

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



RECIPIENT: Innovative Design Concepts for Standard Modular Hydropower and Pumped Storage **STATE:** CO
Hydropower

PROJECT TITLE: Innovative Design Concepts for Standard Modular Hydropower and Pumped Storage Hydropower

Funding Opportunity Announcement Number DE-FOA-0001836 **Procurement Instrument Number** **NEPA Control Number** GFO-FOA0001836-001 **CID Number**

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.)

Rationale for determination:

U.S. Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE) is proposing to release a Funding Opportunity Announcement (FOA) that would lead to making up to 14 awards under two topic areas: concepts for Standard Modular Hydropower (SMH) and new use cases for Pumped Storage Hydropower (PSH). This FOA is intended for individuals, as well as public and private for-profit and non-profit companies or consortia.

Under Topic Area 1, SMH, awards would aim to stimulate innovative designs for small, low-head hydropower facilities capable of lowering the capital costs and reducing the environmental impacts of development of new stream reaches. Work under Topic Area 1 would be limited to development of facility designs and engineering drawings which could be used at a minimum of three potential sites. Work would focus on designing modular components which could scale across and individual site and across many sites. All work under this topic area would be limited to design. Up to 2 awards are expected under this Topic Area.

Under Topic Area 2, PSH, awards would aim to explore new cases for pumped storage hydropower that can improve electricity system resilience, reliability, and economics. Work under Topic Area 2 would include development of novel conceptual designs for pumped storage systems. Work under Topic Area 2 would also include modeling and analysis of the role of pumped storage in asset and system optimization. All work under Topic Area 2 would be limited to design and analysis. Up to 12 awards are expected under this topic area.

No fabrication, testing, or deployment would occur under either topic area.

Based on the review of the FOA, DOE has determined that activities anticipated to be selected under this FOA fit within the class of action(s) selected above. DOE has also determined that based on the types, scope, and scale of anticipated activities that could be selected under the FOA: (1) there would be no extraordinary circumstances (as defined by 10 CFR 1021.410(2)) that could affect the significance of the environmental effects of the activities; (2) the activities do not lead to segmentation to meet the definition of a categorical exclusion; and (3) the activities would have independent utility and would not be connected to other actions with potentially significant impacts, related to other proposals with cumulatively significant actions, or an improper interim action. Anticipated activities are 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 :

This NEPA Determination applies to the issuance of the FOA as well as all awards selected under the FOA, 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.

This NEPA determination does not require a tailored NEPA provision.
Water Power Program
NEPA Review Completed by Roak Parker 7/16/18

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____



Electronically Signed By: Kristin Kerwin

NEPA Compliance Officer

Date: 7/20/2018

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: _____