



U.S. DEPARTMENT OF
ENERGY

Nuclear Energy

**FY 2017 Scientific Infrastructure Support
Funding Opportunity Announcement
DE-FOA-0001516**



August 09, 2016

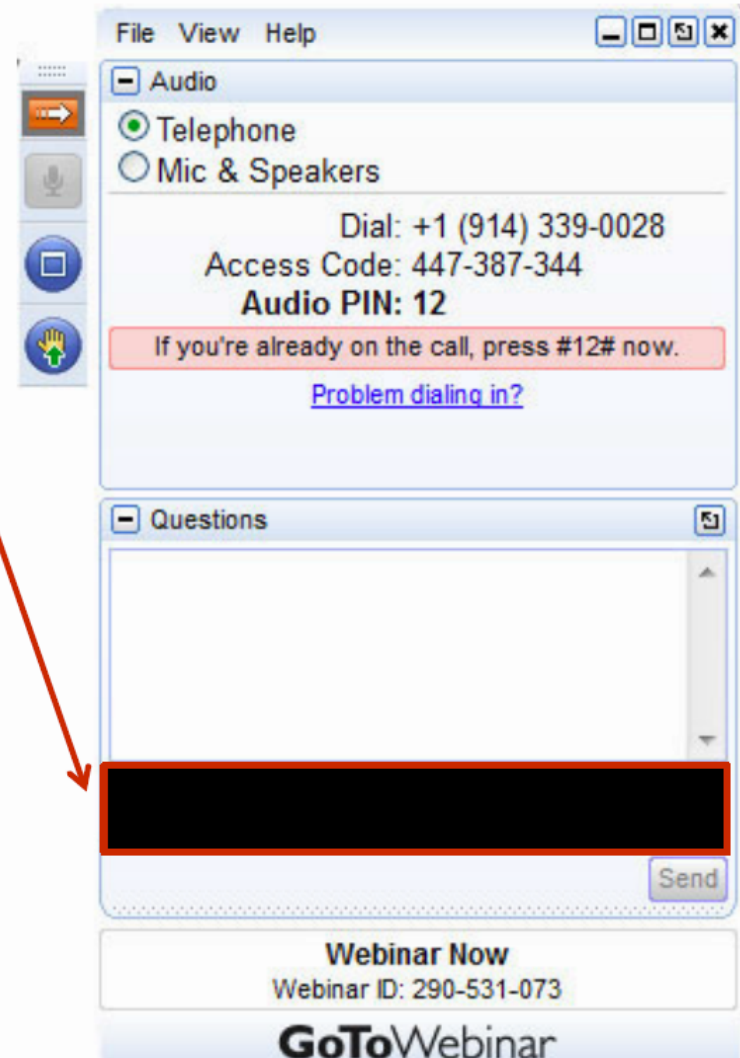
- **FOA Overview**
- **Reactor Upgrades and General Scientific Infrastructure**
- **Key Changes in the FY 2017 FOA**
- **Nuclear Energy Infrastructure Database**
- **Review Process, Tools, and Submissions**



How to Ask Questions During This Webinar



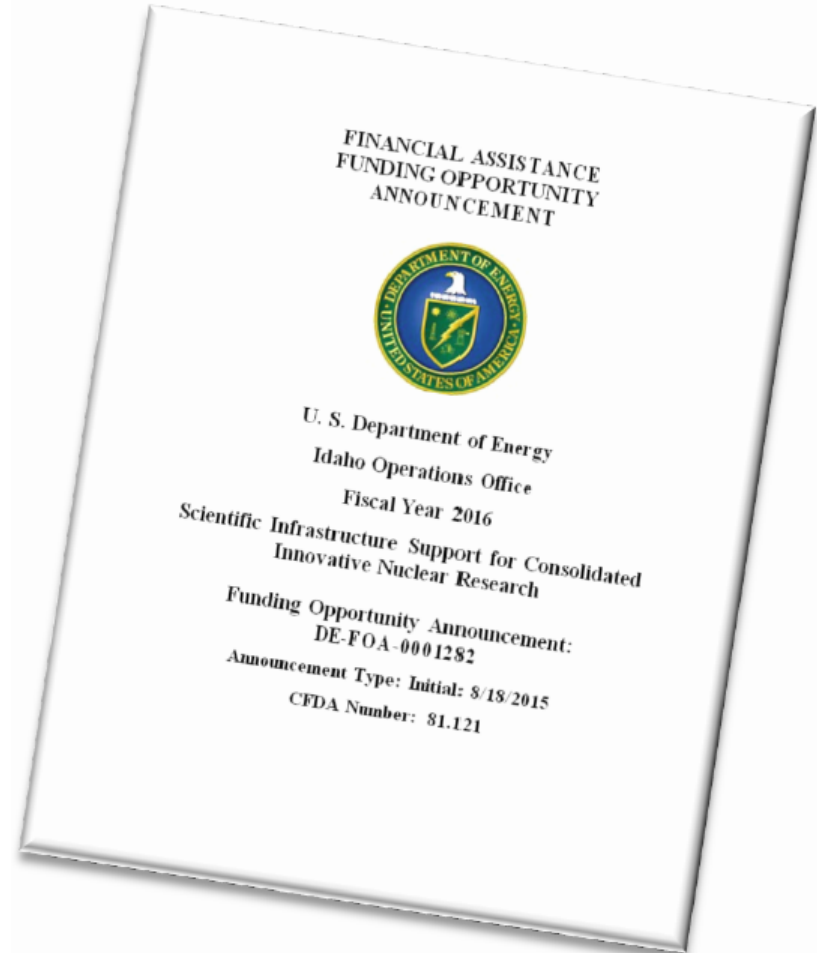
- Submit questions using the GoToWebinar software by typing in the “**Question**” field.
- If your question does not get answered during the allotted time, questions will be answered later and posted on www.neup.gov.
- Specific questions on individual eligibility should be addressed offline.





Objective: To promote efficiency and the effective use of resources

- Presents all anticipated DOE-NE funding opportunities at once
- Allows integration of deadlines to enable better planning
- Presents opportunities to request funding from multiple program elements to maximize research dollars



■ Funding Mechanism

- Universities – Grants issued by DOE-ID

■ Funding Opportunities

- Reactor Upgrades: combines Major and Minor Reactor Upgrade
- General Scientific Infrastructure: for US universities

■ Find FOA (DE-FOA-0001516) at <http://www.grants.gov>

- Apply directly through <http://www.grants.gov>



Important Dates



- **FOA release date:**
September 1, 2016

- **Applications due:**
November 23, 2016

- **Anticipated award announcement:**
April-May 2017





■ Area 1 – University Reactor Upgrades Infrastructure Support

- Combines Major and Minor
Reactor Upgrades



■ Area 2 – General Scientific Infrastructure Support for Universities



■ **Removed National Laboratory section for General Scientific Infrastructure from this FOA**

- The NSUF will continue the goal of funding scientific infrastructure within the NSUF using the infrastructure gap analysis as a basis for determining the specific need and location instead of a competitive process.

■ **Review the NSUF Capabilities and Partners at:**

- NSUF.INL.gov (partners)
- NSUF-Infrastructure.INL.gov (capabilities)

Policy Reminders

- Institution may submit only one application to each area.
- Academic institutions may be ineligible if they have a no-cost time extension for an existing infrastructure project (Reactor Upgrade or General Scientific Infrastructure Support). Eligibility to submit is reviewed on a case-by-case basis.
- DOE-fueled education research reactors are the only reactors eligible for University Reactor Upgrades.
- Institutions are responsible for not exceeding the submission limit.
- Universities have a 1:1 cost match requirement in GSI above \$250,000.



University Reactor Upgrades



■ Award Size

- Maximum individual award: \$3,000,000
- Expected award range: \$250,000 - \$1,500,000 total
- DOE anticipated to award some smaller awards

■ Period of Performance

- 1 year

■ Eligibility

- Only educational reactors fueled by DOE (list in FOA)

■ Estimated Funding Level

- Approximately \$3 million





■ Award Size

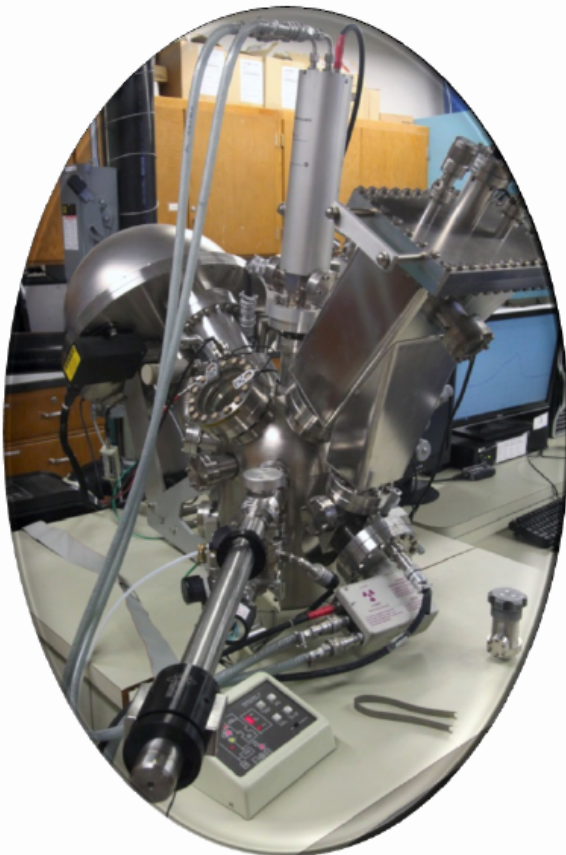
- Maximum DOE funding per individual university award: \$2,000,000 – anticipated award size \$250,000

■ Period of Performance

- 1 year

■ Eligibility

- Universities are eligible to submit applications
- One application per institution can be submitted to each area of this FOA.
- University cost match (1:1) required after \$250,000



Cost Sharing and Cost Matching

■ Cost Share

- Cost sharing is encouraged, but is not required in any part of this FOA

■ Cost Match

- Cost match is required on university GSI projects that exceed \$250,000
- Dollar for dollar matching requirement, up to the project ceiling of \$2,000,000 (e.g. \$300,000 application would require a \$50,000 university cost match, making the project total \$350,000)
- Anticipated award range will be around \$250,000

DE-FOA-0001516

REVIEW PROCESS, TOOLS, AND SUBMISSIONS



■ Review criteria and processes

- Each application will receive a review by both federal and peer reviewers

■ Review Criteria

- **Impact** – (40%) *Potential of the requested equipment, instrumentation or modification to:*
 - Enhance the safety, performance, control or operational capability of reactor systems, or
 - Increase the quality, safety/security, or efficiency of the operation of the reactor facility, or
 - Improve or expand the research, teaching and training capabilities of the reactor facility.
- **Use** – (30%) *As a result of the proposed equipment, the amount of student, faculty, or researcher usage of the capabilities, and the amount and variety of research and/or services actually provided by the facility;*
- **Project Implementation** – (30%) *Capability to implement the full scope of the project including timely project completion, personnel qualifications, budget, and feasibility.*
- Additional review information is available in Part V of the FOA



■ Review criteria and processes

- Each application will receive a review by both federal and peer reviewers

■ Review Criteria

- **Impact** - (40%) *Potential of the requested equipment, instrumentation or modification to:*
 - *facilitate, improve or expand the research (especially ongoing Office of Nuclear Energy research or those proposed in FY 2017 in response to the CINR FOA DE-FOA-0001515) and training capabilities;*
- **Use** – (30%) *As a result of the proposed equipment, the amount of student, faculty, or researcher usage of the capabilities, and the amount and variety of research and/or services actually provided by the facility;*
- **Project Implementation** – (30%) *Capability to implement the full scope of the project including timely project completion, personnel qualifications, budget, and feasibility.*
- Additional review information is available in Part V of the FOA

■ NSUF Integration

- Applicants should demonstrate the ability to integrate equipment into the Nuclear Science User Facilities program to:
 - create new NSUF partner facilities or
 - bolster capabilities at existing NSUF partner facilities.

■ Review the NSUF Capabilities and Partners at:

- NSUF.INL.gov (partners)
- NSUF-Infrastructure.INL.gov (capabilities)
 - registration required

■ Up to 5% scoring bonus on top of reviewer scores.



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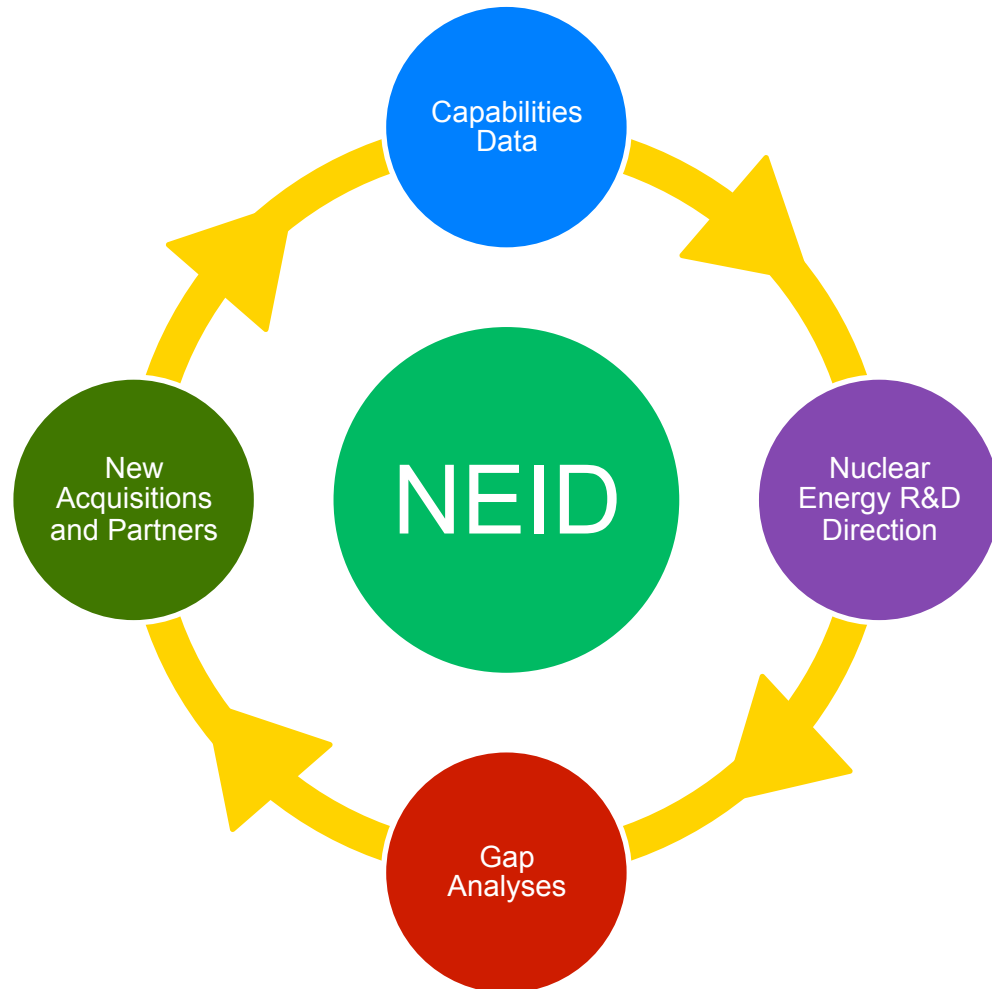
NUCLEAR ENERGY INFRASTRUCTURE DATABASE



Infrastructure Management Program



1. Gather Data on Nuclear Energy R&D Capabilities
2. Estimate Near, Mid and Long-term R&D Directions
3. Use these to perform gap analyses for Nuclear Energy R&D.
4. Assist funding decisions and incorporate the results into the NEID.

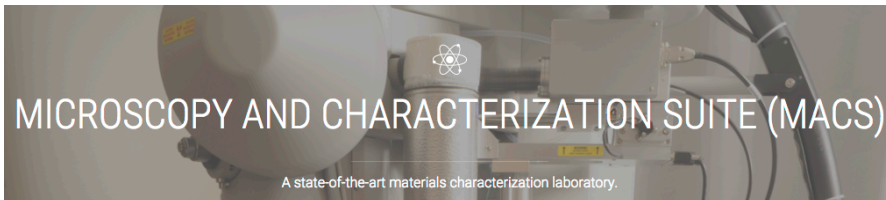




U.S. DEPARTMENT OF
ENERGY

Nuclear Energy

NEID Organization



FEI Quanta 3D FEG
Focused Ion Beam
SEM Microscope



Institutions

Facilities

Instruments



Database Characteristics



Data



126 Institutions



464 Facilities



882 Instruments

Users



75 Federal
Government &
National Laboratories



38 Universities &
NGOs



25 Nuclear Energy
Industry



Database Categories



Facility Information	Facility Conditions	Facility Utilization	Data Sources
Facility/Instrument Name Abbreviation Owner Type Institution State Region Country Primary Capability Secondary Capability Tertiary Capability Core Capability Unique Capability Radiological Limits Hot Work Facilities Support Equipment Sample Encapsulation Atmosphere/environment	Commissioning Date Recent Major Upgrade Material Condition Mission Upgradable? Supporting Physical Plant Regulating Agency License End Date	User Facility or Contract? Cost to Use Cost to Maintain Cost to Replace Funding Sources NSUF Partner? DOE-NE Use [%] NE Objectives [1,2,3,4] Utilization [%] # of users # of staff	Contact information Email Address Web Site Source(s) of Data Date of Data
			Reactor Type Thermal Power Pulse Power Thermal Flux Fast Flux In-core locations Ex-core locations Pneumatic Transfer System Flow Loops Beam Ports

40 common database fields for all entries

5-20 fields specific to facility/instrument type



NE Infrastructure Management Program **Browse Data** Search ▾ Welcome Guest ▾

Sift through the data or do a directed search

User Controls

NE Infrastructure Management Program (NEID)

NE Infrastructure Management Program is a web based search tool for finding facility / instrument capability.

Sign In

User Name

Password

Remember Me

Existing User Log-in

Register

Access to the information contained here is restricted on different levels. Please register, and our Admins will review your request to make more information available.

New User Registration



- Redesign of the NEID to match the new NSUF web page.
• Includes the ability to access the Fuels and Materials Library.

NSUF Infrastructure Infrastructure
Home / Browse
Browse
10
Search...
Babcock and Wilcox Technical Services Group
Bechtel-Bettis
Best Theratronics
Boise State University
Brookhaven National Laboratory
California Institute of Technology
Canadian Nuclear Laboratories (formerly AECL)
Center for Advanced Energy Studies (CAES)
Centre de Recherche Nucléaire de Draria (CRND)
China Institute of Atomic Energy
Showing 11 to 20 of 119 entries

The new Website will be deployed prior to September 1, 2016



Provides irradiated samples for users to access and conduct research through a competitively reviewed proposal process.

The library includes over 3500 specimens as part of the NSUF awarded research.

Materials Include:

- Steels
- Other alloys
- Ceramics
- Pure materials
- Actinides
- Fission products



INL Legacy
materials

Volunteered
materials from
outside the INL

Supporting
documentation
related to
samples



Contact Information



■ Technical questions can be submitted to:

- Brenden Heidrich (Technical Point of Contact)
 - NSUF@INL.gov
 - 208-526-8117
- The Infrastructure FOA Q&A section at www.NSUF.INL.gov

■ Procurement questions can be submitted to:

- Shawn Tinsley (DOE-ID Contract Specialist)
 - tinslesm@id.doe.gov
 - 208-526-3997

■ Application Site

- www.Grants.gov