FINANCIAL ASSISTANCE FUNDING OPPORTUNITY ANNOUNCEMENT



U. S. Department of Energy Idaho Operations Office

Fiscal Year 2024 Phase II Continuation Consolidated Innovative Nuclear Research

Funding Opportunity Announcement: DE-FOA-0003039

Announcement Type: Initial – June 12, 2023 **Amendment 001 – July 06, 2023**

Assistance Listings Number: 81.121

Informational Webinar: May 31, 2023

(Video links and presentations are available at www.NEUP.gov)

Issue Date: June 12, 2023

Letter of Intent (Mandatory for all applications)

Due Date: July 12, 2023, at 5:00 p.m. ET

Full Applications

Due Date: November 14, 2023, at 5:00 p.m. ET

NOTE: Deadlines are the dates/times by which DOE must receive the specified

submittal.

 $\underline{\text{AMENDMENT }001-\text{This}}$ amendment is an administrative amendment that clarifies the eligibility section of the FOA and improves consistency throughout the document. Updates include:

- That the active CINR project and a Phase II Continuation CINR award can have a short overlap between August 1, 2024, and September 30, 2024.
- The term phase II in this FOA has been rephrased as Phase II Continuation CINR for consistency purposes.
- Reference correction has been made for Part V Section A.3.

Registration Requirements

There are several one-time actions applicants must complete in order to submit an application in response to this funding opportunity announcement (FOA) (e.g., register with the System for Award Management (SAM), obtain a Unique Entity Identifier, and create an account on NEUP.gov. Applicants, who are not registered with SAM, should allow up to five-weeks to complete this requirement. It is suggested that the process be started as soon as possible.

If an applicant has not already done so, it must:

- 1. Register with the SAM: https://www.sam.gov/SAM/.
- 2. Obtain the Unique Entity Identifier (ID) number generated in SAM.gov.
- 3. Create an account on the NEUP.gov website at www.NEUP.gov using the 'Sign In' tab in the top right-hand corner. To create an account: 1) Click "Create a new account"; 2) Fill out the required information and click "Create User"; and 3) Fill out the information in the "My Information" section.

Questions

Questions regarding the content of this FOA must be submitted using the contact information found in Part VII, Section B of this FOA. DOE will try to respond to a question within three business days unless a similar question and answer have already been posted on the website.

Application Preparation

Applicants must prepare the application package and application forms from the NEUP.gov website: https://neup.inl.gov/SitePages/Home.aspx

Additional instructions are provided in Part IV of this FOA.

Application Submission

Apply for this FOA at www.NEUP.gov. Electronic applications and instructions are available at the NEUP.gov website. To access these materials: (1) go to www.NEUP.gov; (2) select "Sign In" from the top right hand corner of the screen; (3) enter your user credentials; (4) select "Applications" from the menu; and (5) click on "Create New Application" for the type of application you are creating. Apply at www.NEUP.gov. If you have any questions about your registration, contact the Innovative Nuclear Research (INR) Integration Office at 208-526-2123 or at neup@inl.gov. Any questions regarding the FOA or application requirements must be directed to Andrew Ford at fordaj@id.doe.gov.

CHECKLIST FOR AVOIDING COMMON ERRORS

Item Issue			
Page Limits	Strictly follow page and font limits throughout application documents, including but not limited to:		
	- Technical Abstract (use appropriate template)		
	- Technical Narrative (font must not be less than 11 pt for all,		
	including tables, figures, <u>and</u> references)		
	- Benefit of Collaboration		
	- Capabilities		
	- CVs		
Protected Personally Identifiable	Ensure none are present in the application. (Do <u>not</u> include		
Information	citizenship numbers in applications.)		
Collaborators	- List <u>all</u> collaborators in the Collaborators section of the		
	application form, including name, organization, funding		
	amount, phone, email, U.S. Person status and citizenship,		
	country, state, city, and zip code. This includes any individual		
	appearing in the technical abstract, technical narrative, benefit		
	of collaboration, coordination and management plan, or budget		
	documents.		
Budget	- Use current negotiated indirect cost and fringe benefit rates.		
	- Include separate subaward budgets, if applicable.		
Budget Justification	- Justify all requested costs.		
	- Include separate subaward budget justifications, if applicable.		
Current and Pending Support	- Ensure complete disclosures of current and pending support		
	for the PI and all industry and academic collaborators		
	named in the application. (This form is <u>not</u> required for		
	national laboratory participants.)		
	- Ensure the certification wording from Part IV Section		
	D.11.1 is included in the template. (If using the SciENcv		
	template, the certification wording, signature and date must		
	be appended to this form.)		
Certifications and Assurances	Ensure that signatures are completed for both sections of the		
	Certifications and Assurances documentation.		
R&R Other Project Information	- If marking proprietary information, clearly mark the		
Reck Other Project Information	sections where proprietary information is in the narrative		
	or other documents using the procedure outlined in the		
	FOA.		
	- If marking 'yes' to international collaboration, list all		
	institutions and countries.		
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LIST OF ACRONYMS

CFR Code of Federal Regulations

CINR Consolidated Innovative Nuclear Research

COI Conflict of Interest

COI Policy Conflict of Interest Policy for Financial Assistance

DE Department of Energy unique identifier FOA Number prefix

DMP Data Management PlanDOE Department of Energy

FFATA Federal Funding and Transparency Act of 2006

FFRDC Federally Funded Research and Development Center

FOA Funding Opportunity Announcement
FSRS FFATA Subaward Reporting System

FWP Field Work Proposal

FY Fiscal Year

GAIN Gateway for Accelerated Innovation in Nuclear

HBCU Historically Black Colleges and Universities

ID Identifier

IHE Institute of Higher Education
IRP Integrated Research Project

LOI Letter of Intent

M&O Management and Operating
 M&TE Measuring and Test Equipment
 MSI Minority Serving Institution
 NCE No Cost Time Extension

NE Office of Nuclear Energy

NEUP Nuclear Energy University Program

NSUF Nuclear Science User Facilities

NNSA National Nuclear Security Administration

OMI Other Minority Institutions

PDF Adobe Portable Document Format

PI Principal Investigator

QA Quality Assurance

R&D Research and Development

SAM System for Award Management

TCU Tribal Colleges and Universities

U.S. United States

PART I – FUNDING OPPORTUNITY DESCRIPTIONS

A. STATEMENT OF OBJECTIVES

This FOA is for Phase II Continuation Consolidated Innovative Nuclear Research (CINR) and is thus referred to in this document as the "Phase II Continuation CINR FOA."

A.1 Background and Objectives

The Office of Nuclear Energy (NE) mission is to advance nuclear energy science and technology to meet U.S. energy, environmental, and economic needs. NE has identified the following goals to address challenges in the nuclear energy sector, help realize the potential of advanced technology, and leverage the unique role of the government in spurring innovation:

- Keep existing U.S. nuclear reactor operating
- Deploy new nuclear reactors
- Secure and sustain our nuclear fuel cycle
- Expand international nuclear energy cooperation

Collectively, all NE-sponsored activities support the Department's priorities to combat the climate crisis, create clean energy jobs with the free and fair chance to join a union and bargain collectively, and promote equity and environmental justice by delivering innovative clean energy technologies for nuclear energy systems.

All applications submitted under this Phase II Continuation CINR FOA must demonstrate a strong tie to at least one of these four mission priorities and highlight how it supports DOE priorities. Applications focused specifically in areas not of interest to the NE mission, such as fusion energy, medical physics, nuclear forensics, or environmental management, will not be reviewed or considered.

NE conducts crosscutting nuclear energy research and development (R&D) and associated infrastructure support activities to develop innovative technologies that offer the promise of dramatically improved performance for its mission needs as stated above, while maximizing the impact of NE resources.

This Phase II Continuation CINR FOA provides opportunities for teams that have performed high quality work through the Nuclear Energy University Program (NEUP) to propose new projects that complement and enhance ongoing NEUP research through a competitive application and review process. This Phase II Continuation CINR process is executed through NEUP. NEUP supports university-based infrastructure and R&D (including Integrated Research Projects) in areas relevant to the NE mission.

While this Phase II Continuation CINR FOA specifies many of NE's current and upcoming R&D priorities, NE reserves the right to respond to potential shifts in R&D priorities during Fiscal Year (FY) 2024 that may be driven by events, policy developments, or Congressional/budget direction. Further, NE reserves the right to fund all or part of an application to this FOA.

A.2 NE Program Resources

For more information on current NE programs, please visit the following links:

- Fuel Cycle Technologies: https://www.energy.gov/ne/initiatives/fuel-cycle-technologies
- Reactor Technologies: https://www.energy.gov/ne/nuclear-reactor-technologies
- NEET Crosscutting Technologies: https://www.energy.gov/ne/nuclear-energy-enabling-technologies-neet
- Nuclear Energy University Program (NEUP): https://neup.inl.gov
- Nuclear Science User Facilities (NSUF): https://nsuf.inl.gov/
- Spent Fuel and Waste Disposition: https://www.energy.gov/ne/spent-fuel-and-waste-disposition
- Consent-Based Siting: https://www.energy.gov/ne/consent-based-siting
- Gateway for Accelerated Innovation in Nuclear (GAIN): https://gain.inl.gov/

Active NEUP project abstracts can be found at <u>neup.gov</u> under the R&D and Integrated Research Project (IRP) tabs.

B. FUNDING OPPORTUNITIES

NE is seeking Phase II Continuation CINR applications from U.S. universities to conduct nuclear energy-related research to help meet the objectives of the major NE funded research areas.

The Phase II Continuation CINR FOA is focused on continuing promising research pathways by soliciting applications that directly complement and extend research that has previously been awarded through NEUP.

CINR awarded projects, including R&D and IRPs, that conclude between January 1, 2024, and September 30, 2024, are eligible to apply.

Nuclear Science User Facility (NSUF) Access Only projects are not eligible to apply to this funding opportunity and should instead apply to the NSUF Access Only process under the separate FY 2024 CINR FOA for additional access to NSUF capabilities.

Phase II Continuation CINR projects, by their nature as extensions of current research direction, are shorter in duration and smaller in scope than original CINR projects. Phase II Continuation CINR projects should provide a logical path between the current research scope of the active CINR project and the new scope in a way that creates a seamless transition between the two projects.

The original CINR project and the Phase II Continuation CINR project are separate competitive DOE awards. Although the research scope should seamlessly transition, the original CINR award

will conclude between January 1, 2024, and September 30, 2024, and the Phase II Continuation project will begin on August 1, 2024. Remaining funds from the original CINR project cannot be transferred to the Phase II Continuation CINR project award. CINR projects that are concluding on a no-cost time extension can apply for a Phase II Continuation award. The active CINR project and Phase II Continuation CINR award can have minimal overlap, typically no more than two months between August 1, 2024, and September 30, 2024.

NE anticipates that Phase II Continuation CINR projects will be awarded so that there is no gap in funding between the original CINR project and the newly awarded Phase II Continuation CINR project. If there is a gap in funding due to the project ending before September 30, 2024, the PI must provide a clear mitigation and justification plan for how the project will restart after a short lapse in funding.

PART II – AWARD INFORMATION

A. TYPE OF AWARD INSTRUMENT

DOE anticipates awarding grants under the Phase II Continuation CINR FOA.

B. ESTIMATED FUNDING

The estimated amounts identified for each of the Phase II Continuation CINR FOA areas are specified in Part II. Funding for all awards is contingent upon the availability of funds appropriated by Congress for the purpose of this program.

NE currently estimates \$3 million in awards for this FOA.

C. MAXIMUM AND MINIMUM AWARD SIZE

The ceiling (i.e., the maximum amount for an individual award made under each area) and floor (i.e., the minimum amount for an individual award made under each area) are identified in Part II, Sections C.1-C.3 below:

C.1 U.S. University-led R&D Projects (Original project funding levels between \$800,000-\$1,000,000)

- Ceiling: up to 2/3s of original CINR project award (2-year project)
- Floor: None.

C.2 U.S. University-led Mission Supporting/Strategic Needs R&D Projects (Original project funding levels between \$400,000-\$500,000)

- Ceiling: up to 2/3s of original CINR project award (2-year project)
- Floor: None.

C.3 U.S. University-led IRPs (Original project funding levels between \$1,500,000-\$5,000,000)

- Ceiling: up to 2/3s of original CINR project award (2-year project)
- Floor: None.

D. EXPECTED NUMBER OF AWARDS

The number of awards is dependent on the size of the awards. DOE reserves the right to make more or fewer (or even no awards) depending on funding availability and/or the quality of the applications.

NE anticipates making 4 awards under this FOA.

E. ANTICIPATED AWARD SIZE

NE anticipates making several smaller awards. Anticipated award size is no more than two thirds of the original project award and will typically fall in the \$300,000-\$1,000,000 range.

F. PERIOD OF PERFORMANCE

NE anticipates making awards for up to 2 years and 2 months. Assuming NE announces awards under this Phase II Continuation CINR FOA by March 2024, funded projects shall begin no later than August 1, 2024. Proposing different start dates for the project and budget periods may make the application ineligible for award. If a different project start date, other than August 1, 2024, is necessary for the successful performance of the project, it must be fully documented and justified in the application for consideration by NE.

G. TYPE OF APPLICATION

DOE will accept only new applications directly tied to a currently active CINR project.

PART III - ELIGIBILITY INFORMATION

A. ELIGIBLE APPLICANTS

DOE has restricted eligibility for award in accordance with the Code of Federal Regulations, 2 CFR 910.126(b). This eligibility restriction does not apply to subrecipients, subawards, vendors, or team members of the prime/lead applicant. This Phase II Continuation CINR FOA is open to only U.S. universities as prime recipients. National laboratory and industry entities can participate as sub-recipients.

To support the goal of building a clean and equitable energy economy, NE strives to contribute to the President's goal that 40% of the overall benefits of certain Federal investments flow to Disadvantaged Communities (DAC) (the Justice40 Initiative)¹. The goal is to spur economic development and job creation in DACs throughout the United States. through effective teams and/or partnerships with institutions, located in a disadvantaged community that may receive funding support from the project.

In support of the Justice40 Initiative, the White House has developed the Climate and Economic Justice Screening Tool (CEJST) to identify DACs. CEJST can be found at https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5. Applicants are encouraged to use CEJST to illustrate how their project supports DACs.

NE also strives to ensure energy justice through effective teams and/or partnerships with MSIs, including Historically Black Colleges and Universities (HBCUs), and Tribal Colleges and Universities (TCUs).

Information on Minority Serving Institutions can be found at https://www2.ed.gov/about/offices/list/ope/idues/eligibility.html#tips. This information predominately covers institutions that have been awarded grants through the Department of Education and does not include all institutions that may meet the definition of an MSI. **This resource is not an exhaustive list of minority-serving institutions.** For purposes of identifying MSIs in NE's application system, NE is using a directory based on 2020 U.S. Department of Education data, compiled by Rutgers University's Center for MSIs, which can be found at: https://www2.ed.gov/about/offices/list/ope/idues/2022eligibilitymatrix.xlsx. This list is also not an exhaustive list of MSIs but will be used as a starting point for self-identifying MSIs. If applicants believe that their institution qualifies as an MSI and is not listed, please contact neup@inl.gov with an explanation for how the university meets the conditions of being considered an MSI.

Research consortiums may be composed of diverse institutions including academia, national laboratories, non-profit research institutes, industry/utilities, and international partners. Research

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¹ The Justice40 initiative, established by E.O. 14008, sets a goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities. The Justice40 Interim Guidance provides a broad definition of disadvantaged communities (Page 2): https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf.

teams should strive to achieve the synergies that arise when individuals with forefront expertise in different methodologies, technologies, disciplines, and areas of content knowledge approach a problem together, overcoming impasses by considering the issue from fresh angles and discovering novel solutions.

This Phase II Continuation CINR FOA provides award opportunities to U.S.-owned entities as defined in 2 CFR 910.124:

2 CFR 910.124(b) definitions include:

United States means the several States, the District of Columbia, and all commonwealths, territories, and possessions of the United States.

United States-owned company means:

- (1) A company that has majority ownership by individuals who are citizens of the United States, or
- (2) A company organized under the laws of a State that either has no parent company or has a parent company organized under the laws of a State.

2 CFR 910.124(c):

A company shall be eligible to receive an award of financial assistance under a covered program only if DOE finds that -

- (1) Consistent with § 910.124(d), the company's participation in a covered program would be in the economic interest of the United States; and
- (2) The company is either -
 - (i) A United States-owned company; or
 - (ii) Incorporated or organized under the laws of any State and has a parent company which is incorporated or organized under the laws of a country which -
 - (A) Affords to the United States-owned companies opportunities, comparable to those afforded to any other company, to participate in any joint venture similar to those authorized under the Act [Section 2306 of the Energy Policy Act of 1992, 42 U.S.C. 13525];
 - (B) Affords to United States-owned companies local investment opportunities comparable to those afforded to any other company; and
 - (C) Affords adequate and effective protection for the intellectual property rights of United States-owned companies.

2 CFR 910.124(d):

Determining the economic interest of the United States. In determining whether participation of an applicant company in a covered program would be in the economic interest of the United States under § 910.124(c)(1), DOE may consider any evidence showing that a financial assistance award would be in the economic interest of the United States including, but not limited to -

- (1) Investments by the applicant company and its affiliates in the United States in research, development, and manufacturing (including, for example, the manufacture of major components or subassemblies in the United States);
- (2) Significant contributions to employment in the United States by the applicant company and its affiliates; and
- (3) An agreement by the applicant company, with respect to any technology arising from the financial assistance being sought
 - (i) To promote the manufacture within the United States of products resulting from that technology (taking into account the goals of promoting the competitiveness of United States industry); and
 - (ii) To procure parts and materials from competitive suppliers.

While international partners are encouraged to participate, no U.S. Government funding will be provided to entities incorporated outside of the United States or to a foreign government or any entity owned or controlled by a foreign government. Foreign government ownership means direct ownership of the applicant entity, its parent organization (e.g., trust, holding company, corporation, etc.), and any and all other entities in the corporate structure regardless of the applicant entity's place of incorporation and operation. NE will evaluate the benefit and contribution of any such proposed partnerships as part of its evaluation of the relevancy to the NE mission.

A collaborator is an individual that makes a defined, material contribution that is critical to the success of the project and/or contributing to joint publications. Any individual appearing in the project summary, technical narrative, benefit of collaboration, coordination and management plan, or budget documents should be listed directly as collaborators on the application form. All collaborators must be added to the application form with complete information. Any individuals that do not meet these criteria should not be listed as collaborators on the application.

NE has two designations for collaborators: 1) key/senior personnel and 2) 'other collaborators'. Document requirements will vary depending on whether an individual is designated as 'key/senior personnel' or as a general collaborator. **Key/senior personnel should be listed in the first collaborators section on the application form. Other collaborators should be listed on the second collaborators section of the application form.**

Refer to each required area of the pre- and full-application requirements to provide needed information for all key/senior personnel.

Applicants must have the full consent of each collaborator prior to listing them on an application form. Non-university collaborators, in composite, can have no more than 20% of the total funds provided by the Government. An employee with a joint appointment between a university and a DOE national laboratory can apply through the institute of higher education (IHE) if the institution pays his or her salary and provides his or her benefits.

A.1 Domestic Entities

For-profit entities, educational institutions, and nonprofits² that are incorporated (or otherwise formed) under the laws of a particular state or territory of the United States are eligible to apply for funding as a prime or subrecipient (only educational institutions may apply as a prime recipient.)

State, local, and tribal government entities are eligible to apply for funding as a subrecipient.

DOE/National Nuclear Security Administration (NNSA) Federally Funded Research and Development Centers (FFRDC) and DOE Government-Owned Government-Operated laboratories are eligible to apply for funding as a team member. If an FFRDC is proposed as a team member or subrecipient, the requirements contained in Part III, Section C, apply.

Non-DOE/NNSA FFRDCs and non-DOE Government-Operated Government-Owned laboratories are eligible to apply for funding as a subrecipient.

Federal agencies and instrumentalities (other than DOE) are eligible to apply for funding as a subrecipient.

A.2 U.S. Incorporated Foreign Entities

U.S. incorporated foreign entities, whether for-profit or otherwise, are eligible to apply for funding under this Phase II Continuation CINR FOA as either a prime recipient or subrecipient subject to the requirements in 2 CFR 910.124.

A.3 Incorporated Consortia

Incorporated consortia, which may include domestic and/or foreign entities, are eligible to apply for funding as a prime recipient or subrecipient. For consortia incorporated (or otherwise formed) under the laws of a State or territory of the United States, please refer to "Domestic Entities" in Part III, Section A.1 above. For consortia incorporated in foreign countries, please refer to the requirements in "U.S. Incorporated Foreign Entities" Part III, Section A.2 above.

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Nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 2005, are not eligible to apply for funding.

A.4 Unincorporated Consortia

Unincorporated consortia, which may include domestic and foreign entities, must designate one member of the consortium to serve as the prime recipient/consortium representative (U.S. university). The prime recipient/consortium representative must be incorporated (or otherwise formed) under the laws of a State or territory of the U.S. The eligibility of the consortium will be determined by the eligibility of the prime recipient/consortium representative.

B. APPLICATION RESTRICTIONS

Phase II applications have the following restrictions:

- Only one Phase II Continuation CINR application is allowed per active CINR project.
- Applications can only be made by the lead institution of a currently active CINR award that concludes between January 1, 2024, and September 30, 2024.
- The lead PI on the active CINR award and Phase II Continuation CINR award should be the same. Extenuating circumstances where a new PI at the lead institution needs to be identified should be pre-approved by DOE.

NOTE: Procurement regulations require that applications submitted to this Phase II Continuation CINR FOA will be awarded to the applicant entity listed and will not be transferred pre-award to another institution if a lead PI changes institutions. Following the date set in this Phase II Continuation CINR FOA for receipt of applications, PIs that are moving from one institution to another during the Phase II Continuation CINR review time period are subject to the DOE-ID Changing Principal Investigator (PI) and Related Changes/Revisions Policy which is explained at www.NEUP.gov. Post award revision must adhere to the requirements of 2 CFR 200.308.

C. COST SHARING

For applications led by universities, cost sharing is not required, but may be proposed. If cost sharing is provided, see 2 CFR part 200 for the applicable cost sharing guidance and Part VIII, Section G, of this Phase II Continuation CINR FOA below. Cost sharing is **NOT** a scored review criterion.

For applications led by all other entities (i.e., other than universities, nonprofit institutions/organizations, and FFRDCs), the provisions of the Energy Policy Act of 2005, Section 988, apply. Cost share of at least 20% of the total allowable costs of the project (i.e., the sum of the government share, including FFRDC contractor costs if applicable, and the recipient share of allowable costs equals the total allowable costs of the project) and must come from non-Federal sources, unless otherwise allowed by law. (See 2 CFR 200.29 for more information on the cost sharing requirements.)

Although the DOE/NNSA FFRDC contractor cost is not included in the total approved budget for the award, DOE will pay the DOE/NNSA FFRDC contractor portion of the effort under an existing DOE/NNSA contract. Recipient is not responsible for reporting on that portion of the total estimated cost that is paid directly to the DOE/NNSA FFRDC contractor.

By accepting federal funds under this award, you agree that you are liable for your percentage share of allowable project costs, even if the project is terminated early or is not funded to its

completion. After award, failure to provide the cost share required may result in the subsequent recovery by DOE of some or all the funds provided under the award.

D. OTHER ELIGIBILITY REQUIREMENTS

D.1 FFRDC Contractors

FFRDC contractors may be proposed as a team member on another entity's application subject to the following guidelines:

Authorization for non-DOE/NNSA FFRDCs. The Federal agency sponsoring the FFRDC contractor must authorize in writing the use of the FFRDC contractor on the proposed project and this authorization must be submitted with the application. The use of an FFRDC contractor must be consistent with the contractor's authority under its award.

Authorization for DOE/NNSA FFRDCs. The cognizant contracting officer for the FFRDC must authorize in writing the use of a DOE/NNSA FFRDC contractor on the proposed project and this authorization must be submitted with the application. The following wording is acceptable for this authorization:

"Authorization is granted for the Fill-in 1: [Name] Laboratory to participate in the proposed project. The work proposed for the laboratory is consistent with or complimentary to the missions of the laboratory, will not adversely impact execution of the DOE/NNSA assigned programs at the laboratory."

NOTE: The FFRDC's participation in the proposed project is subject to the terms and conditions of its management and operating (M&O) contract with DOE. Participants requiring access to the FFRDC facilities are subject to the FFRDC's policy and DOE regulations.

NOTE: If all FFRDC/non-FFRDC management has been notified of all submissions and acknowledgment of all participants are identified, individual Letters of Authorization may be submitted or submitted as blanket permission Identification of participants by name is to be included in the body or as a separate list.

- Value/Funding: The value of, and funding for, the FFRDC contractor portion of the work will not normally be included in the award to a successful applicant. Usually, DOE will fund a DOE FFRDC contractor through the DOE Field Work Proposal (FWP) system and other non-DOE FFRDC contractors through an interagency agreement with the sponsoring agency.
- Cost Share: On industry led applications, the applicant's cost share requirement will be based on the total cost of the project. FFRDC costs are included as part of the Government cost share.

• FFRDC Contractor Effort:

- The scope of work to be performed by the FFRDC contractor may not be more significant than the scope of work to be performed by the prime applicant.
- The FFRDC contractor effort, in aggregate, shall not exceed 20% of the total estimated costs of the projects.
- **Responsibility**: The applicant, if successful, will be the responsible authority regarding the settlement and satisfaction of all contractual and administrative issues, including but not

limited to, disputes and claims arising out of any agreement between the applicant and the FFRDC contractor.

Table 1 provides a summary of Parts II and III of this FOA.

Table 1. Summary of Parts II and III

Phase II Continuation CINR FOA Areas	Estimated Available Budget	Maximum Award Size	Project Duration	Cost Share	Collaboration
Phase II R&D				University, nonprofit institutions/ organizations	University, national laboratory, industry, and foreign collaborations are encouraged, but no U.S. funding can go to entities that are not incorporated in the U.S.
Phase II R&D Strategic Needs/Mission Supporting	\$3,000,000	2/3s of original CINR award	Up to 2 years and 2 months	and FFRDCs do not require cost share but is permitted. All other entities require a minimum 20% cost share	
Phase II IRP					

PART IV – APPLICATION AND SUBMISSION INFORMATION

NOTE: The following requirements apply to all three areas defined in Part I, Section B, of this Phase II Continuation CINR FOA unless specific requirements are identified.

A. ADDRESS TO REQUEST APPLICATION PACKAGE

Electronic applications and instructions are available at the NEUP.gov website. To access these materials: (1) go to www.NEUP.gov; (2) select "Sign In" from the top right-hand corner of the screen; (3) enter your user credentials; (4) select "Applications" from the menu; and (5) click on "Create New Application" for the type of application you are creating. Apply at: www.NEUP.gov.

Paper copies of the application package may be requested at:

INR Integration Office Megha Dubey PO Box 1625 MS 3730 Idaho Falls, ID 83415

Telephone: 208-526-5689 Fax: 208-526-1844

B. DOCUMENT FORMAT REQUIREMENTS

All non-budget documentation (use templates where provided) is to be prepared using standard 8.5" × 11" paper with 1-inch margins (top, bottom, left, right) and a font size no smaller than Times New Roman 11 point. This is a requirement for all pages included in the document (i.e., table of contents, references, etc.). The preferred file format is Adobe Portable Document Format (PDF) for all documents except for spreadsheets. All spreadsheets are to be uploaded in Excel file format to the online application. Do **NOT** lock any cells in the spreadsheet.

Applicants must comply with all pertinent page limitations. Any text (including references and data tables) in a document that does not adhere to the requirements listed above (except graphics, graphs, charts, and equations) will be removed from the document and will not be reviewed. DOE reserves the right to dismiss applications that violate formatting requirements. Signature blocks must be signed by the designated official.

Documents should be saved using the document naming suggestion at the bottom of each document description. The tracking ID will automatically be generated by the application system and can be found at the top of the application form under "Tracking ID."

DOE reserves the right to dismiss applications which it deems, after initial review, to lack enough detail for reviewers to adequately judge technical merit. Applications submitted with corrupted, incomplete, or incorrect files may be dismissed without further review.

C. APPLICATION SUBMITTAL INSTRUCTIONS

C.1 Letter of Intent (LOI)

LOIs are a requirement for all applications. LOIs must be submitted by the date and time specified in Part IV, Section F.1.

C.1.1 LOI Submittal Instructions

Application forms and instructions are available at the NEUP.gov website. To access these materials: (1) go to www.NEUP.gov; (2) select "Login" from the top right-hand corner of the screen; (3) enter your user credentials; (4) select "Applications" from the menu; and (5) find "FY 2024 Phase II Continuation Letter of Intent" and click on "Create New Application" for the type of application you are creating.

LOIs should include the following:

- Title of project;
- Tracking ID number, DOE Contract number, title, and year awarded for currently awarded CINR project;
- Proposing PI and associated institution, if known; and
- A project description covering the following items:
 - A description of current progress on the current CINR award and expected deliverables in the final 12 months of the project.
 - Summary of milestone completion, schedule, and performance of the current award.
 - A description of the new scope proposed as the Phase II Continuation CINR portion of the project.
 - A description of how the two projects would be integrated together and the importance of direct follow-on to the current research objectives.
 - Identification of existing/new key/senior personnel that will make research contributions to the new scope of work.
 - The importance of the work to the NE mission.
- o 5-page limit, 11-point font.

Name File: 2024 PhaseII LOI "Insert ID #"

D. CONTENT AND FORM OF ALL FULL APPLICATIONS

Applicants must provide all information requested. Forms and optional templates may be used to provide the information in accordance with the instructions below. Files that are attached must be in PDF format, unless otherwise specified in this announcement. Optional document templates can be found on the NEUP.gov website by clicking the 'Documents' button at the bottom of the front page (https://neup.inl.gov/SitePages/Related Documents.aspx).

You must save the Full Application before a tracking ID number will be generated.

D.1 Conflict-of-Interest (COI) Acknowledgement

The DOE interim Conflict of Interest Policy for Financial Assistance (COI Policy) can be found at Financial Assistance Letter No. FAL 2022-02 | Department of Energy. This policy is applicable to all non-Federal entities applying for, or that receive, DOE funding by means of a financial assistance award (e.g., a grant, cooperative agreement, or technology investment agreement) and, through the implementation of this policy by the entity, to each Investigator who is planning on participating in, or is participating in, the project funded wholly or in part under the DOE financial assistance award. DOE's interim COI Policy establishes standards that provide a reasonable expectation that the design, conduct, and reporting of projects funded wholly or in part under DOE financial assistance awards will be free from bias resulting from financial conflicts of interest or organizational conflicts of interest. The applicant is subject to the requirements of the interim COI Policy and within each application for financial assistance, the applicant must certify that it is, or will be by the time of receiving any financial assistance award, compliant with all requirements in the interim COI Policy. The applicant must flow down the requirements of the interim COI Policy to any subrecipient non-Federal entities.

The applicant is required to disclose, manage, and report conflicts of interest as per the DOE interim COI Policy. Check the appropriate box on the application form certifying compliance with the COI Policy. If any disclosures need to be made, upload a COI document to the COI disclosure area of the application form.

Name File: 2024 PhaseII COI "Insert ID #"

D.2 SF-424 Research and Related (R&R)

Applicants shall complete the SF-424, R&R form, available at <u>www.NEUP.gov</u> and upload a completed and signed PDF copy of the form with the application.

Name File: 2024 PhaseII SF424RR "Insert ID #"

D.3 R&R Other Project Information

Applicants shall complete items 1–6 on the R&R Other Project Information form available at www.NEUP.gov, and upload a completed PDF copy of the form. Items 7-12 will be completed in the application form and do not need to be completed here.

Name File: 2024 PhaseII R&R Other Project Information "Insert ID #"

D.4 Project Summary/Abstract

(Use Provided Template on Application Site)

The project summary/abstract must contain a summary of the proposed activity, suitable for dissemination to the public. It should be a self-contained document that identifies the following: the name of the applicant; the name of the PI(s); the project title; a list of major deliverables; the scope and objectives of the project; a description of the project, including major tasks (phases, planned approach, etc.) and methods to be employed; the potential impact of the project (i.e., benefits, outcomes); and the names of key/senior personnel (for collaborative projects). This

document must not include any proprietary or sensitive business information as NE may make it available to the public after awards are made.

Pages outside the specified page limits and font size, including references, will be redacted and unavailable for evaluators to review.

- o 1-page limit for R&D, 11-point font. (Appendix A Template)
- o 2-page limit for IRPs, 11-point font. (Appendix B Template)

Name File: 2024 PhaseII Technical Abstract "Insert ID #"

D.5 Project Narrative

Applicant shall provide a written narrative addressing the strategy to execute R&D that supports the specified Technical Work Scope. The documentation provided shall include the items specified below:

- Application title.
- Identification of associated CINR award by tracking ID #, DOE Contract Number, title, and year awarded.
- Project Objectives: Provide a clear, concise statement of specific objectives/aims of the proposed project in support of the NE mission.
- Proposed scope description.
- Logical path to accomplishing scope, including descriptions of tasks. This section will provide a clear, concise statement of the specific objectives/aims of the proposed project. This section should be formatted to address each of the merit review criterion and subcriterion listed in Part V, Section A. Provide sufficient information so that reviewers will be able to evaluate the application in accordance with these merit review criteria. **DOE**has the right to evaluate and consider only those applications that separately address each of the merit review criteria.
- Relevance and Outcomes/Impacts: This section will provide a clear explanation of its importance and relevance to the NE mission as described in the objectives in Part I Section A.
- Schedule: Define timelines for executing the specified work scope, including all important activities or phases of the project. Successful applicants must use this schedule when reporting project progress.
- Milestones and deliverables.
- Type/Description of facilities that will be used to execute the scope (if applicable).
- The roles and responsibilities of each partnering organization in the execution of the work scope. Describe the role and work to be performed by each participant/investigator, the business arrangements between the applicant and participants, and how the various efforts will be integrated and managed.
- Unique challenges to accomplishing the work and planned mitigations.

• Information, data, plans, or drawings necessary to explain the details of the application.

Page limits include cover page, table of contents, charts, graphs, maps, photographs, tables, references and other pictorial presentations while complying with the document format instructions in Part IV, Section B. Pages outside the specified page limits and font size, including references, will be redacted and unavailable for evaluators to review.

• 10-pages, 11-point font.

Do not include any internet addresses (URLs) that provide information necessary to review the application; information contained in these sites will not be reviewed.

Name File: 2024 PhaseII Technical Narrative "Insert ID #"

D.6 Transition Plan

Applicants will outline the current status of the awarded CINR projects and describe:

- How the current CINR project will be completed and descriptions of milestones and deliverables including potential delays.
- How the current CINR project deliverables will inform the new scope of work and any
 risks to transitioning to the Phase II Continuation CINR award. Risk mitigation plans
 should be identified for research that is still pending results.
- How the new scope will integrate, and compliment work already performed. This may include continuity of student researchers, expanded use of equipment, or other factors that would make a Phase II Continuation CINR award more advantageous than a typical R&D award.
- Identifying any benefits or challenges to changes in team make-up between the current CINR project and new scope of work.

Applicants should provide sufficient detail to describe the impacts a Phase II award would have on the overall research goals of the project.

o 5-page limit, 11-point font.

Name File: 2024 PhaseII Transition Plan "Insert ID#"

D.7 Vitae (Technical Expertise and Qualifications)

(Required: Lead PI, key/senior personnel)

Applicant shall name all teaming partners by name and organization, as well as their proposed roles and responsibilities. For collaborators (including senior key person), who will contribute in a substantial, measurable way to the project (including for subrecipients and consultants), the applicant shall provide brief vitae that list the following:

Contact information.

- Education and Training: provide institution, major/area, degree, and year for undergraduate, graduate, and postdoctoral training.
- Research and Professional Experience: beginning with the current position list, in chronological order (newest to oldest), professional/academic positions with a brief description.
- Publications: provide a list of up to 10 publications most closely related to the proposed project. For each publication, identify the names of all authors (in the same sequence in which they appear in the publication), the article title, book or journal title, volume number, page numbers, year of publication, and website address if available electronically.
- Patents, copyrights, and software systems developed may be provided in addition to or substituted for publications.
- Synergistic Activities: list no more than five professional and scholarly activities related to the effort proposed.

Pages outside the specified page limits and font size, including references, will be redacted and unavailable for evaluators to review.

o 2-page limit, 11-point font.

Name File: 2024 PhaseII "Last Name of Individual" "Insert ID #"

Technical expertise and qualifications are to be provided for all senior/key personnel. All participants making a defined, material contribution that is critical to the success of the project must be listed as collaborators on the online application. Applicants must have the full consent of all collaborators prior to submitting the application.

D.8 Benefit of Collaboration

The applicant shall provide a narrative that includes an explanation of the contribution that will be made by the collaborating organizations and/or facilities to be utilized. Please indicate within this section whether the application has benefit or influence on other ongoing or proposed NE R&D projects (e.g., modeling and simulation in one application and effect validation in a separate application).

This document is required unless the application only has a single PI.

Pages outside the specified page limits and font size, including references, will be redacted and unavailable for evaluators to review.

o 4-page limit, 11-point font.

Name File: 2024 PhaseII Benefit of Collaboration "Insert ID#"

D.9 Capabilities

Provide information on the following, as applicable:

- Infrastructure Requirements: The applicant shall identify the infrastructure (e.g., facilities, equipment, instrumentation, and other resources) required to execute the proposed scope of work, including applicant's location, availability, capabilities, and how they will be used in the project. Describe the non-labor (e.g., facilities, equipment, and instrumentation) resources that are available and accessible to the applicant and are required to execute the scope of work. Describe any unique equipment and facilities that are needed, are accessible, and will be used to execute the scope of work. Discuss the adequacy of these resources and identify any gaps and how these will be addressed.
- Adequate financial resources (if cost sharing).
- Ability to comply with the required or proposed performance schedule, taking into consideration all existing commercial and governmental business commitments.
- A satisfactory record of performance, integrity, and business ethics.
- Necessary organization, experience, accounting and operational controls, or the ability to obtain them (including, as appropriate, such elements as property control systems, quality assurance measures, and safety programs).

This Phase II Continuation CINR FOA allows the applicant to propose the purchase of any needed equipment to conduct the proposed work. If equipment purchases are proposed, describe comparable equipment, if any, already at the institution and explain why it cannot be used.

Pages outside the specified page limits and font size, including references, will be redacted and unavailable for evaluators to review.

o 2-page limit, 11-point font.

Name File: 2024 PhaseII Capabilities "Insert ID #"

D.10 Budget Documents

D.10.1 R&R Lead Budget Form: (TOTAL FED & NON-FED)

(Required for all lead institutions)

Complete the Research and Related Budget (Total Fed & Non-Fed) form in accordance with the following instructions contained in Part IV, Section E.

A separate budget must be completed for each year of requested support. The form will generate a cumulative budget for the total project period. Complete all the mandatory information on the form. Funds may be requested under any of the categories listed if the item and amount are necessary to perform the proposed work, meet all the criteria for allowability under the applicable Federal cost principles, and are not prohibited by the funding restrictions in this announcement (see Part IV, Section H of this Phase II Continuation CINR FOA).

NOTE: Successful applicants may be requested to participate in an annual program review meeting and should budget travel accordingly.

NOTE: Do **NOT** lock the cells when saving this document. Applications containing budget forms with **locked cells** may not be evaluated further.

Name File: 2024 PhaseII Budget "Insert ID #".xls

D.10.2 R&R Subaward Budget Form: (TOTAL FED & NON-FED)

(Required for University and Industry collaborators)

Budgets for subrecipients, other than DOE FFRDC Contractors. Applicant must provide a separate cumulative SF-424 budget for each subrecipient that is expected to perform work estimated to be more than \$250,000 or 50% of the total work effort (whichever is less). Use up to 10 letters of the subrecipient institution's name as the file name.

NOTE: Do **NOT** lock the cells when saving this document. Applications containing budget forms with LOCKED CELLS may not be evaluated further.

Name File: 2024 PhaseII Subaward Budget "Insert ID #".xls

D.10.3 Budget for DOE/NNSA Federally Funded Research and Development Center (FFRDC) Contractor

(Required for National Laboratory participants)

If using a DOE/NNSA FFRDC contractor, the FFRDC must provide a DOE Field Work Proposal in accordance with the requirements in DOE Order 412.1A, Administrative (Admin) Change 1, Work Authorization System dated 05/21/2014. FWPs can be obtained from respective laboratory financial administrators.

FFRDCs are permitted to propose costs in accordance with their established DOE contracts (e.g., overhead, fees, etc.).

Name File: 2024 PhaseII FWP "Insert ID #"

D.10.4 Budget Justification

(Required for all University and Industry participants)

The <u>Budget Justification Supporting Documentation</u> is available at NEUP.gov. Provide the required supporting information for all costs required to accomplish the project, including the following costs: labor; equipment; domestic and foreign travel; participant/trainees; material and supplies; publication; consultant services; automated data processing/computer services; subaward/consortium/contractual; equipment or facility rental/user fees; alterations and renovations; and indirect cost type. Provide any other information you wish to submit to justify the budget request.

A budget justification is required for the lead applicant and all sub-awardees. The justification can be combined into one document or submitted as separate files.

Foreign travel must be included in the budget justification request. Any foreign travel not included in the budget justification will not be approved upon issuance of the grant.

If cost sharing is required or voluntarily proposed, provide an explanation of the source, nature, amount, and availability of any proposed cost sharing.

Third Parties Contributing to Cost Sharing Information (if applicable):

A letter from each third party (i.e., a party other than the organization submitting the application) contributing to the cost share, must be submitted with the application. The letter must state that the third party is committed to providing a specific minimum dollar amount of cost sharing. Submitting the letters with the application provides assurance that the letters of commitment have been signed.

In an appendix to the Budget Justification, the following information for each third party contributing to cost sharing must be identified: (1) the name of the organization; (2) the proposed dollar amount to be provided; (3) the amount as a percentage of the total project cost; and (4) the proposed cost sharing - cash, services, or property. Successful applicants must provide the signed letters of commitment outlined in Part IV, Section E, Submission from Successful Applicants.

Name File: 2024 PhaseII Budget Justification "Insert ID #"

D.11 Additional Attachments

D.11.1 Current and Pending Support

(Required for Lead PI and senior/key personnel)

Current and pending support is intended to allow the identification of potential duplication, overcommitment, potential conflicts of interest or commitment, and all other sources of support. As part of the application, the PI and each senior/key person at the prime applicant and any proposed subaward level must provide a list of all sponsored activities, awards, and appointments, whether paid or unpaid; provided as a gift with terms or conditions or provided as a gift without terms or conditions; full-time, part-time, or voluntary; faculty, visiting, adjunct, or honorary; cash or in-kind; foreign or domestic; governmental or private-sector; directly supporting the individual's research or indirectly supporting the individual by supporting students, research staff, space, equipment, or other research expenses. All involvement in foreign government-sponsored talent recruitment programs must be identified in current and pending support.

For every activity, list the following items:

- The sponsor of the activity or the source of funding.
- The award or other identifying number.
- The title of the award or activity. If the title of the award or activity is not descriptive, add a brief description of the research being performed that would identify any overlaps or synergies with the proposed research.
- The total cost or value of the award or activity, including direct and indirect costs and cost share. For pending proposals, provide the total amount of requested funding.
- The award period (start date end date).
- The person-months of effort per year being dedicated to the award or activity.

If required to identify overlap, duplication of effort, or synergistic efforts, append a description of the other award or activity to the current and pending support.

Details of any obligations, contractual or otherwise, to any program, entity, or organization sponsored by a foreign government must be provided on request to either the applicant institution or DOE. Supporting documents of any identified source of support must be provided to DOE on request, including certified translations of any document.

The information may be provided in the format approved by the National Science Foundation (NSF), which may be generated by the Science Experts Network Curriculum Vitae (SciENcv), a cooperative venture maintained at https://www.ncbi.nlm.nih.gov/sciencv/, and is also available at https://www.nsf.gov/bfa/dias/policy/nsfapprovedformats/cps.pdf. The use of a format required by another agency is intended to reduce the administrative burden to researchers by promoting the use of common formats.

Each current and pending support disclosure must be signed and dated and include the following certification statement:

I, [Full Name and Title], certify to the best of my knowledge and belief that the information contained in this Current and Pending Support Disclosure Statement is true, complete, and accurate. I understand that any false, fictitious, or fraudulent information, misrepresentations, half-truths, or omissions of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (18 U.S.C. §§ 1001 and 287, and 31 U.S.C. 3729-3733 and 3801-3812). I further understand and agree that (1) the statements and representations made herein are material to DOE's funding decision, and (2) I have a responsibility to update the disclosures during the period of performance of the award should circumstances change which impact the responses provided above.

If the fillable PDF NSF format is used, the individual must still include a signature, date, and a certification statement using the language included in the paragraph above. If the online version is used in SciENcv, a signature, date, and a certification statement must be attached until the SciENcv website automatically attaches a certification statement.

Definitions:

Current and pending support – (a) All resources made available, or expected to be made available, to an individual in support of the individual's RD&D efforts, regardless of (i) whether the source is foreign or domestic; (ii) whether the resource is made available through the entity applying for an award or directly to the individual; or (iii) whether the resource has monetary value; and (b) includes in-kind contributions requiring a commitment of time and directly supporting the individual's RD&D efforts, such as the provision of office or laboratory space, equipment, supplies, employees, or students. This term has the same meaning as the term Other Support as applied to researchers in NSPM-33: For researchers, Other Support includes all resources made available to a researcher in support of and/or related to all of their professional RD&D efforts, including resources provided directly to the individual or through the organization, and regardless of whether or not they have monetary value (e.g., even if the support received is only in-kind, such as office/laboratory space, equipment, supplies, or employees). This includes resource and/or financial support from all foreign and domestic entities, including but not limited to, gifts provided with terms or conditions, financial support for laboratory

personnel, and participation of student and visiting researchers supported by other sources of funding.

Foreign Government-Sponsored Talent Recruitment Program – An effort directly or indirectly organized, managed, or funded by a foreign government, or a foreign government instrumentality or entity, to recruit science and technology professionals or students (regardless of citizenship or national origin, or whether having a full-time or part-time position). Some foreign government-sponsored talent recruitment programs operate with the intent to import or otherwise acquire from abroad, sometimes through illicit means, proprietary technology or software, unpublished data and methods, and intellectual property to further the military modernization goals and/or economic goals of a foreign government. Many, but not all, programs aim to incentivize the targeted individual to relocate physically to the foreign state for the above purpose. Some programs allow for or encourage continued employment at U.S. research facilities or receipt of federal research funds while concurrently working at and/or receiving compensation from a foreign institution, and some direct participants not to disclose their participation to U.S. entities. Compensation could take many forms including cash, research funding, complimentary foreign travel, honorific titles, career advancement opportunities, promised future compensation, or other types of remuneration or consideration, including in-kind compensation.

Senior/key personnel – an individual who contributes in a substantive, meaningful way to the scientific development or execution of a research, development and demonstration (RD&D) project proposed to be carried out with DOE award.³

Name File: 2024 PhaseII Current and Pending Support "Insert ID #"

D.11.2 Coordination and Management Plan

Multiple PIs (multiple individuals i.e., Lead PI, Co-PI, etc.): The applicant, whether a single organization or team/partnership/consortium, must state whether the project will include multiple PIs. This decision is solely the responsibility of the applicant. If multiple PIs will be designated, the application must identify the Contact PI/Project Coordinator and provide a "Coordination and Management Plan" that describes the organization structure of the project as it pertains to the designation of multiple PIs. This plan should, at a minimum, include:

- Process for making decisions on scientific/technical direction;
- Publications;
- Intellectual property issues;
- Communication plans;
- Procedures for resolving conflicts; and
- PIs' roles and administrative, technical, and scientific responsibilities for the project.

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³ Typically, these individuals have doctoral or other professional degrees, although individuals at the masters or baccalaureate level may be considered senior/key personnel if their involvement meets this definition. Consultants, graduate students, and those with a postdoctoral role also may be considered senior/key personnel if they meet this definition.

Name File: 2024 PhaseII CMP "Insert ID #"

D.11.3 Letter of Authorization for DOE/NNSA FFRDCs

(Required for all National Laboratory participants listed on the application regardless of funding level or tier)

The cognizant contracting officer for the FFRDC must authorize in writing the use of DOE/NNSA FFRDC and non-DOE/NNSA FFRDC contractors on the proposed project, and this authorization must be submitted with the application. The following wording is acceptable for this authorization.

"Authorization is granted for the Fill-in 1: [Name] Laboratory to participate in the proposed project. The work proposed for the laboratory is consistent with or complimentary to the missions of the laboratory, will not adversely impact execution of the DOE/NNSA assigned programs at the laboratory, and will not place the laboratory in direct competition with the domestic private sector."

NOTE: Individual Letters of Authorization may be submitted as a blanket permission, if all FFRDC/non-FFRDC management has been notified of all submissions, and all participants are identified.

Name File: 2024 PhaseII CO Authorization "Insert ID #"

D.11.4 Project/Performance Site Location(s)

Indicate lead and collaborating site(s) where R&D work will be performed. Note the Project/Performance Site Congressional District is entered in the format of the 2-digit state code, following by the 3-digit Congressional district code (e.g., AA-001).

Name File: 2024 PhaseII Site Location "Insert ID #"

D.11.5 Disclosure of Lobbying Activities (Required for ALL applicants)

Applicants must complete and attach the SF-LLL, "Disclosure Form to Report Lobbying," which is available at the application site document library. Applicants must identify any funds, other than federally appropriated funds, that have been paid or will be paid, to any person for influencing, or attempting to influence, an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the grant.

Name File: 2024 PhaseII SF-LLL "Insert ID #"

D.11.6 Certifications and Assurances

(Required for all University leads)

Applicants must complete and attach the Certifications and Assurances form found on the DOE Financial Assistance Forms Page at: http://energy.gov/management/downloads/certifications-and-assurances-use-sf-424.

Name File: 2024 PhaseII Cert & Assurances "Insert ID #"

D.11.7 Foreign Government Ownership Disclosure (Required for all University leads)

Applicants must complete and attach the Foreign Government Ownership Disclosure template.

Name File: 2024 PhaseII Foreign Government Ownership Disclosure "Insert ID #"

D.11.8 Letters of Support or Commitment

D.11.8.1 Project Commitment to Energy Equity and Justice 40 Initiative (Optional)

Applicants are encouraged to describe how their projects or project teams will: (1) contribute to the Justice40 Initiative (as described in Part III A of this FOA); and/or (2) ensure energy justice through effective teams and/or partnerships with MSIs, including Historically Black Colleges and Universities (HBCUs) and Tribal Colleges and Universities (TCUs), or institutions located in a disadvantaged community.

Justice40 Initiative. Applicants may include information on how the projects supports the Justice40 Initiative, including for example:

- Extent to which the applicant identifies the following: specific and measurable benefits for DACs; how the benefits will flow to DACs; and how negative environmental impacts affecting DACs would be mitigated. Benefits include (but are not limited to) measurable direct or indirect investments or positive project outcomes that achieve or contribute to the following in DACs: (1) a decrease in energy burden; (2) a decrease in environmental exposure and burdens; (3) an increase in access to low-cost capital; (4) an increase in high-quality job creation, the clean energy job pipeline, and job training for individuals; (5) increases in clean energy enterprise creation and contracting (e.g., minority-owned or disadvantaged business enterprises); (6) increases in energy democracy, including community ownership; (7) increased parity in clean energy technology access and adoption; and (8) an increase in energy resilience.
- Extent to which the project would contribute to meeting the objective that 40% of the benefits of climate and clean energy investments will flow to DACs;
- The degree to which the proposed project provides funding to DACs or seeks to address communities with environmental justice concerns that experience disproportionate and adverse human health or environmental burdens in accordance with Executive Order 14096:
- Whether the entity is located in a DAC. The onus is on the applicant to self-identify whether it is located in a DAC or partners with an entity, located in a DAC;
- The degree to which the proposed project incorporates applicant or team members from DACs; and

• Whether the proposed project may directly or indirectly benefit DACs or has team member participants from DACs.

Ensure Energy Equity. (NOTE: Energy equity centers the concerns of disadvantaged communities and aims to make energy more accessible, affordable, clean, and democratically managed for all communities.) Applicants are also encouraged to describe how their projects or project teams contribute to energy equity. Applicants may include a section on how the projects ensures energy equity, including for example: the degree to which the proposed project incorporates team member diversity with participants from Minority Serving Institutions (e.g., Historically Black Colleges and Universities (HBCUs)/Other Minority Serving Institutions); and/or partnerships with Minority Business Enterprises, Minority Owned Businesses, Woman Owned Businesses, Veteran Owned Businesses, or Tribal nations.

Name File: 2024 EEandJustice40 "Insert ID#"

Table 2. Summary of Full Application Required Information

Name of Document	Format	Required From	Signature Required
Conflict-of-Interest	Checkbox	Certified by Lead Applicant for all Participants	-
SF-424 (R&R)	Form	Lead Applicant	Yes
Research and Related Other Project Information	Form	Lead Applicant	
Technical Abstract	PDF	Lead Applicant	
Technical Narrative	PDF	Lead Applicant	
Transition Plan	PDF	Lead Applicant	
Other Attachments			
Vitae - Technical Expertise and Qualifications (2 pages each)	PDF	All Leads and Key/Senior Personnel	
Benefits of Collaborations (4 pages)	PDF	Lead Applicant	
Capabilities (2 pages)	PDF	Lead Applicant	
SF-424 (R&R) Lead Budget Form (Total Fed + Non-Fed)	Form	All Lead Applicants	
SF-424 (R&R) Subaward Budget (Total Fed + Non-Fed), if applicable	Form	Collaborators who meet minimum requirements (work estimated to be \$250,000 or more or 50% of the total work effort, whichever is less)	
Budget for DOE National Laboratory Contractor or FFRDC, if applicable	PDF	National Laboratory Leads and Collaborators	Yes
Budget Justification	PDF	University Leads	
Subaward Budget Justification, if applicable	PDF	Collaborators who meet minimum requirements (work estimated to be \$250,000 or more or 50% of the total work effort, whichever is less)	
Current and Pending Support	PDF or	All University and Industry Leads	Yes, with

Name of Document	Format	Required From	Signature Required
	Form	and Key/Senior Personnel	certification statement from Part IV Section D.11.1
Coordination and Management Plan	PDF	Lead Applicant	
Authorization for DOE/NNSA FFRDCs, if applicable	PDF	National Laboratory Applicants (including non-funded national laboratory collaborators)	Yes
Project/Performance Site Location	Form	All sites performing work	
SF-LLL Disclosure of Lobbying Activities	Form	Lead Applicant	Yes
Certifications and Assurances	Form	University Leads	Yes
Foreign Government Ownership Disclosure	Form	University and Industry Leads	
(Optional) Letters of Support or Commitment	PDF	Optional	

E. SUBMISSION FROM SUCCESSFUL APPLICANTS

If selected for award, DOE reserves the right to request additional or clarifying information for any reason deemed necessary including but not limited to, the following:

- Indirect cost information;
- Other budget information;
- Name and phone number of the Designated Responsible Employee for compliance with national policies prohibiting discrimination (See 10 CFR Part 1040.5);
- Representation of Limited Rights Data and Restricted Software, if applicable;
- Commitment Letter from Third Parties Contributing to Cost Sharing, if applicable; and
- Environmental Checklist.

E.1 Environmental Checklist

An environmental checklist will be required at the time of award negotiations. If selected for award negotiations, please fill out the <u>Environmental Checklist</u>.

DOE's decision whether and how to distribute federal funds under this FOA is subject to the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321, *et seq.*). NEPA requires federal agencies to integrate environmental values into their decision-making processes by considering the potential environmental impacts of their proposed actions. For additional background on NEPA, please see DOE's NEPA website at https://www.energy.gov/nepa.

While NEPA compliance is a federal agency responsibility and the ultimate decisions remain with the federal agency, all recipients selected for an award will be required to assist in the timely and effective completion of the NEPA process in the manner most pertinent to their

proposed project. If DOE determines certain records must be prepared to complete the NEPA review process (e.g., biological evaluations or environmental assessments), the recipient may be required to prepare the records and the costs to prepare the necessary records may be included as part of the project costs.

E.2 Data Management Plan (DMP)

A Data Management Plan (DMP) will be required by October 31, 2024, that:

- 1. Should describe whether and how data generated in the course of the proposed research will be shared and preserved. If the plan is not to share and/or preserve certain data, then the plan must explain the basis of the decision (for example, cost/benefit considerations, other parameters of feasibility, scientific appropriateness, or limitations discussed in #4). At a minimum, DMPs must describe how data sharing and preservation will enable validation of results, or how results could be validated if data are not shared or preserved. DMPs may utilize the Nuclear Research Data System (NRDS) for storage of digital research data. NRDS is a newly developed NSUF High Performance Computing data repository solution that can provide secure lifecycle storage of NSUF and NEUP project data. Access to NRDS would be provided to the PI after award notification and before data is generated. Further details on the NRDS can be found at nsuf.nsuf.inl.gov.
- 2. Should provide a plan for making all research data displayed in publications resulting from the proposed research open, machine-readable, and digitally accessible to the public at the time of publication. This includes data that are displayed in charts, figures, images, etc. In addition, the underlying digital research data used to generate the displayed data should be made as accessible as possible to the public in accordance with the principles stated above. This requirement could be met by including the data as supplementary information to the published article, utilization of the NRDS, or through other means. The published article should indicate how these data can be accessed.
- 3. Should consult and reference available information about data management resources to be used in the course of the proposed research. In particular, DMPs that explicitly or implicitly commit data management resources at a facility beyond what is conventionally made available to approved users should be accompanied by written approval from that facility.
- 4. DMPs must protect confidentiality, personal privacy, Personally Identifiable Information, and U.S. national, homeland, and economic security; recognize proprietary interests, business confidential information, and intellectual property rights; avoid significant negative impact on innovation, and U.S. competitiveness; and otherwise, be consistent with all applicable laws, regulations, and DOE orders and policies. There is no requirement to share proprietary data.

F. SUBMISSION DATES AND TIMES

F.1 LOI Due Date

(Mandatory)

LOIs are required by July 12, 2023, no later than 5:00 p.m. Eastern Time (ET). The LOI shall be submitted as required in Part IV, Section C.1 of this Phase II Continuation CINR FOA.

F.2 Full Application Due Date

Full applications must be received by November 14, 2023, no later than 5:00 p.m. ET. Applicants are encouraged to transmit their applications well before the deadline. Applications received after the deadline will not be reviewed or considered for award.

F.3 Late Submissions, Modifications, and Withdrawals of Letters of Intent and Full Applications

Applicants are responsible for submitting any/all required submissions specified in this Phase II Continuation CINR FOA, including LOIs, applications, and any modifications or withdrawals thereto, so as to reach the Government office designated in the Phase II Continuation CINR FOA by the date/time specified in the Phase II Continuation CINR FOA.

Any required Phase II Continuation CINR FOA submittal, modification, or withdrawal received at the Government office designated in the Phase II Continuation CINR FOA after the exact time specified for receipt of that submittal is "late" and will not be considered.

A late modification of an otherwise successful submittal or application that makes its terms more favorable to the Government will be considered at any time it is received and may be accepted.

Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the required electronic submission, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

If an emergency or unanticipated event interrupts normal Government processes such that the required submittal cannot be received at the Government office designated for receipt of the submittal by the exact time specified in the Phase II Continuation CINR FOA, and urgent Government requirements preclude amendment of the Phase II Continuation CINR FOA, the time specified for receipt of the required submittal will be deemed to be extended to the same time of day, as specified in the Phase II Continuation CINR FOA, on the first work day on which normal Government processes resume.

Applications and other submittals may be withdrawn by written notice (sent electronically to NEUP@inl.gov) received at any time before the exact time set for receipt of that submittal. A required submittal may be withdrawn in person by an applicant or its authorized representative, if, before the exact time set for receipt of that submittal, the identity of the person requesting withdrawal is established and the person signs a receipt for the submittal.

If electronic applications cannot be submitted, applicants can contact:

INR Integration Office Attn: Megha Dubey PO Box 1625 MS 3730 Idaho Falls, Idaho 83415

Telephone: 208-526-5689

Fax: 208-526-1844

G. INTERGOVERNMENTAL REVIEW

This program is not subject to Executive Order 12372, "Intergovernmental Review of Federal Programs."

H. FUNDING RESTRICTIONS

Funding for all awards is contingent upon the availability of funds appropriated by Congress for the purpose of this program in current and future fiscal years.

H.1 Prohibition related to Foreign Government-Sponsored Talent Recruitment Programs

a. Prohibition

Persons participating in a Foreign Government-Sponsored Talent Recruitment Program of a Foreign Country of Risk are prohibited from participating in projects selected for federal funding under this FOA. Should an award result from this FOA, the recipient must exercise ongoing due diligence to reasonably ensure that no individuals participating on the DOE-funded project are participating in a Foreign Government-Sponsored Talent Recruitment Program of a Foreign Country of Risk. Consequences for violations of this prohibition will be determined according to applicable law, regulations, and policy. Further, the recipient must notify DOE within five (5) business days upon learning that an individual on the project team is or is believed to be participating in a foreign government talent recruitment program of a foreign country of risk. DOE may modify and add requirements related to this prohibition to the extent required by law.

b. Definitions

- 1. Foreign Government-Sponsored Talent Recruitment Program An effort directly or indirectly organized, managed, or funded by a foreign government to recruit science and technology professionals or students (regardless of citizenship or national origin, and whether having a full-time or part-time position). Some foreign government-sponsored talent recruitment programs operate with the intent to import or otherwise acquire from abroad, sometimes through illicit means, proprietary technology or software, unpublished data and methods, and intellectual property to further the military modernization goals and/or economic goals of a foreign government. Many, but not all, programs aim to incentivize the targeted individual to physically relocate to the foreign state for the above purpose. Some programs allow for or encourage continued employment at U.S. research facilities or receipt of Federal research funds while concurrently working at and/or receiving compensation from a foreign institution, and some direct participants not to disclose their participation to U.S. entities. Compensation could take many forms including cash, research funding, complimentary foreign travel, honorific titles, career advancement opportunities, promised future compensation, or other types of remuneration or consideration, including in-kind compensation.
- 2. Foreign Country of Risk DOE has designated the following countries as foreign countries of risk: Iran, North Korea, Russia, and China. This list is subject to

change.

H.2 Cost Principles

Costs must be allowable, allocable, and reasonable in accordance with the applicable Federal cost principles referenced in 2 CFR part 200, as adopted and amended by 2 CFR part 910. The cost principles for for-profit organizations are in FAR part 31.

NOTE: For for-profit organizations, 2 CFR 910.352 incorporates the cost principles located at the Federal Acquisition Regulation (FAR) part 31.

H.3 Pre-Award Costs

Recipients may charge to an award, resulting from this announcement, pre-award costs that were incurred within the ninety (90) calendar day period immediately preceding the effective date of the award if the costs are allowable in accordance with the applicable Federal cost principles. Recipients must obtain the prior approval of the contracting officer for any pre-award costs that are for periods greater than this 90-day calendar period.

Pre-award costs are incurred at the applicant's risk. DOE is under no obligation to reimburse such costs if for any reason the applicant does not receive an award or if the award is made for a lesser amount than the applicant expected.

I. OTHER SUBMISSION AND REGISTRATION REQUIREMENTS

I.1 Where to Submit

NOTE: Submit applications through <u>www.NEUP.gov</u> to be considered for award.

Submit electronic applications through the "Applications" function at www.NEUP.gov. For problems with completing the registration process or submitting your application, call Megha Dubey at 208-526-5689 or send an email to NEUP@inl.gov.

I.2 Application Validity Timeframe

By submitting an application in response to this Phase II Continuation CINR FOA, applicants agree that their applications are valid for at least one year from the date set forth for receipt of applications to this Phase II Continuation CINR FOA. DOE reserves the right (with concurrence of the applicant) to use the submitted application(s) to make additional awards for up to one year, even after DOE's initial selection announcement has occurred.

PART V – APPLICATION REVIEW INFORMATION

NOTE: The following requirements apply to all Phase II Continuation CINR FOA areas.

A. CRITERIA

A.1 LOI Review

At the LOI review stage, DOE will invite selected applicants to provide Full Applications, based on relevance to NE mission, technical merit, and past project performance, provided below in Part V, Sections A.1 of this Phase II Continuation CINR FOA.

All LOIs, as described in Part IV, Section C.1 submitted under this Phase II Continuation CINR FOA will be reviewed and scored, as described below in Part V, Sections A.1.

A.1.1 Initial Review Criteria of LOIs

Prior to a comprehensive merit evaluation, DOE will perform an initial review to determine the following: (1) the applicant is eligible for an award; (2) the application is tied to a currently awarded CINR project that concludes between January 1, 2024 and September 30, 2024 (3) the information required by the announcement has been submitted; and (4) all mandatory requirements are satisfied. Applications meeting these initial review criteria will be considered during the technical review process.

A.1.2 LOI Relevancy Criteria

Following the LOI initial review, programmatic experts will assess those applications that have met the LOI initial review criteria for relevance to the NE mission. All applications that meet the objectives of the FOA will move forward to technical review.

A.1.3 LOI Technical Review Merit Criteria

Several programmatic experts will assess each application on its technical merit. Reviewers will use project reports on current CINR project activities, in addition to the application materials, to evaluate the criteria. Reviewers will review the technical basis of the application, assigning the application a merit category as described below.

- Criterion 1 Advances the State of Knowledge and Understanding and Addresses Gaps in Nuclear Science and Engineering Research: DOE will evaluate the technical merit of the proposed R&D project, including the extent to which the project advances the state of knowledge and understanding and addresses gaps in nuclear science and engineering research. Evaluation will consider how important the proposed project is to advance knowledge and understanding within the area selected and how well the proposed project advances, discovers, or explores creative, original, or potentially transformative concepts.
- Criterion 2 Past project performance: DOE will evaluate the overall quality/acceptability of work on the current CINR project and the proposed plan for completion provided in the application. In evaluating this criterion, DOE may consider the following: (1) timeliness of deliverables, milestones, and reporting; (2) research progress; (3) student development and support; (4) and, research productivity (conference proceedings, journal articles, etc.).

• Criterion 3 – Applicant Team Capabilities, Risks, and Experience: DOE will evaluate the extent to which the applicant team provides objective evidence that it has the resources and abilities to successfully complete the R&D project in a technically defensible manner. Current activities, relevance and depth of the organization's experience and capabilities, past performance, together with that of the PI, and the adequacy of the requested resources and their supporting justification will all be evaluated as they relate to the likely successful completion of the R&D objectives.

After considering the overall evaluation scores, available funding, and the other selection factors (see Part V, Section A.4 of this Phase II Continuation CINR FOA) as needed, DOE will make a final determination of applicants who will be invited to provide Full Applications.

LOIs that do not receive an invitation to submit are not permitted to submit a Full Application.

A.1.4 Diverse Team Review

Up to 3 points may be contributed to the overall score during the merit review process based on the degree to which an application is led by or effectively partners with MSIs, including HBCUs and TCUs. (For a directory of MSIs, please visit: https://www2.ed.gov/about/offices/list/ope/idues/eligibility.html#el-inst.)

NOTE: Diverse teams and partnerships are not required for projects to be evaluated as unquestionably relevant; however, diverse teams and partnerships will increase the average overall score by up to 3 points, based on the project meeting one of the following criteria: (1) the project has a substantive contribution by MSIs as lead or collaborator; (2) the project has a demonstrable contribution by MSIs as lead or collaborator; or (3) the project has some relevant partnership with MSIs as lead or collaborator.

A.2 Initial Review Criteria of Full Applications

Prior to a comprehensive merit evaluation, DOE will perform an initial review to determine: (1) the applicant is eligible for an award; (2) the application is tied to a currently awarded CINR project that concludes on or before September 30, 2024 (3) the information required by the announcement has been submitted; and (4) all mandatory requirements are satisfied. Applications meeting these initial review criteria will be considered during the merit review and award selection decision.

A.3 Full Application Merit Review Criteria

Selection will be made in accordance with the review criteria identified for each area and the program policy factors (other selection factors) listed in Part V, Section A.4 of this FOA. All applications will be scored and ranked. Applications must be fully responsive to each of the following criteria.

Review of Full Applications shall be based on how well the applications meet or exceed the technical merit criteria provided below and as weighted as described in Table 3. All invited Full Applications submitted under this Phase II Continuation CINR FOA will be reviewed and scored as described in this Phase II Continuation CINR FOA. A panel of experts will assess each Full Application's relevance to the NE mission. Multiple technical peer reviewers will evaluate the

project for technical merit. Effective partnerships will be incorporated into the overall score, as described in Part V, Section A.1.4.

A.3.1 Relevancy Criteria

The same criteria used for the LOI evaluation phase applies to Full Applications. See Part V, Sections A.1 of this Phase II Continuation CINR FOA.

A.3.2 Technical Review Merit Attributes

Applications will be subjected to formal merit review and will be evaluated against the following criteria.

- Criterion 1 Advances the State of Knowledge and Understanding and Addresses Gaps in Nuclear Science and Engineering Research: DOE will evaluate the technical merit of the proposed R&D project, including the extent to which the project advances the state of knowledge and understanding and addresses gaps in nuclear science and engineering research. Evaluation will consider how important the proposed project is to advance knowledge and understanding within the area selected and how well the proposed project advances, discovers, or explores creative, original, or potentially transformative concepts.
- Criterion 2 Technical Quality of the Proposed R&D Project: DOE will evaluate the overall quality/acceptability of the proposed R&D project. In evaluating this criterion, DOE may consider the following: (1) integration of the past CINR award with the new scope of work, (2) merit, feasibility, and realism of the proposed methodology and approach to the project; (3) schedule, including sequence of project tasks, principle milestones, and times for each task; (4) planned assignment of responsibilities; (5) proposed project efficiencies; and (6) technical expertise available to the applicant in carrying out the project.
- Criterion 3 Applicant Team Capabilities, Risks, and Experience: DOE will evaluate the extent to which the applicant team provides objective evidence that it has the resources and abilities to successfully complete the R&D project in a technically defensible manner. Current activities, relevance and depth of the organization's experience and capabilities, past performance, together with that of the PI, and the adequacy of the requested resources and their supporting justification will all be evaluated as they relate to the likely successful completion of the R&D objectives.

In evaluating criterion 3, DOE will consider the extent to which the application demonstrates the following:

- That the capabilities and qualifications of engineering and scientific personnel, PI, and other key contributors are such that they can successfully accomplish the technical scope of the proposed project.
- That the applicant or respective team members have demonstrated successful experience/past performance, knowledge, and understanding of the business and regulatory requirements for projects of similar size, scope, and complexity in achieving project technical success on time with no significant, unresolved safety and quality issues.

 The applicant team's identification of, and work with nuclear energy stakeholders, to gain perspective and technical knowledge important to project decisions, and how the applicant will work with stakeholders to best achieve the objectives of this FOA and the project.

Table 3. R&D Full Applications - Weighting of Evaluation Scores

Criterion	
Technical Application – Peer Review	Percentage of Peer Review Score
Letters of Intent	
Criterion 1: Advances the State of Scientific Knowledge and Understanding and Addresses Gaps in Nuclear Science and Engineering Research	35%
Criterion 2: Project Performance	35%
Criterion 3: Applicant Team Capabilities, Risks, and Experience	30%
Full Applications	
Criterion 1: Advances the State of Scientific Knowledge and Understanding and Addresses Gaps in Nuclear Science and Engineering Research	35%
Criterion 2: Technical Quality of the Proposed R&D Project	35%
Criterion 3: Applicant Team Capabilities, Risks, and Experience	30%
Peer Review Score	Sum of ratings x weights
Relevancy to the NE mission	Yes/No
Diverse Team Review	Up to 3 points

A.4 Other Selection Factors

<u>Program Policy Factors</u>. The Selection Official may consider the following program policy factors in the selection process:

- Degree to which proposed project optimizes/balances/maximizes use of available DOE funding to achieve DOE program goals and objectives, including how projects support DOE research. It may also include research portfolio diversity, geographic distribution and/or how the projects support other complementary efforts that, when taken together, will best achieve program research goals and objectives.
- Application selection may optimize appropriate mix of projects to best achieve DOE research goals objectives.
- Cost/Budget considerations, including availability of funding.
- Extent that the applicant has awards in progress, or not completed, from DOE, from a previous year's FOA, or has existing NCE.

- Demonstrated ability of the applicant to successfully complete projects (including relevant prior projects) and do so within budget and within the specified timeframe of the award.
- Applicability across multiple reactor technologies, including future design types.
 Proposed cost share that exceeds minimum required amounts on the part of the applicant may be given preferential consideration.
- Applications that have national security concerns.
- Projects that contribute to energy equity.
- Projects that support the Justice 40 Initiative.

Applicants may provide this information on the Phase II Continuation CINR application form.

The Selection Official may consider any of the above factors independently in determining the optimum mix of applications that will be selected for support. These factors, while not indicators of the application's merit, may be essential to the process of selecting the application(s) that, individually or collectively, will best achieve the program objectives. Such factors are often beyond the control of the applicant. **Applicants should recognize that some very good applications might not receive an award because of program policy factors and available funding.** Therefore, the Selection Official may use the above factors to assist in determining which applications shall receive DOE funding support.

B. SUMMARY OF THE REVIEW AND SELECTION PROCESS

B.1 Letters of Intent

DOE will evaluate LOIs against the technical criteria and relevance to the NE mission described in this Phase II Continuation CINR FOA. This evaluation process will produce a list of recommended projects for each work scope. DOE will consider the overall evaluation results and program policy factors to select a final set of invited projects to provide a Full Application.

B.2 Full Applications

Multiple peer reviewers will independently evaluate the applications in accordance with the technical review evaluation criteria described in this Phase II Continuation CINR FOA. Also, DOE will complete a Relevancy Criteria Review in accordance with the criteria described above. DOE will consider the overall evaluation results and subjective programmatic factors to ultimately recommend a final set of applications for approval by the Selection Official.

B.3 Reporting of Matters Related to Recipient Integrity and Performance

DOE, prior to making a Federal award with a total amount of Federal share greater than the simplified acquisition threshold, is required to review and consider any information about the applicant that is in the designated integrity and performance system accessible through SAM (currently FAPIIS) (see 41 U.S.C. § 2313).

The applicant, at its option, may review information in the designated integrity and performance systems accessible through SAM. The applicant may comment on any information about itself

which a Federal awarding agency previously entered that is currently in the designated integrity and performance system accessible through SAM.

DOE will consider any written comments by the applicant, in addition to the other information in the designated integrity and performance system, in making a judgment about the applicant's integrity, business ethics, and record of performance under Federal awards when completing the review of risk posed by applicants as described in 2 CFR 200.205 - Federal awarding agency review of risk posed by applicants.

C. ANTICIPATED NOTICE OF SELECTION

DOE anticipates making selection announcements no later than July 31, 2024.

PART VI – AWARD ADMINISTRATION INFORMATION

A. AWARD NOTICES

A.1 Notice of Selection

DOE will notify applicants selected for award. This notice of selection is not an authorization to begin performance. (See Part IV, Section I.2 of this Phase II Continuation CINR FOA with respect to the allowability of pre-award costs.) Organizations whose applications have not been selected will be advised as promptly as possible. This notice will explain why the application was not selected.

A notice of Federal award, signed by the DOE Contracting Officer, is the authorizing award document for any grants awarded as a result of this Phase II Continuation CINR FOA. A post-selection/pre-award process will occur prior to issuing the actual award. This process includes such activities as a responsibility review/review of risk posed by the selected applicant, a technical and budget review of the selected applicant's proposed budget, etc. Once approved, DOE will provide the actual award notice to the recipient by electronic means.

A.2 Nondisclosure and Confidentiality Agreements Representations

In submitting an application in response to this Phase II Continuation CINR FOA, the Applicant represents that:

- It does not and will not require its employees or contractors to sign internal nondisclosure
 or confidentiality agreements or statements prohibiting or otherwise restricting its
 employees or contractors from lawfully reporting waste, fraud, or abuse to a designated
 investigative or law enforcement representative of a Federal department or agency
 authorized to receive such information.
- It does not and will not use any Federal funds to implement or enforce any nondisclosure and/or confidentiality policy, form, or agreement it uses unless it contains the following provisions:
 - "These provisions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive order relating to (1) classified information, (2) communications to Congress, (3) the reporting to an Inspector General of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety, or (4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive Orders and statutory provisions are incorporated into this agreement and are controlling."
- The limitation and representations above in Part VI, Section A.2 of this Phase II Continuation CINR FOA shall not contravene requirements applicable to Standard Form 312, Form 4414, or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

Notwithstanding the limitation and representations listed Part VI, Section A.2 of this Phase II Continuation CINR FOA above, a nondisclosure or confidentiality policy form or agreement that is to be executed by a person connected with the conduct of an intelligence or intelligence-related activity, other than an employee or officer of the U.S. Government, may contain provisions appropriate to the particular activity for which such document is to be used. Such form or agreement shall, at a minimum, require that the person will not disclose any classified information received in the course of such activity, unless specifically authorized to do so by the U.S. Government. Such nondisclosure or confidentiality forms shall also make it clear that they do not bar disclosures to Congress, or to an authorized official of an executive agency or the Department of Justice, that are essential to reporting a substantial violation of law.

A.3 Notice of Award

An assistance agreement issued by the Contracting Officer is the authorizing award document. It normally includes, either as an attachment or by reference, the following: (1) special terms and conditions; (2) applicable program regulations, if any; (3) application as approved by DOE; (4) DOE assistance regulations at 2 CFR part 200, as amended by 2 CFR part 910; (5) National Policy Assurances to be incorporated as award terms; (6) Budget Summary; and (7) Federal Assistance Reporting Checklist, which identifies the reporting requirements.

B. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS

B.1 Administrative Requirements

The administrative requirements for DOE grants and grants are contained in 2 CFR part 200, as amended by 2 CFR part 910 (See: http://ecfr.gov). Grants made to universities, non-profits, and other entities subject to Title 2 CFR are subject to the Research Terms and Conditions located on the National Science Foundation website at http://www.nsf.gov/bfa/dias/policy/rtc/index.jsp.

B.1.1 Unique Entity ID and SAM Requirements

Additional administrative requirements for DOE grants are contained in 2 CFR part 25 (see http://www.ecfr.gov/cgi-bin/ECFR?page=browse). Prime awardees must be registered in SAM before submitting an application and must continue to maintain a SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by DOE under this Phase II Continuation CINR FOA. Primes and subawardees at all tiers must obtain Unique Entity ID numbers and provide it to the prime awardee before the subaward can be issued. The prime will provide this valid Unique Entity ID in its application. DOE may not make a Federal award to an applicant until the applicant has complied with all applicable Unique Entity ID and SAM requirements and, if an applicant has not fully complied with the requirements by the time DOE is ready to make the award, DOE may determine that the applicant is not qualified to receive an award and use that determination as a basis for making an award to another applicant.

B.1.2 Subaward and Executive Reporting

Additional administrative requirements necessary for DOE grants to comply with the Federal Funding and Transparency Act of 2006 (FFATA) are contained in 2 CFR, part 170 (see http://www.ecfr.gov/cgi-bin/ECFR?page=browse). Prime awardees must register with the new FFATA Subaward Reporting System (FSRS) database and report the required data on their first

tier subawardees. Prime awardees must report the executive compensation for their own executives as part of their registration profile in the SAM.

B.2 Special Terms and Conditions and National Policy Requirements

The DOE special terms and conditions for use in most grants are located at http://energy.gov/management/office-management/operational-management/financial-assistance-forms under "Award Terms".

If the Federal share of any Federal award includes more than \$500,000 over the period of performance, post award reporting requirements reflected in 2 CFR part 200, Appendix XII—*Award Term and Condition for Recipient Integrity and Performance Matters*, may also apply to any resultant award made under this Phase II Continuation CINR FOA.

The National Policy assurances to be incorporated as award terms are located at http://www.nsf.gov/bfa/dias/policy/rtc/appc.pdf and at http://energy.gov/management/office-management/office-management/office-financial-assistance-forms under Award Terms.

Quality Assurance (QA) to be incorporated as award terms (applicable to educational institutions only). While DOE will normally rely on the institution's QA system, below are general guidelines that those systems should adhere to, as applicable, for the type of work being done. No separate deliverable is required by this provision, unless the institution's existing QA systems are not compliant with these guidelines, or in the case that the institution identifies that the work to be performed has any special or unique QA requirements. The DOE has the right of access to the university facilities and records for surveillance or inspection. Any surveillance or inspections will be coordinated with the PI.

Test Planning, Implementation, and Documentation (Research Planning)

- Test methods and characteristics shall be planned and documented, and the approaches and procedures recorded and evaluated. Characteristics to be tested and test methods shall be specified. The test results shall be documented and their conformance to acceptance criteria evaluated.
- Documentation shall be developed to ensure replication of the work. The researcher/developer shall document work methods and results in a complete and accurate manner. The level of documentation shall be sufficient to withstand a successful peer review. Protocols on generation and safeguarding of data and process development from research shall be developed for consistency of R&D work.
- Laboratory notebooks shall be controlled by a university documented procedure/process. Also, the process for development of intellectual property documentation shall be controlled under university document control procedures/processes.
- If the university identifies any special or unique QA requirements for Test Planning, Implementation, and Documentation, the university shall submit a Test Plan/Research Plan to the funding organization for review and concurrence prior to use.

Equipment Calibration and Documentation

The researcher shall specify the requirements of accuracy, precision, and repeatability of measuring and test equipment (M&TE). Depending upon the need for accuracy, precision, and repeatability of M&TE used in research, standard university documented procedures shall be implemented. During the process development stage, and for all R&D support activities, M&TE shall be controlled. The degree of control shall be dependent on the application of the measurement. The university shall have available calibration records documenting instrument calibration to a national standard.

Procurement Document Control

University documented procurement document control procedures/processes shall be implemented, if results of initial research work are expected in the next stage of work, and if the pedigree of materials being used could influence the usefulness of the research work results. Procurement document specifications shall be controlled. For development and support activities, the level of procurement document control shall be applied to support a design basis (i.e., engineering design system criteria). If procurement document control requirements apply, the university shall have a documented procedure/process for control of suspect/counterfeit items (S/CI) and have available for submission for DOE review material pedigree records.

Training and Personnel Qualification

Personnel performing research activities shall be trained per university documented requirements to ensure work is being conducted properly to prevent rework or the production of unacceptable data. The university shall have available personnel training records for submission for DOE review.

Records

In many cases, the notebook or journal of the researcher is the QA record. These documents shall be controlled in accordance with university documented procedure/process, e.g., maintain notebook as a controlled document, maintain copies of critical pages or access-controlled filing when not in use to preserve process repeatability and the QA record. Electronic media may be used to record data and shall be subject to documented administrative controls for handling and storage of data. Work activity records shall be maintained by the university and available for DOE review, upon request, within sixty (60) days of completion of the work scope.

Data Acquisition/Collection and Analysis

When gathering data, the researcher shall ensure that the systems and subsystems of the experiment are operating properly. Software systems used to collect data and operate the experiment requires verification that it meets functional requirements prior to collection of actual data. Data anomalies require investigation. When performing data analysis, define the following: (1) assumptions and the methods used; (2) the results obtained so that independent qualified experts can evaluate how data was interpreted; (3) methods used to identify and minimize measurement uncertainty; (4) the analytical models used; and (5) whether the R&D results have been documented adequately and can be validated.

Peer Review

Peer reviews shall be performed in accordance with peer review best practices as described in Part V of this Phase II Continuation CINR FOA. The peer reviews shall be documented and maintained by the university. Peer review documentation and results shall be provided to DOE.

B.3 Intellectual Property Provisions

The standard DOE financial assistance intellectual property provisions applicable to the various types of recipients are located at http://energy.gov/gc/standard-intellectual-property-ip-provisions-financial-assistance-awards.

B.4 Interim Conflict of Interest Policy for Financial Assistance

The DOE interim COI Policy can be found at Financial Assistance Letter No. FAL 2022-02 | Department of Energy. This policy is applicable to all non-Federal entities applying for, or that receive, DOE funding by means of a financial assistance award (e.g., a grant, cooperative agreement, or technology investment agreement) and, through the implementation of this policy by the entity, to each Investigator who is planning to participate in, or is participating in, the project funded wholly or in part under the DOE financial assistance award. DOE's interim COI Policy establishes standards that provide a reasonable expectation that the design, conduct, and reporting of projects funded wholly or in part under DOE financial assistance awards will be free from bias resulting from financial conflicts of interest or organizational conflicts of interest. The applicant is subject to the requirements of the interim COI Policy and within each application for financial assistance, the applicant must certify that it is, or will be by the time of receiving any financial assistance award, compliant with all requirements in the interim COI Policy. The applicant must flow down the requirements of the interim COI Policy to any subrecipient non-Federal entities.

B.5 Lobby Restrictions

By accepting funds under this award, the applicant agrees that none of the funds obligated on the award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. § 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

B.6 Corporate Felony Conviction and Federal Tax Liability Representations

In submitting an application in response to this Phase II Continuation CINR FOA, the applicant represents that:

- It is not a corporation that has been convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months; and
- It is not a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that

is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

For purposes of these representations the following definitions applies:

- A corporation includes any entity that has filed articles of incorporation in any of the 50 states, the District of Columbia, or the various territories of the United States (but not foreign corporations); and
- It includes both for-profit and non-profit organizations.

B.7 Statement of Federal Stewardship

DOE/NNSA will exercise normal Federal stewardship in overseeing the project activities performed under this award. Stewardship activities include, but are not limited to, conducting site visits; reviewing performance and financial reports; providing technical assistance and/or temporary intervention in unusual circumstances to correct deficiencies which develop during the project; assuring compliance with terms and conditions; and reviewing technical performance after project completion to ensure that the award objectives have been accomplished.

The recipient's responsibilities are listed in Part VI, Section B.7 below:

Recipient's Responsibilities. The recipient is responsible for:

- Complying with all award requirements, including performing the activities supported by this award, including providing the required personnel, facilities, equipment, supplies and services.
- Defining approaches and plans as may be required by this award, submitting the plans to DOE for review, and incorporating DOE's comments.
- Managing and conducting the project activities, including coordinating with DOE M&O contractor(s) as required and as proposed in the recipient's project plan on activities performed under the M&O contract(s) that are related to the project.
- Attending annual program review meetings and reporting project status, if requested by the program.
- Submitting technical reports as stated in the Federal Assistance Reporting Checklist and incorporating DOE comments.
- Completing reporting requirements as outlined in the instructions provided in the awards Attachment B "Federal Assistance Reporting Checklist and Instructions" including:
 - NE Program Information Collection System (PICS:NE): Phase II Continuation CINR FOA awarded PIs are required to complete reporting requirements as outlined in the instructions provided in the awards Attachment B "Federal Assistance Reporting Checklist and Instructions". Information provided in required award reporting will be utilized to populate PICS:NE (PICS:NE data entry will be done by DOE using information provided by the PI). PIs may be asked by the DOE PICS:NE representative for additional information during the initial work package setup process to accurately document the project plan, as well as through the award's project period to populate information in PICS:NE. PIs may be requested to provide

- additional assistance for clarification purposes in assuring accuracy of the information being entered into PICS:NE.
- NE Program Accrual Information: DOE policy requires the monthly tracking of uncosted obligations on financial assistance awards in the DOE accounting system to assist DOE in accomplishing more accurate project management and to more accurately recognize Department liabilities to the recipient. DOE personnel do this internally by subtracting paid costs and any costs accrued (yet to be paid incurred costs of the recipient) from the amounts obligated on the financial assistance award. In accomplishing this, DOE may request the recipient provide additional cost accrual information to accurately estimate/document the accrual in the DOE accounting system. If such information is needed, it will typically be done on awards over \$1M and DOE will normally do this using an e-mail to the recipient requesting the recipient identify the dollar value of work it has performed each month but not yet invoiced (or done a Treasury system draw on) as of month end. Recipients will cooperate with DOE in providing the needed cost accrual information.

NOTE: There are limitations on recipient responsibilities and authorities in the performance of the project activities. Performance of the project activities must be within the scope of the Statement of Objectives, the terms and conditions of the grant, and the funding and schedule constraints.

C. REPORTING

Reporting requirements are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, attached to the award agreement. A sample checklist is available at http://energy.gov/management/office-management/operational-management/financial-assistance-forms under Award Forms.

NOTE: A new award may be delayed due to delinquent reporting, including delinquent final reports for past awards.

NOTE: Phase II Continuation Projects will receive a unique DOE award number and will report as a separate project for all reporting activities.

NOTE: The DOE F 4600.2 identifies in box 4.E "Other Reporting", a marked checkbox titled "Other (see special instructions)", which requires submission of the following:

- Work Package Template (one time submission) Completed and submitted by the PI to assist DOE with populating general award information in the PICS:NE system. The template is due no later than 10/31/2024 for awardees in the above listed areas. The Work Package should contain milestones that are appropriate, meaningful and measurable, over the life of the project.
- Quad Chart (semi-annual submission) The chart is completed and submitted by the PI to provide NE program managers and technical leads with a quick "snap-shot" look at R&D progress.

PART VII – QUESTIONS/AGENCY CONTACTS

A. QUESTIONS

Interested parties are encouraged to ask questions as early in the Phase II Continuation CINR FOA process as possible. Questions and comments concerning this Phase II Continuation CINR FOA shall be submitted no later than five (5) business days prior to the application due date. Questions submitted after that date may not allow the Government sufficient time to respond.

Questions regarding the content of this Phase II Continuation CINR FOA must be submitted to the Agency Contact listed in Part VII, Section B of this Phase II Continuation CINR FOA. Questions pertaining to items such as application processes, eligibility, or application document requirements should also be directed to NEUP@inl.gov.

Questions relating to the registration process, system requirements, how an application form works, or the submittal process, must be directed to NEUP@inl.gov.

Answers to submitted questions containing information about the Phase II Continuation CINR FOA, work scopes and technical questions, or the FOA process that would be necessary for the preparation of applications will be posted to www.NEUP.gov as soon as practical. Information provided to a potential applicant in response to its request will not be disclosed if doing so would reveal the potential applicant's confidential business strategy and/or is otherwise protected. DOE will try to respond to a question within three (3) business days unless a similar question and answer have already been posted on the website.

B. AGENCY CONTACT

Name: Andrew Ford

E-mail: fordaj@id.doe.gov

C. INFORMATIONAL WEBINAR

DOE holds a webinar each year to discuss the structure and execution of this FOA, including major updates from previous years, including work scopes. Applicants can watch and participate in the live webinars and submit questions, through the GoToWebinar interface, to be answered in real time. Registration information and webinar presentations are available on www.NEUP.gov for review by applicants.

PART VIII – OTHER INFORMATION

A. MODIFICATIONS

Notices of any modifications to this announcement will be posted on www.FedConnect.net and www.NEUP.gov. It is recommended that the website is checked frequently at www.NEUP.gov to ensure you receive timely notice of any modifications or other announcements.

B. GOVERNMENT RIGHT TO REJECT OR NEGOTIATE

DOE reserves the right, without qualification, to reject any or all applications received in response to this announcement and to select any application, in whole or in part, as a basis for negotiation and/or award.

C. COMMITMENT OF PUBLIC FUNDS

The Contracting Officer is the only individual who can make awards or commit the Government to the expenditure of public funds. A commitment by anyone other than the Contracting Officer, either explicit or implied, is invalid.

Funding for all awards is contingent upon the availability of funds appropriated by Congress for the purpose of this program.

D. PROPRIETARY APPLICATION INFORMATION

Patentable ideas, trade secrets, proprietary or confidential commercial or financial information, disclosure of which may harm the applicant, should be included in an application only when such information is necessary to convey an understanding of the proposed project. The use and disclosure of such data may be restricted, provided the applicant includes the following legend on the first page of the project narrative and specifies the pages of the application which are to be restricted:

"The data contained in pages [Insert pages] of this application have been submitted in confidence and contain trade secrets or proprietary information, and such data shall be used or disclosed only for evaluation purposes, provided that if this applicant receives an award as a result of or in connection with the submission of this application, DOE shall have the right to use or disclose the data herein to the extent provided in the award. This restriction does not limit the government's right to use or disclose data obtained without restriction from any source, including the applicant."

To protect such data, each line or paragraph on the pages containing such data must be specifically identified and marked with a legend similar to the following:

"The following contains proprietary information that (name of applicant) requests not be released to persons outside the Government, except for purposes of review and evaluation."

E. EVALUATION AND ADMINISTRATION BY NON-FEDERAL PERSONNEL

In conducting the merit review evaluation, the Government may seek the advice of qualified non-Federal personnel as reviewers. The Government may also use non-Federal personnel to conduct routine, nondiscretionary administrative activities. The applicant, by submitting an application, consents to the use of non-Federal reviewers/administrators. Non-Federal reviewers must sign COI and non-disclosure agreements prior to reviewing an application. Non-Federal personnel conducting administrative activities must sign a non-disclosure agreement.

F. INTELLECTUAL PROPERTY DEVELOPED UNDER THIS PROGRAM

<u>Patent Rights</u>. Domestic small businesses and domestic nonprofit organizations will receive the patent rights clause at 37 CFR 401.14, i.e., the implementation of the Bayh-Dole Act. This clause permits domestic small business and domestic non-profit organizations to retain title to subject inventions.

<u>Class Patent Waiver</u>. For applicant's that are not domestic small businesses or nonprofit organizations, the Office Nuclear Energy (NE) Class Patent Waiver W(C) 2020-002 may be applicable to an award made under this announcement. The class patent waiver will provide applicants, not subject to the Bayh-Dole Act, the option to retain title to their own inventions, subject to the same government retained rights identified in the Act above. To receive the class waiver, an applicant, must agree to provide statutory minimum cost share required under the award and agree to substantially manufacture technology created under the award in the U.S., or provide other economic benefits to the U.S. in accordance with the U.S. Competitiveness provision set forth in the above-referenced class patent waiver.

Rights in Technical Data. Normally, the Government has unlimited rights in technical data created under a DOE agreement. Delivery or third-party licensing of proprietary software or data developed solely at private expense will not normally be required except as specifically negotiated in a particular agreement to satisfy DOE's own needs or to ensure the commercialization of technology developed under a DOE agreement.

Special Protected Data Statutes. This program is covered by a special protected data statute. These special protected data statutes apply to only those applicants who cost share. The provisions of the statute provide for the protection from public disclosure, for a period of up to five (5) years from the development of the information, of data that would be a trade secret, or commercial or financial information that is privileged or confidential, if the information had been obtained from a non-Federal party. Generally, the provision entitled, Rights in Data - Programs Covered Under Special Protected Data Statutes (Item 4 under 2 CFR 910, Appendix A to Subpart D), would apply to an award made under this announcement. This provision will identify data or categories of data first produced in the performance of the award that will be made available to the public, notwithstanding the statutory authority to withhold data from public dissemination, and will also identify data that will be recognized by the parties as protected data.

<u>Copyright</u>. The recipient and subrecipients may assert copyright in copyrightable works, such as software, first produced under the award without DOE approval. When copyright is asserted, the government retains a paid-up nonexclusive, irrevocable worldwide license to reproduce, prepare derivative works, distribute copies to the public, and to perform publicly and display publicly the

copyrighted work. This license extends to contractors and others doing work on behalf of the government.

U.S. Manufacturing. On June 07, 2021, DOE approved a DETERMINATION OF EXCEPTIONAL CIRCUMSTANCES (DEC) UNDER THE BAYH-DOLE ACT TO FURTHER PROMOTE DOMESTIC MANUFACTURE OF DOE SCIENCE AND ENERGY TECHNOLOGIES. In accordance with this DEC, all awards, including sub-awards, under this FOA shall include the U.S. Competitiveness Provision in accordance with Intellectual Property Provisions referenced at B.3. The Provision requires that any products embodying any subject invention or produced through the use of any subject invention will be manufactured substantially in the United States unless the recipient can show to the satisfaction of DOE that it is not commercially feasible. A copy of the DEC can be found at https://www.energy.gov/gc/determination-exceptional-circumstances-decs. Pursuant to 37 CFR § 401.4, any nonprofit organization or small business firm as defined by 35 U.S.C. 201 affected by any DEC has the right to appeal it by providing written notice to DOE within 30 working days from the time it receives a copy of the determination.

G. UNDERSTANDING COST SHARING REQUIREMENTS (Cost sharing is not required for universities and FFRDCs)

Department-wide cost sharing requirements are established by Section 988 of the Energy Policy Act of 2005. The DOE Financial Assistance Rules at 2 CFR part 200 and 2 CFR part 910 implement cost sharing requirements (see 2 CFR 200.306 and 2 CFR 910.130).

In accordance with section 988 (d) of the Energy Policy Act of 2005, Calculation of Amount, when calculating the amount of the non-Federal contribution, the Government:

- 1. May include the following costs as allowable in accordance with the applicable cost principles:
 - a. Cash.
 - b. Personnel costs.
 - c. The value of a service, other resource, or third-party in-kind contribution determined in accordance with the applicable circular of the Office of Management and Budget [Note: In-kind contributions, like any other cost, need to be incurred during the award project period, e.g., cannot give credit for costs incurred prior to the award, including prior development costs, unless otherwise authorized by the applicable cost principles].
 - d. Indirect costs or facilities and administrative costs.
 - e. Any funds received under the power program of the Tennessee Valley Authority (except to the extent that such funds are made available under an annual appropriation act).

Shall not include:

- f. Revenues or royalties from the prospective operation of an activity beyond the time considered in the award.
 - g. Proceeds from the prospective sale of an asset of an activity.
 - h. Other appropriated Federal funds.

The terms and conditions of the grant will include appropriate provisions on allowable costs.

The Federal share shall not be required to be repaid as a condition of award. Royalties should not be used to repay or recover the Federal share but may be used as a reward for technology transfer activities.

Cost share is often confused with some form of cost matching. The key to understanding how cost share works is to understand the base from which the cost share percentage is calculated. Cost share percentage is a percentage of the total allowable costs of the project. Note that it is NOT a percentage of the DOE funds, but rather the entire project, including all awardee funds, DOE funds, and all FFRDC requirements.

When determining the cost share requirement in dollars, it is first necessary to determine the entire project cost. Initially, no consideration would be given as to where the funds would come from. An applicant would determine that a certain cost (e.g., hours, travel, supplies, etc.) would be needed to complete the project as proposed in the application. Once the project cost is determined, an applicant can then calculate the cost share requirement by multiplying the cost share percentage by the project cost. The resulting dollar figure would be the dollar requirement that the applicant must provide as cost share.

Below are several examples of how the cost share amount would be calculated:

Example 1

The applicant determines that the following budget requirements are needed to carry out the work described in its application to DOE:

Direct Labor	\$100,000
Travel	\$3,000
Equipment	\$17,000
Supplies	\$10,000
Subcontract	\$20,000

Total Project Cost \$150,000

A cost share requirement of 20% was specified in the funding announcement.

Cost Share = (cost share percentage) × (total project cost)

Cost Share = $(20\%) \times (\$150,000)$

Cost Share = \$30,000

The applicant must now identify \$30,000 of \$150,000 as Cost Share.

The applicant would then request DOE funding in the amount of \$120,000.

DOE Share = \$120,000 Awardee Share = \$30,000

Example 2

The applicant determines that the following budget requirements are needed to carry out the work described in its application to DOE:

Total Project	\$300,000		
Supplies	\$60,000		
Equipment	\$10,000		
Travel	\$20,000		
Labor	\$10,000		
Direct	\$200,000		

A cost share requirement of 20% was specified in the funding announcement.

Cost Share = $(\cos t \text{ share percentage}) \times (total project cost)$

Cost Share = $(20\%) \times (\$300,000)$

Cost Share = \$60,000

The applicant must now identify \$60,000 of \$300,000 as Cost Share. DOE would pay \$60,000 directly to the FFRDC. The applicant would then request DOE funding in the amount of \$180,000.

DOE Share = \$180,000 (funds to Awardee) + \$60,000 (FFRDC) = \$240,000

Awardee Share = \$60,000

NOTE: FFRDC funds are paid directly to the FFRDC by DOE. The work provided by the FFRDC is still considered part of the total project cost; therefore, it is included in the base from which the awardee cost share is calculated.

In all cases, the applicant must specify the individual costs that make up each part of the total project cost and indicate whether DOE or non-DOE funds will be used to cover the cost.

The budget from **Example 1** might look something like the following:

		DOE	Non-DOE
Direct Labor	\$100,000	\$70,000	\$30,000
Travel	\$3,000	\$3,000	\$0
Equipment	\$17,000	\$17,000	\$0
Supplies	\$10,000	\$10,000	\$0
Subcontract	\$20,000	<u>\$20,000</u>	<u>\$0</u>
Total Project Cost	\$150,000	\$120,000	\$30,000

The application forms in this Phase II Continuation CINR FOA will facilitate the identification of funding sources.

H. NOTICE REGARDING ELIGIBLE/INELIGIBLE ACTIVITIES

Eligible activities under this program include those which describe and promote the understanding of scientific and technical aspects of specific energy technologies, but not those that encourage or support political activities such as the collection and dissemination of information related to potential, planned, or pending legislation.

I. NO-COST TIME EXTENSIONS

Unilateral no-cost time extensions will NOT be permitted to awards made under this Phase II Continuation CINR FOA. All no-cost time extensions must provide adequate justification and receive approval from the Contracting Officer. No-cost time extensions should be requested as soon as the need is identified within the last year of the award.

A request for a no-cost time extension on existing NE funded projects must only be made between October 1 - April 15. Any request outside of this period will need to be substantially justified and receive approval from the Contracting Officer. One no-cost time extension request may be granted for up to 12 months, pending review and approval. No-cost time extensions should be submitted only during the period of October 1 – April 15 to MEUP@inl.gov.

J. REBUDGET REQUEST

Any rebudget request where the cumulative amount of such change is expected to exceed 10 percent of the total budget as last approved by the Federal awarding agency must be requested in writing (see 2 CFR 200.308). The request must include a detailed budget justification, and an updated budget in the same format that was used in the original application. Any request for the purchase of equipment exceeding \$5,000 must be requested in writing to include a valid quote, and justification for purchase.

Budget forms can be found at: https://www.energy.gov/management/downloads/sf-424-research-and-related-budget-rr

K. CONFERENCE SPENDING

The recipient shall not expend any funds on a conference not directly and programmatically related to the purpose for which the grant was awarded that would defray the cost to the United States government of a conference held by any executive branch department, agency, board, commission, or office for which the cost to the United States government would otherwise exceed \$20,000, thereby circumventing the required notification by the head of any such executive branch department, agency, board, commission, or office to the inspector general (or senior ethics official for any entity without an inspector general), of the date, location, and number of employees attending such conference.