

FY 2024 Reactor Sharing and Outreach and Infrastructure Revitalization Funding Opportunities

Informational Webinar

December 13, 2023

New Funding Opportunities

- **Reactor Sharing and Outreach (DE-FOA-0003041)**



- **University Nuclear Research Infrastructure Revitalization (DE-FOA-0003042)**

Reactor Sharing and Outreach (RS&O) Overview

- **The Reactor Sharing and Outreach Funding Opportunity originated from feedback from the TRTR working group and NE's Request for Information call in 2023**
- **The objectives of the effort are to:**
 1. Strengthen nuclear science and engineering instruction in the curricula of the non-reactor owning colleges and universities;
 2. Increase opportunities for future nuclear science and engineering collaboration for faculty and students;
 3. Improve public awareness and understanding of nuclear science, engineering, and technology through research reactor visits and other outreach opportunities; and
 4. Engage with underrepresented communities to promote nuclear science, engineering, and technology to educate and recruit the next generation nuclear energy workforce.

What is a disadvantaged or underrepresented community?

Disadvantaged

- Defined by Executive Order 14008.
- Communities that are economically disadvantaged and overburdened by pollution and underinvestment in housing, transportation, water and wastewater infrastructure, and health care.
- A community qualifies as “disadvantaged” if the census tract is above the threshold for one or more environmental or climate indicators and the tract is above the threshold for the socioeconomic indicators.

Underrepresented

- Executive Orders 13985, 14020, 14091.
- The term “underrepresented” is context-dependent and should be considered relative to the relevant communities, workforces, and locations.
- Refers to populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life.

<https://www.energy.gov/articles/introducing-minorities-energy-initiative>

<https://nces.nsf.gov/pubs/nsf23315/report>

RS&O Purpose

- **The purpose of this FOA is to encourage universities and colleges with nuclear research reactor facilities to share resources and capabilities with non-reactor educational institutions, such as universities, colleges, K-12, vocational schools, and community colleges.**
- **Examples of activities of interest for this FOA could include:**
 - nuclear science laboratories to supplement nuclear engineering, physics or chemistry courses,
 - tours for classes and student groups,
 - science teacher workshops in nuclear science, etc.
- **In addition, activities will incorporate engagements with university research reactor facilities and the public to advocate for nuclear sciences, engineering, and technology.**

RS&O Format and Eligibility

- **Award Size**
 - Up to \$200,000
 - **Cost sharing** is encouraged but not required in this FOA
- **Period of Performance**
 - Up to 2 years
- **Target Number of Awards**
 - 5 awards
- **Eligibility**
 - Lead institution must have a NE-fueled research reactor, restricted to 24 U.S. colleges and universities;
 - Encouraged to include partner institutions;
 - Each lead institution can only submit one application;
 - Awardees can only hold one RS&O award at a time.

RS&O Review Process

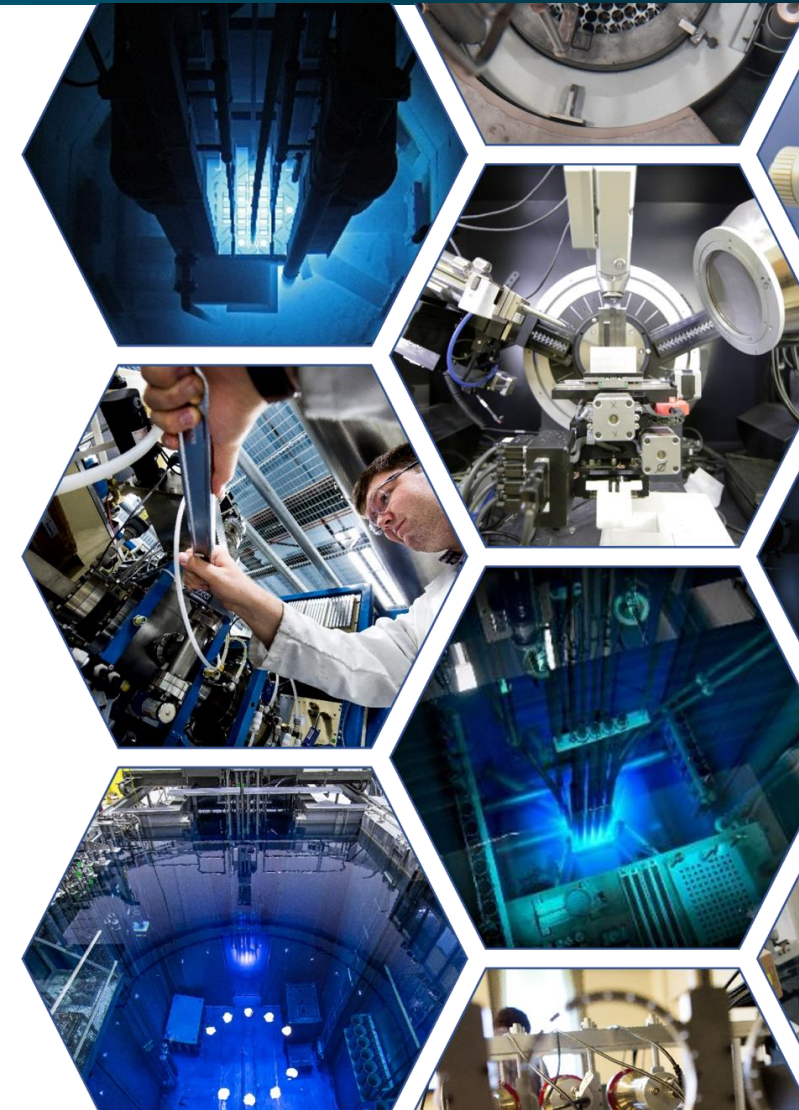
- **Full Application**
 - 8-page limit
- **Full applications will be evaluated by a panel of experts which will include multiple technical peer reviewers evaluating technical merit.**
 - Criteria will include:
 - **(50%) Impact** on Nuclear Science and Engineering Education and Outreach
 - **(30%) Execution** in Logical Path to Completion
 - **(20%) Utilization** of Applicant Team Capabilities, Risks, and Experience
 - **(Bonus) Diverse Team Consideration** - Up to 3% consideration for significant MSIs including HBCUs, or TCU participation

 Weight

 Bonus

University Nuclear Research Infrastructure Revitalization Overview

- The FOA supports infrastructure and associated research to provide a more holistic approach to US university infrastructure investments and associated R&D capabilities through a consortia-style model that combines physical infrastructure investments with training, student support, and research.
- Directly addresses FY 2023 Congressional budget language on revitalizing university nuclear research infrastructure to support:
 - Nuclear cyber-physical protection;
 - New digital technologies in advanced nuclear reactors; and
 - The development and safety assessments of small modular reactors.
- Excludes activities that involve the planning or construction of new university nuclear reactors.



Infrastructure Revitalization Purpose



- University-led consortia projects should focus on a goal or capability that significantly adds to the current U.S. capacity to support advanced reactor R&D, education, and workforce development.
- **Projects are intended to:**
 - Revitalize the U.S. capacity for university-led nuclear R&D by establishing and/or improving infrastructure to align with the advanced reactor technologies being deployed by the U.S. nuclear industry;
 - Support innovative combinations of facilities, equipment, and related capabilities to maximize the value of investments toward R&D;
 - Emphasize support for rapid, lower-cost approaches that can enable advanced-reactor-relevant R&D, education and workforce development prior to any universities establishing advanced research reactors; and
 - Involve consortia among different types of institutions to maximize participation and realization of benefits by communities that have historically faced challenges to such access.

Infrastructure Revitalization Format and Eligibility

- **Award Size**
 - Up to \$6M
 - **Cost sharing** is encouraged but not required in this FOA
- **Period of Performance**
 - Up to 4 years
- **Target Number of Awards**
 - One award
- **Eligibility**
 - Open to all U.S. colleges and universities
 - Requires a multi-institutional consortium
 - A minimum of 50% of requested funds must be used for physical infrastructure/equipment
 - Non-university collaborators, in composite, can have no more than 20% of the overall budget requested
 - Cost sharing is encouraged, but not required

Revitalization Review Process

- **Full Application**
 - 25-page limit
 - Application requires vendor quotes for physical equipment exceeding \$5,000 and research scoping and budgets
- **Full applications will be evaluated by a panel of experts which will include multiple technical peer reviewers evaluating technical merit.**
 - Criteria will include:
 - **(35%) Merit** of the Project Relative to Revitalizing Nuclear Research Infrastructure
 - **(35%) Execution** of the Proposed Method or Approach
 - **(30%) Utilization** of Applicant Team Capabilities, Risks, and Experience
 - **(Bonus) Diverse Team Consideration** - Up to 3% consideration for significant MSI, HBCU, or TCU participation

 Weight

 Bonus

Schedule

FOA Release	December 6, 2023
Overview Webinar and Q&A	December 13, 2023
Full Applications Due	February 14, 2024
Award Announcement	May 2024
Award Start Date	August 1, 2024

Contact Information



- **Technical questions can be submitted to:**
 - NEUP@inl.gov
- **Procurement questions can be submitted to:**
 - Andrew Ford (DOE-ID Contract Specialist)
 - fordaj@id.doe.gov
- **Application Site**
 - www.neup.gov
- **Infrastructure Q&A Section**
 - <https://neup.inl.gov/SitePages/FAQs.aspx>

U.S. DEPARTMENT OF
ENERGY



Office of
NUCLEAR ENERGY