  
N/A

**Procurement Instrument Number**  
N/A

**NEPA Control Number**  
GFO-StoragePrize-001

**CID Number**

**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:

The U.S. Department of Energy (DOE) is proposing to authorize the administration of a prize competition known as the American-Made Industrial Energy Storage Systems Prize. This prize aims to support the development of innovative energy storage solutions that can accommodate cooling, thermal, and/or electric energy loads at the industrial facility scale. Concepts solicited from competitors should enable time shifting of either electric or thermal energy demand, using thermal energy storage across a range of temperatures of industrial relevance, and enabling on-site or near-site clean energy to fully meet the heat or power demands of industrial processes. These concepts could facilitate the adoption of clean electricity for industrial facilities by addressing the challenge of intermittency associated with clean energy sources.

Phase 1 would include the development of a cost-effective concept design that has the potential to support industrial level load storage for thermal or electric energy needs by external competitors. These competitors may submit concepts that address thermal or electrical energy needs or a combination thereof with application to an industry of their identification. Up to 18 winners would be selected at the conclusion of this Phase, with six winners in each of the three energy storage categories.

Phase 2 would advance winning teams and their concepts through detailed design showing developmental progress, bench-scale data collection through prototyping, and development of adoption readiness plans. Using collected data, competitors would be expected to develop technoeconomic and life cycle analyses to support the scaling potential of their energy storage solutions to industrial partners. Up to nine winners would be selected at the conclusion of this Phase, with three winners in each of the three energy storage categories.

Phase 3 would include team preparation of near-scale experimental devices to validate their designs and demonstrate their technological readiness. Competitors would also develop commercialization plans to showcase the market plan and future scalability for their technology. Competitors may be required to work with IEDO to generate a validation report for the Industrial Technology Validation Program. Up to three winners would be selected at the conclusion of this Phase, with one winner in each of the three energy storage categories.

Activities in Phase 1 would include only intellectual, academic, or analytical activities (e.g., design development, data analysis, conceptual design, reporting, etc.). Based on the types of activities occurring in Phase 1, DOE does not anticipate any impacts to resources of concern. Phase 2 efforts would include prototyping activities. Phase 3 would include design validation and demonstration. Phase 2 and 3 efforts would occur at locations that are currently unknown, and may involve the modification of current equipment, implementation of new equipment and/or groundbreaking activities. This NEPA Determination, therefore, does not include activities under Phase 2 and 3.

DOE has considered the scale, duration, and nature of proposed activities to determine potential impacts on resources, including those of an ecological, historical, cultural, and socioeconomic nature. DOE does not anticipate impacts on these resources within the scope of this current NEPA Determination that would be considered significant or require DOE to consult with other agencies or stakeholders.

EERE is aware of the November 12, 2024, decision of *Marin Audubon Society v. FAA*, No. 23-1067 (D.C. Cir. Nov. 12, 2024). To the extent that a court may conclude that the Council on Environmental Quality (CEQ) regulations implementing NEPA are not judicially enforceable or binding on this agency action, EERE has nonetheless elected to follow those regulations at 40 C.F.R. Parts 1500-1508, in addition to DOE's procedures/regulations implementing NEPA at 10 C.F.R. Part 1021, to meet the agency's obligations under NEPA, 42 U.S.C. §§ 4321 et seq.

## NEPA PROVISION

DOE has made a conditional NEPA determination.

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

-Phase 1 activities

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

-Phase 2 activities

-Phase 3 activities

Notes:

Industrial Efficiency and Decarbonization Office  
NEPA review completed by Chris Akios, 12/19/2024

## 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.

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:



Andrew Montano

NEPA Compliance Officer

Date: 12/19/2024

## 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: \_\_\_\_\_