

**FINANCIAL ASSISTANCE
FUNDING OPPORTUNITY ANNOUNCEMENT**



U. S. Department of Energy

Idaho Operations Office

**Fiscal Year 2025 Scientific Infrastructure Support for
Consolidated Innovative Nuclear Research**

Funding Opportunity Announcement: DE-FOA-0003312

Announcement Type: Initial – May 20, 2024

Assistance Listings Number: 81.121

Informational Webinar	May 9, 2024 (Video links and presentations will be available at www.NEUP.gov)
FOA Issue Date	May 20, 2024
Application Due Date	July 17, 2024, at 5:00 p.m. Eastern Time
Estimated Notice of Selections	End of March 2025

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

Registration Requirements

There are several one-time actions applicants must complete in order to submit an application in response to this Announcement (e.g., obtain Unique Entity Identifier (UEI) number, register with the System for Award Management (SAM), and create an account on the NEUP.gov website at: www.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.

The applicant must complete or have already completed the following actions:

- (1) Register with the SAM: <https://www.sam.gov/>. For more information about SAM registration for applicants please refer to: <https://www.sam.gov/content/entity-landing>.
- (2) Obtain the Unique Entity Identifier (UEI) generated 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 funding opportunity announcement (FOA)** must be submitted using the contact information found at Part VII, Section B, of this FOA. DOE will try to respond to a question within three (3) business days unless a similar question and answer has 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 Section IV of this FOA.

Application Submission

Instructions and a copy of the FOA can be found at www.NEUP.gov.

Electronic applications and instructions are available at the NEUP 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 INR Integration Office at 208-681-3848 or at neup@inl.gov.

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LIST OF ACRONYMS

CFR	Code of Federal Regulations
CINR	Consolidated Innovative Nuclear Research
CO	Contracting Officer
COI	Conflict of Interest
DAC	Disadvantaged Community
DE	Department of Energy (FOA Number)
DOE	Department of Energy
FC R&D	Fuel Cycle Research and Development
FFATA	Federal Funding and Transparency Act of 2006
FOA	Funding Opportunity Announcement
FSRS	FFATA Subaward Reporting System
FY	Fiscal Year
GSI	General Scientific Infrastructure
HBCU	Historically Black Colleges and Universities
HPC	High-Performance Computing
INL	Idaho National Laboratory
MSI	Minority-serving Institution
NE	Office of Nuclear Energy
NEAMS	Nuclear Energy Advanced Modeling and Simulation
NEID	Nuclear Energy Infrastructure Database
NEUP	Nuclear Energy University Program
NS&E	Nuclear Science & Engineering
NSUF	Nuclear Science User Facilities
OMI	Other Minority Institutions
PDF	Adobe Portable Document Format
PI	Principal Investigator
QA	Quality Assurance
RC RD&D	Reactor Concepts Research, Development and Demonstration
RU	Reactor Upgrades
R&D	Research and Development
RD&D^(OBJ)	Research, Development and Demonstration
SAM	System for Award Management
SF	Standard Form
UEI	Unique Entity Identifier
U.S.	United States

CHECKLIST FOR AVOIDING COMMON ERRORS

Item	Issue
Page Limits	<p>Strictly follow page limits and font size throughout application documents, including, but not limited to:</p> <ul style="list-style-type: none"> - Project Summary/Abstract File (use appropriate template) - Project Narrative File (8 pages) - Project Team Curriculum Vitae (3-page max. each CV)
Project Summary/Abstract	Name of applicant, Principal Investigator (PI), PI's institutional affiliation(s), project title, objectives of the project, description of the project, potential impact, and major participants
Budget	Use current negotiated indirect cost and fringe benefit rates
Budget Justification (attached to budget)	Justify all requested costs
Vendor Quotes (Referenced costs (catalog pricing) or other basis for estimate)	Submit vendor quotes for any single item over \$5,000
Current and Pending Support	Ensure complete listing of all activities, including brief abstract of scope of work for all items listed, regardless of source of funding.
Certifications and Assurances	Ensure that signatures are complete for <u>both</u> sections of the certifications and assurances documentation (typically, three (3) signatures are required).
Font Size	Pay particular attention to required font format and sizes, typically, Times New Roman, 11 pt. font.
Forms	Use associated links for any/all forms.

PART I FUNDING OPPORTUNITY DESCRIPTION

This Funding Opportunity Announcement (FOA) is for General Scientific Infrastructure Support for Consolidated Innovative Nuclear Research (CINR) and University Research Reactor Upgrades (RU) Infrastructure Support for the U.S. nuclear research community. It is referred to in this document as the “Infrastructure FOA.”

A. BACKGROUND AND OBJECTIVES

The Office of Nuclear Energy’s (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 reactors 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.

The development of nuclear energy-related infrastructure and basic capabilities in the research community is necessary to promote Research and Development (R&D) that supports nuclear science and engineering (NS&E), NE’s mission, and the nation’s nuclear energy challenges. Accordingly, the Department of Energy (DOE) intends to facilitate the education and training of nuclear scientists, engineers, and policymakers through graduate and undergraduate study, two-year programs, and R&D that is relevant to the Department and the U.S. nuclear energy industry in general.

Within the Nuclear Energy University Program (NEUP), the specific goals of this Infrastructure FOA are:

- To support, maintain, or enhance the institution’s capacities to attract and teach high quality students interested in nuclear energy-related studies;
- Build the institution’s research or education capabilities; and
- Enhance the institution’s capabilities to perform R&D that is relevant to NE’s mission.

The following targeted objectives within this Infrastructure FOA will aid in achieving these goals:

- (1) Upgrade and improve U.S. university nuclear research and training reactors.**
Upgrades for a research reactor that include the acquisition of equipment and/or instrumentation for activities related to safety, performance, control, or operational reliability. For example, equipment acquired for security/safety enhancements required by the federal/state/local regulatory agencies are permitted.

- (2) **Obtain equipment and instrumentation that significantly improves or expands the research, instruction, training capabilities, and/or operating capabilities** related to NE program missions (e.g., utilization or handling of radiological or radioactive materials). For example, this may include radiation detection and measurement equipment.
- (3) **Contribute to strengthening the academic community's nuclear engineering infrastructure.**

Requests should focus on individual, discrete, definable items, or capabilities. An applicant must demonstrate the educational or R&D connection between requested pieces of equipment to support the NE mission. Applications made of several uncorrelated equipment requests are not of interest. A request should not duplicate existing capabilities. To review existing NE R&D capabilities in the U.S., refer to the Nuclear Energy Infrastructure Database (NEID), available at <https://nsuf.inl.gov> under Resources (account login required). Information on current NE research programs can be found at NE's website: <https://energy.gov/ne>.

NE reserves the right to respond to potential shifts in priorities during FY 2024 that may be driven by events, policy developments, or Congressional/budget direction. NE will factor such considerations into decisions related to the timing and scale of award announcements associated with this FOA.

B. RELATED COLLABORATIVE OPPORTUNITIES

Utilization of equipment acquired through this Infrastructure FOA may have the potential to enhance or benefit currently funded or proposed NE R&D projects.

Nuclear Science User Facilities (NSUF)

NE provides nuclear energy researchers access to world-class capabilities to facilitate the advancement of nuclear science and technology through the NSUF. Access to the capabilities of the NSUF is granted through the separate FY 2025 CINR FOA (DE-FOA-0003309). The NSUF provides state-of-the-art experimental irradiation testing and post-irradiation examination facilities, as well as technical assistance in design and analysis of reactor experiments at no cost to the user. This access allows university, national laboratory, and industry researchers and their collaborators to build on current knowledge to better understand the complex behavior of materials and fuels in the radiation environment of a nuclear reactor.

The NSUF at the Idaho National Laboratory (INL) and its partner facilities represent a prototype laboratory for the future. This unique model is best described as a distributed partnership with each facility bringing exceptional capabilities to the relationship, including reactors, beamlines, state-of-the-art instruments, hot cells, and most importantly, expert mentors. Together, these capabilities and people create a nationwide infrastructure that allows the best ideas to be investigated, using the most advanced capabilities. Information about existing capabilities within the NSUF can be found on the website (nsuf.inl.gov).

Awarding of infrastructure grants through this FOA is one of the methods to expand the NSUF to serve more users. The role that a requested capability might play should be emphasized in an application. If the NSUF determines the new equipment/capability adds significant value to DOE, the host institution may be invited to join the NSUF partnership so that the equipment may

be available to other researchers. As the NSUF focuses on investigating the effects of irradiation on nuclear fuels and materials, applications for capabilities that can accommodate work with radioactive/irradiated materials (>5mrem/hr @ 30 cm, beta/gamma only) will be given higher priority.

The NSUF provides access to high-performance computational (HPC) resources at INL at no charge to users. Consequently, applications requesting to purchase scientific computing equipment (such as institutional clusters, HPC nodes, etc.) will not be entertained. See nsuf.inl.gov or hpc.inl.gov for information on accessing HPC resources through the NSUF.

Applicants targeting infrastructure upgrades for an existing or prospective NSUF partner facility are required to specifically address how the upgrades will enhance the NSUF program. Additionally, the applicant must address how the upgrades will maintain relevance at an NSUF partner facility.

Visit the NSUF website <https://nsuf.inl.gov> and contact nsuf@inl.gov for information on becoming an NSUF partner.

C. FUNDING OPPORTUNITY AREAS

DOE is seeking applications under the Infrastructure FOA in the following areas:

Area	Number of Applications Allowed
University Research Reactor Upgrades (RU) Infrastructure Support	One (1) application from each institution for each reactor
General Scientific Infrastructure (GSI) Support for Universities	One (1) application from each institution

NOTE: If a university operates two (2) research reactors, it may submit a total of three (3) applications under this FOA, one (1) for each reactor for a total of two (2) under the RU area and one (1) under the GSI area for a total of three (3) applications).

C.1 University Research Reactor Upgrades (RU) Infrastructure Support

This section summarizes derived requirements, restrictions, and preferences related to University Research RU Infrastructure Support.

Please note the following:

- The primary purpose of this FOA area is to improve the safety, security, and operational reliability of university research reactors. Applications addressing those needs will be given highest priority.
- This FOA area covers the procurement of spare parts and associated hardware for research reactor control consoles. These systems are vital for continued safe and reliable reactor operation. Replacements often take months from order to delivery. Applications to support continued long-term operation of the university research reactor by purchasing spare parts, subsystems, channels, and detectors are encouraged.
- NE reserves the right to award portions of a request so that available funding can have the

highest impact for the research reactor community.

- Infrastructure requests that support the sharing and use of equipment and instrumentation by multiple campuses of a university or multiple universities are encouraged.

Requests for equipment and associated upgrades, specifically for general scientific laboratories, are addressed in the next section, Part I - C.2.

C.2 General Scientific Infrastructure (GSI) Support for Universities

This section summarizes derived requirements, restrictions, and preferences related to GSI Support for Universities. All eligible institutions of higher education can submit applications under the GSI area that support NE's mission and objectives by specifically supporting or improving the instructional mission of the university.

Please note the following:

- Under this FOA area, applications can be submitted for equipment, software, instrumentation, and associated non-reactor upgrade requests that support nuclear energy-related R&D or education.
- Funding requests may include, but are not limited to, equipment and instrumentation for specialized facilities, classrooms, and teaching laboratories, and non-reactor NS&E research.
- Infrastructure requests that support the sharing and use of equipment and instrumentation by multiple campuses of a university, multiple universities, or with national laboratories are encouraged.
- Equipment and associated upgrades specifically for university research reactors are the subject to the RU area of this FOA.
- Infrastructure requests that support existing or future NSUF capabilities at institutions of higher education are encouraged.

D. ELIGIBILITY AND APPLICATION RESTRICTIONS

In accordance with 2 CFR 910.126(b), eligibility for award is restricted to U.S. institutions of higher education.

D.1 University Research Reactor Upgrades (RU) Infrastructure Support

The following institutions with research reactors are eligible to submit applications under the RU area. Each institution is permitted to submit a **single, separate** application for each research reactor that it operates.

1	Idaho State University	13	The Ohio State University
2	Kansas State University	14	University of California, Davis
3	Massachusetts Institute of Technology	15	University of California, Irvine
4	Missouri University of Science & Technology	16	University of Florida
5	North Carolina State University	17	University of Maryland, College Park
6	Oregon State University	18	University of Massachusetts, Lowell
7	Pennsylvania State University	19	University of Missouri, Columbia
8	Purdue University	20	University of New Mexico
9	Reed College	21	University of Texas at Austin
10	Rensselaer Polytechnic Institute	22	University of Utah
11	Rhode Island Nuclear Science Center	23	University of Wisconsin, Madison
12	Texas A&M University	24	Washington State University

D.2 General Scientific Infrastructure Support for Universities.

Institutions of higher education are permitted to submit **one single** application to GSI support section of this FOA area per institution.

D.3 General Application Restrictions

An application to either RU or GSI areas is restricted to equipment for activities supporting research, teaching, and education, such as the purchase, set-up, and vendor installation costs for equipment and instrumentation, as well as building modifications that immediately support the installation and operation of the equipment. The following costs are not allowed under this FOA for both areas:

- Application shall not include hiring or other human capital costs;
- Indirect costs shall not be allowed;
- The application shall not include the cost of routine operation and maintenance of equipment;
- Installation costs for equipment and instrumentation that are beyond the vendor's standard installation cost shall not be allowed;
- Institution-specific costs, not specific to the equipment or instrumentation, are the responsibility of the applicant. For example, if a vendor needs to meet safety and health requirements to access the campus or a facility, then these costs are the responsibility of the applicant; and

- Funds are restricted to equipment for activities supporting research, teaching, and education. Upgrades that directly increase operational profit or support for commercial activities shall not be allowed.

Accordingly, DOE reserves the right to consider the results of its ongoing evaluation of priorities as part of the award selection process.

D.4 Statutory Authority

The activities to be supported under this FOA are authorized under § 951 (a) of the Energy Policy Act of 2005, as codified at 42 U.S.C. § 16271(a). Additionally, 42 U.S.C. § 16274 and 31 U.S.C. § 6304 applies.

PART II AWARD INFORMATION

A. TYPE OF AWARD INSTRUMENT

DOE anticipates awarding grants to universities and colleges.

B. ESTIMATED FUNDING

The estimated amounts identified for each FOA area are contingent upon Congressional appropriations and is subject to significant change.

B.1 University Research Reactor Upgrades (RU) Infrastructure Support

DOE currently estimates that it will fund approximately **\$2.5 million** in awards for University Research RU Infrastructure Support.

B.2 General Scientific Infrastructure (GSI) Support for Universities

DOE currently estimates that it will fund approximately **\$2.5 million** in awards for University GSI support.

C. MAXIMUM AND MINIMUM AWARD SIZE

For the two FOA areas, the maximum amount of funding available for an individual award under this area is identified as the FOA ceiling, and the minimum amount of funding available for an individual award under this area is identified as the floor. The ceilings and floors are listed below:

	University Research Reactor Upgrades Infrastructure Support	General Scientific Infrastructure Support for Universities
Federal Floor (i.e. minimum amount for an individual award made under this announcement)	None	None
Federal Ceiling (i.e. maximum amount for an individual award made under this announcement)	\$5,000,000	\$5,000,000
Anticipated Awards	Multiple smaller awards that are no more than \$1,500,00 each	Average award will be approximately \$250,000 for the total project period
Cost Share / Cost Match Requirement *	No Cost Share / No Cost Match	No Cost Share / 1:1 Cost Match >\$250k**

* Definition of Cost Sharing and Cost Matching is located in Part VIII - G.

**For additional details, refer to Part III - C. "Cost Matching For General Scientific Infrastructure (GSI) Support Applications"

D. EXPECTED NUMBER OF AWARDS

The estimated amounts, identified for each FOA area, are contingent upon Congressional appropriations and are subject to change. However, DOE anticipates making numerous awards under each FOA area, depending on the quality of the submissions and availability of funds. DOE reserves the right to make no awards under this announcement.

E. PERIOD OF PERFORMANCE

DOE anticipates making awards with an estimated project performance period of 1 year, beginning August 1, 2025. Additional time, if needed, may be requested, and justified in the application.

F. TYPE OF APPLICATION

DOE will only accept new applications under this announcement.

PART III ELIGIBILITY INFORMATION

The following requirements apply to all FOA areas unless specific requirements are identified.

A. ELIGIBLE APPLICANTS

Universities and Colleges: In accordance with 2 CFR 910.126(b), eligibility for award is restricted to U.S. universities and colleges. Please see Part I - D for additional restrictions.

To support the goal of building a clean and equitable energy economy, NE strives to contribute to the President's environmental justice objectives, including energy justice and energy equity. Energy justice objectives include the goal that 40% of the overall benefits of certain Federal investments flow to disadvantaged communities (DAC) (the Justice40 Initiative)¹. For energy justice, certain Federal investments focus on the areas of climate change; clean energy and energy efficiency; clean transit; affordable and sustainable housing; training and workforce development; the remediation and reduction of legacy pollution; and the development of critical clean water infrastructure to spur economic development and job creation in disadvantaged communities throughout the U.S..

In support of the Justice40 Initiative, the White House has developed the Climate and Economic Justice Screening Tool (CEJST) tool to identify disadvantaged communities. CEJST can be found at <https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5>. If a project will benefit a DAC, applicants should use CEJST to define and identify the specific DAC and describe in detail in its narrative how the project will benefit the identified DAC. Benefits are measured as monetary and nonmonetary investment.

NE also strives to ensure the President's energy equity objectives are met through effective teams and/or partnerships with Minority Serving Institutions (MSI), including Historically Black Colleges and Universities (HBCU), and Tribal Colleges and Universities (TCU). Applicants are encouraged to partner with MSIs, including HBCUs, and TCUs.

Information on MSI can be found at <https://www2.ed.gov/about/offices/list/ope/itudes/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. The Office of Science has compiled a similar list of institutions: <https://science.osti.gov/grants/Applicant-and-Awardee-Resources/Institution-Designations>. **These lists are 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.

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>.

B. COST SHARING

For both RU and GSI areas, cost sharing is NOT required, but it is encouraged. A general explanation of cost sharing is located in Part VIII - G.

C. COST MATCHING FOR GENERAL SCIENTIFIC INFRASTRUCTURE (GSI) SUPPORT APPLICATIONS

To maximize the use of available NE funding, cost matching is required on a 1:1 dollar match for requested amounts greater than \$250,000 for applications under the GSI area. A general explanation of cost matching is located in Part VIII - G. For example, if a \$300,000 project is proposed, cost matching requirements apply to \$50,000 of this amount (the amount over \$250,000), and the recipient would be required to contribute \$25,000. This requirement may not be waived. There is no cost matching requirement for University Research RU Infrastructure Support Awards.

For cost match, applicants 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 Subpart E—Cost Principles—of [2 CFR Part 200](#). For recipients that are for-profit organizations as defined by [2 CFR 910.122](#), the Cost Principles which apply are contained in [48 CFR Part 31 Subpart 31.2](#). See [§ 910.352](#) for further information. [NOTE: In-kind contributions, like any other cost, need to be incurred during the award project period (e.g., DOE 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; and
- 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).

Applicants shall not include:

- a. Revenues or royalties from the prospective operation of an activity beyond the time considered in the award;
- b. Proceeds from the prospective sale of an asset of an activity; and
- c. Other appropriated Federal funds.

D. OTHER ELIGIBILITY REQUIREMENTS

Applicants targeting infrastructure upgrades for an existing or prospective NSUF partner facility are required to specifically address how the upgrades will enhance the NSUF program. Additionally, the applicant must address how the upgrades will maintain ongoing relevance at an NSUF partner facility.

- Visit the NSUF website (<https://nsuf.inl.gov>) and contact nsuf@inl.gov for information on becoming an NSUF partner.
- If the NSUF determines the new equipment/capability adds significant value to DOE, the equipment/capability may be invited to join the NSUF, so the equipment is available to other researchers. Information about existing capabilities within the NSUF can be found on the website (nsuf.inl.gov) or a more general overview of capabilities throughout the world can be found in the NEID available at <https://nsuf.inl.gov> under Resources.

PART IV APPLICATION AND SUBMISSION INFORMATION

Note: The requirements apply to all FOA areas unless specific requirements are identified.

A. ADDRESS TO REQUEST APPLICATION PACKAGE

Electronic applications and instructions are available at the www.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.

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), using 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. LETTER OF INTENT AND PRE-APPLICATION

C.1 Letter of Intent

Letters of Intent are not required.

C.2 Pre-applications

Pre-applications are not required.

D. CONTENT AND FORM OF APPLICATION

Applicants **must** complete the mandatory forms, and any applicable optional forms (e.g.,

Disclosure of Lobbying Activities), in accordance with the instructions in sub-sections D.1 through D.13. Files attached to forms must be merged into a single PDF file, unless otherwise specified in the instructions. The following table summarizes all the required forms and files for an application. Optional forms and files are identified below.

Required Form/File	Format	File Name	Signature Required
Application for Federal Assistance – SF-424	Form	FY25 SF424 Fed Assist [TRACKING ID#].pdf	Yes
Project/Performance Site Location(s)	Form	FY25 Performance Site [TRACKING ID#].pdf	
Project Summary/Abstract File	PDF	FY25 Summary Abstract [TRACKING ID#].pdf	
Project Narrative File (limit of 8 pages)	PDF	FY25 Project Narrative [TRACKING ID#].pdf	
Project Team Curriculum Vitae (limit of 3 pages per Vitae)	PDF	FY25 CV [PI NAME] [TRACKING ID#].pdf	
SF-424A Excel – Budget Information for Non-Construction Programs	Excel	FY25 Budget SF424A [TRACKING ID#].xls	
Cost Sharing and Cost Matching Letter(s) of Commitment (if applicable)	PDF	FY25 Commitment Letter [TRACKING ID#].pdf	
Budget Justification File	PDF	FY25 Budget Justification [TRACKING ID#].pdf	
Vendor Quotes (applicable if over \$5K)	PDF	FY25 Vendor Quotes [TRACKING ID#].pdf	
Current and Pending Support	PDF	FY25 Support [TRACKING ID#].pdf	
Potentially Duplicative Funding Notice (if applicable)	PDF	FY25 PDFN [TRACKING ID#].pdf	
Interim Conflict of Interest Policy	PDF	FY25 COI Disclosure [TRACKING ID#].pdf	
Disclosure of Lobbying Activities (SF-LLL)	Form	FY25 SF-LLL [TRACKING ID #].pdf	Yes
Certifications and Assurances	PDF	FY25 Cert & Assurances [TRACKING ID#].pdf	
Transparency of Foreign Connections	PDF	FY25 TFC [TRACKING ID#].pdf	
Project Commitment to Energy Justice and Energy Equity (Optional)	PDF	FY25 EEandJustice40 [TRACKING ID#].pdf	

D.1 SF-424 – Application for Federal Assistance

Complete all required fields in accordance with the pop-up instructions on the form. The correct

form to use is the Application for Federal Assistance SF-424 (OMB 4040-0004), which is available at: www.NEUP.gov. The list of certifications and assurances referenced in Field 21 can be found on the DOE Financial Assistance page at: <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms> under Certifications and Assurances.

Save form as:

“FY25 SF424 Fed Assist [TRACKING ID#].pdf”

D.2 Project/Performance Site Location(s)

Insert the primary site where the work will be performed. If a portion of the project will be performed at any other site(s), identify the site location(s) in the blocks provided.

NOTE: The Project/Performance Site Congressional District is entered in the format of the two-digit state code followed by a dash and a three-digit Congressional district code (i.e., VA-001). Hover over the field in the form for additional instructions.

Use the “Next Site” button to expand the form to add additional Project/Performance Site Locations.

Save form as:

“FY25 Performance Site [TRACKING ID#].pdf”

D.3 Project Summary/Abstract File

The one (1) page 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 name of the applicant, the project director/PI(s), the project title, the objectives of the project, a description of the project, including methods to be employed, the potential impact of the project (i.e., benefits, outcomes), and major participants (for collaborative projects). Do not include any proprietary or sensitive business information in this document, because, if an award is made, the Department may make it available to the public.

Page limit: 1-page

Save this information in a file named:

"FY25 Summary Abstract [TRACKING ID#].pdf"

D.4 Project Narrative File

The project narrative must not exceed eight (8) printed pages, including cover page, table of contents, charts, graphs, maps, photographs, references, and other pictorial presentations while complying with the document format instructions in Part IV, Section B. Applicants must comply with all pertinent page limitations.

DOE reserves the right to dismiss applications that violate formatting requirements. Signature blocks must be signed by the designated official. EVALUATORS WILL REVIEW ONLY EIGHT PAGES, AS SPECIFIED ABOVE. Do not include any Internet addresses (URLs) that provide information necessary to review the application. See Part VIII, Section D, for instructions on how to mark proprietary application information.

Page limit: 8-pages

Save the information in a single file named
"FY25 Project Narrative [TRACKING ID#].pdf"

NOTE: The narrative should address each of the merit review criterion and sub-criterion listed in greater detail in Part I - D. Applicants should provide sufficient information to enable reviewers to evaluate the application in accordance with the merit review criteria and other selection factors.

The project narrative must include the following:

(1) Cover Page: containing the following information:

- a. Name of organization;
- b. Announcement number;
- c. FOA Opportunity Title (e.g., University Research RU Infrastructure Support or GSI Support);
- d. Technical and business points-of-contact for the applicant, denoting the names, titles, addresses, telephone and facsimile numbers, and electronic mail addresses;
- e. PI's name, telephone number, facsimile number, e-mail address, and organization name/unit; and
- f. Names of team members or partnerships.

(2) Project Goals and Objectives: This section should provide a clear, concise statement of the specific objectives/aims of the proposed project. For this FOA, a "goal" is an outcome the proposed team would like to achieve, while an objective is an action or outcome related to a metric. Including the following in no specific order:

- a. A narrative that describes how the proposed effort will further NS&E R&D and education.
- b. Describe the NS&E program(s) at your school. If you do not have a current program, describe your plans to establish such a program.
- c. Describe comparable equipment, if any, already at your organization or within the DOE complex, and explain why it is unavailable. Review the NEID available at <https://nsuf-infrastructure.inl.gov> for information about existing capabilities.
NOTE: Address any proposed equipment described in the Budget Justification file (see Part IV - D.7) in the narrative.
- d. Overall goal(s) of the proposed upgrades and/or equipment. The proposed goal(s) may include multiple components or aspects and may be linked to specific measurable objectives. Goals and objectives must encompass the following (in no particular order):
 - i. How the request fills institutional and/or national infrastructure gaps and complements existing infrastructure and personnel capabilities.
 - ii. How the proposed effort outcome or process will tie into the NE mission and/or NSUF.

- iii. How the new equipment will enable the university's learning mission.
 - iv. Utilization of the upgrades and/or equipment by researchers within and external to your organization. It is recommended to include target metrics of utilization by the proposing institution and others in the research community. If there is a preexisting capability, provide a description of how the upgrade or equipment will improve utilization.
 - e. Address the Buy America Requirements for Infrastructure Projects. Include a short statement on whether the project will involve the construction, alteration, and/or repair of infrastructure in the U.S.. The applicant must assume that the Buy America Requirements are applicable to purchase of equipment. See Appendix A for applicable definitions and other information to inform this statement.
- (3) Schedule and Description of Tasks: This section should provide a breakdown of individual tasks related to the overall effort. Successful applicants must use this project timetable to report progress. This section should also include a scope of work and execution plan with detail appropriate to the complexity of the project. This will form the basis for the Project Implementation merit review listed in Section V, A.2.1.3 and A.2.2.3. Include the following:
- a. An overall timeline and key milestones of the proposed tasks (e.g., Gantt chart, timeline, etc.).
 - b. Applicants must demonstrate the educational or R&D connection between requested upgrades or equipment. Applications made of several uncorrelated equipment requests are not of interest.
- (4) Relevance and Outcomes/Impacts: This section is a justification for the proposed project and should explain the relevance of the effort to the mission of NE and the expected outcomes and/or impacts. This section should include a clear statement of the importance of the project in terms of the utility of the outcomes and the target community of beneficiaries. List all applicable NE funded R&D projects in this section. Specifically list any NE R&D program relevance.
- (5) Roles of Participants: Describe the capabilities and qualifications of the PI and application team to accomplish the proposed work. This should include personnel information for any expertise required to accomplish the proposed project. References should be specific to individuals. The PI should state explicitly whether there is any expertise that must be acquired to complete the project and the plan to acquire the expertise (new hires, consultants, etc.).
- (6) Facilities, Complementary Equipment, and Other Resources: Identify the facilities (e.g., office, laboratory, computer, etc.), equipment (computers, oscilloscopes, etc.), and other resources (machine shops, electronic shops, etc.) to be used at each performance site. Describe utilization of facilities, equipment, and other resources that are directly applicable to the proposed work. Include pertinent capabilities, capacities, relative proximity, and extent of availability to the project.

D.5 Project Team Curriculum Vitae (CV)

Applicants must provide a CV for the PI. CVs should be provided for all staff providing

significant and required expertise on the project. CV must include the following:

- (1) Provide a full biographical vitae for the PI listed in Section A of the R&R Budget form.
- (2) Contact Information.
- (3) Education and Training: Provide institution, major/area, degree, and year for undergraduate, graduate, and postdoctoral training. List all education and training, foreign or domestic, at the applicant institution or elsewhere, whether or not remuneration is received, and, whether full-time, part-time, or voluntary.
- (4) Research and Professional Experience: Beginning with the current position, list, in chronological order, professional/academic positions with a brief description. Additionally, list all current academic, professional, or institutional appointments, foreign or domestic, at the applicant institution or elsewhere, whether or not remuneration is received, and, whether full-time, part-time, or voluntary.
- (5) Publications: Provide a complete list of publications. 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.
- (6) Awards and honors.
- (7) Patents, copyrights, and software systems developed may be provided in addition to or substituted for publications.
- (8) Synergistic Activities: List no more than 5 professional and scholarly activities related to the effort proposed.
- (9) There should be no lapses in time over the past 10 years or since age 18, whichever period is shorter.

Save each CV as a separate file named:
"FY25 CV [PI NAME] [TRACKING ID#].pdf"

D.6 SF-424A Excel, Budget Information – Non-Construction Programs File

Applicants must provide a separate budget for each year of support requested, and a cumulative budget for the total project period. Use the SF-424A Excel, "Budget Information - Non Construction Programs" form on the DOE Financial Assistance Forms page at <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>.

Applicants may request funds under the appropriate Object Class Categories, as long as 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 G).

Save this information in a single file named:
"FY25 Budget SF424A [TRACKING ID#].xlsx"

D.7 Cost Sharing and Cost Matching Letter(s) of Commitment

If cost sharing is proposed or cost matching is required (under GSI), applicants must have a commitment letter from each third party contributing to the cost share or match (i.e., a party other than the organization submitting the application), stating that the third party is committed to providing a specific minimum dollar amount of cost sharing. If applicable, the letter must state that the third party is committed to providing a specific minimum dollar amount or value of in-kind contributions allocated to cost sharing. The following information for each third party contributing to cost sharing should be identified: (1) the name of the organization; (2) the proposed dollar amount to be provided; and (3) the proposed cost sharing type (cash or in-kind contributions).

NOTE: Letters of support or endorsement for the project from entities that do not have a substantive role in the project may not be considered.

Save all letters of commitment in a single as:
“FY25 Commitment Letter [TRACKING ID#].pdf”

D.8 Budget Justification File

Applicants must justify the costs proposed in each Object Class Category/Cost Classification category. Provide an equipment list with the following information:

- (1) Clearly identified equipment (e.g., description, manufacturer part number, etc., if known);
- (2) Explain how the proposed equipment meets the definition of “equipment” at 2 CFR 200.33, as opposed to items of supply;
- (3) Explain the need for the equipment to accomplish the project;
- (4) Indicate the unit cost and quantity for each item to be purchased; and
- (5) Explain how the cost estimates for equipment purchases are established, are determined to be fair and reasonable, and are consistent with applicant institution’s established procurement procedures (compliant with 2 CFR 200.17-200.326). Include available supporting documents such as quotes or catalog pricing for the proposed equipment.

If cost sharing is proposed, refer to Part IV - D.9. Additionally, the budget justification file must identify the following information for each third-party contributing cost sharing:

- a. the name of the organization;
- b. the proposed dollar amount to be provided;
- c. the amount as a percentage of the total project cost; and
- d. the proposed cost sharing - cash, services, or property.

NOTE: there are restrictions on the use of funds under this FOA:

- (1) The application cannot include hiring or other human capital costs;
- (2) Indirect costs are not allowed, except as specified in this FOA;
- (3) The application cannot include the cost of routine operation and maintenance of

equipment;

- (4) Installation costs for equipment and instrumentation that are beyond the vendor's standard installation cost are not allowed;
- (5) Institution-specific costs, not specific to the equipment or instrumentation, are the responsibility of the applicant. For example, if a vendor needs to meet safety and health requirements to access the campus or a facility, these costs are the responsibility of the applicant;
- (6) Funds are restricted to equipment for activities supporting research, teaching, and education; and
- (7) Upgrades to increase operational profit or support for commercial activities are not allowed.

Save the budget justification information in a single file named
"FY25 Budget Justification [TRACKING ID#].pdf"

D.9 Vendor Quotes

Submit vendor quotes, referenced costs (catalog pricing), or other basis for estimate for any single item over \$5,000. This is required even though the applicant may intend to submit the contract for open bids following the award.

Save file as:
"FY25 Vendor Quotes [TRACKING ID#].pdf"

D.10 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.

For each current and pending support disclosure, the individual must include a signature, date, and a certification statement using the language included below.

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.

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 research, development and demonstration (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 an RD&D project proposed to be carried out with DOE award.

Save this information in a file named:
“FY25 Current and Pending Support [TRACKING ID#].pdf”

D.11 Potentially Duplicative Funding (if applicable)

If the applicant or project team member has other active awards of federal funds, the applicant must determine whether the activities of those awards potentially overlap with the activities set forth in its application to this FOA. If there is a potential overlap, the applicant must notify DOE in writing of the potential overlap and state how it will ensure any project funds (i.e., recipient cost share and federal funds) will not be used for identical cost items under multiple awards. Likewise, for projects that receive funding under this FOA, if a recipient or project team member receives any other award of federal funds for activities that potentially overlap with the activities funded under the DOE award, the recipient must promptly notify DOE in writing of the potential overlap and state whether project funds from any of those other federal awards have been, are being, or are to be used (in whole or in part) for one or more of the identical cost items under the DOE award. If there are identical cost items, the recipient must promptly notify the DOE Contracting Officer (CO) in writing of the potential duplication and eliminate any inappropriate duplication of funding.

Save file as:
“FY25 PDFN [TRACKING ID#].pdf”

D.12 Interim Conflict of Interest Policy (Required for All Applicants)

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 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.

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.

Save this sheet in a single file named:
"FY25 COI Disclosure [TRACKING ID#].pdf"

D.13 Disclosure of Lobbying Activities (SF-LLL) (Required for All Applicants)

Identify any funds, other than Federal 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/cooperative agreement.

Save this form as:
"FY25 SF-LLL [TRACKING ID#].pdf"

D.14 Certifications and Assurances

Applicants must complete and attach the Certifications and Assurances form found on the DOE Financial Assistance Forms Page at: [Certifications and Assurances for Use with SF-424 | Department of Energy](#).

Save this file as:
"FY25 Cert & Assurances [TRACKING ID#].pdf"

D.15 Transparency of Foreign Connections

Applicants must provide the following as it relates to the proposed recipient and subrecipients. Include a separate disclosure for the applicant and each proposed subrecipient. U.S. National Laboratories, domestic government entities, and institutions of higher education are only required to respond to items 1, 2 and 9, and if applying as to serve as the prime recipient, must provide complete responses for project team members that are not U.S. National Laboratories, domestic government entities, or institutions of higher education.

- (1) Entity name, website address, and mailing address;
- (2) The identity of all owners, principal investigators, project managers, and senior/key personnel who are a party to any Foreign Government-Sponsored Talent Recruitment Program of a foreign country of risk (i.e., China, Iran, North Korea, and Russia);
- (3) The existence of any joint venture or subsidiary that is based in, funded by, or has a foreign affiliation with any foreign country of risk;
- (4) Any current or pending contractual or financial obligation or other agreement specific to a business arrangement, or joint venture-like arrangement with an enterprise owned by a foreign state or any foreign entity;
- (5) Percentage, if any, that the proposed recipient or subrecipient has foreign ownership or control;
- (6) Percentage, if any, that the proposed recipient or subrecipient is wholly or partially owned by an entity in a foreign country of risk;
- (7) Percentage, if any, of venture capital or institutional investment by an entity that has a general partner or individual holding a leadership role in such entity who has a foreign affiliation with any foreign country of risk;
- (8) Any technology licensing or intellectual property sales to a foreign country of risk, during the 5-year period preceding submission of the proposal;
- (9) Any foreign business entity, offshore entity, or entity outside the U.S. related to the proposed recipient or subrecipient;
- (10) Complete list of all directors (and board observers), including their full name, citizenship and shareholder affiliation, date of appointment, duration of term, as well as a description of observer rights as applicable;
- (11) Complete capitalization table for your entity, including all equity interests (including LLC and partnership interests, as well as derivative securities). Include both the number of shares issued to each equity holder, as well as the percentage of that series and all equity on a fully diluted basis. Identify the principal place of incorporation (or organization) for each equity holder. If the equity holder is a natural person, identify the citizenship(s). If the recipient or subrecipient is a publicly traded company, provide the above information for shareholders with an interest greater than 5%;
- (12) A summary table identifying all rounds of financing, the purchase dates, the investors for each round, and all the associated governance and information rights obtained by investors during each round of financing; and
- (13) An organization chart to illustrate the relationship between your entity and the immediate parent, ultimate parent, and any intermediate parent, as well as any subsidiary or affiliates. Identify where each entity is incorporated.

DOE reserves the right to request additional or clarifying information based on the information submitted.

Note: Save all information in a single PDF file.

Save file as:
FY25 TFC [TRACKING ID#].pdf

D.16 Project Commitment to Energy Justice and Energy Equity (Optional)

1. Applicants are encouraged to describe how their projects or project teams will advance energy justice and energy equity for the Administration's objectives. Energy Justice objectives include a project's or project team's contribution to the Justice40 Initiative (as described in Part III A of this FOA). Energy equity objectives include, for example, effective teams and/or partnerships with MSIs, including HBCUs and 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 [disadvantaged communities](#); how the benefits will flow to [disadvantaged communities](#); and how negative environmental impacts affecting [disadvantaged communities](#) 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 the Federal Government's goal that 40% of certain Federal climate and clean energy investments will flow to [disadvantaged communities](#);
 - The degree to which the proposed project provides funding to [disadvantaged communities](#) 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 [disadvantaged community](#);
 - The degree to which the proposed project incorporates applicant or team members from [disadvantaged communities](#); and
 - Whether the proposed project may directly or indirectly benefit [disadvantaged communities](#) or has team member participants from [disadvantaged communities](#).
2. **Advance Energy Equity.** Energy equity centers on the concerns of underserved and socially and economically 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., HBCUs/Other Minority Serving Institutions); and/or partnerships with Minority Business Enterprises, Minority Owned Businesses, Woman Owned Businesses, Veteran Owned Businesses, or Tribal nations 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.

Save file as:
FY25 EEandJustice40 [TRACKING ID#].pdf

E. SUBMISSIONS FROM SUCCESSFUL APPLICANTS

If selected for award negotiations, DOE reserves the right to require that selected applicants provide additional or clarifying information regarding the application submissions, the project, the project team, the award requirements, and any other matters related to anticipated award. The following is a list of examples of information that may be required:

- Personnel proposed to work on the project and collaborating organizations (See Section VI.B.5. Participants and Collaborating Organizations);
- Current and Pending Support (See Sections IV.D.11. and VI.B.6. Current and Pending Support);
- Indirect cost information;
- Environmental Checklist;
- Other budget information;
- Name and phone number of the Designated Responsible Employee, for complying with national policies prohibiting discrimination (see 10 CFR 1040.5); and/or
- Representation of Limited Rights Data and Restricted Software, if applicable.

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 [Environmental Checklist](#).

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 is not required for this FOA.

F. SUBMISSION DATES AND TIMES

F.1 Letter of Intent Due Date

Letters of Intent are not required.

F.2 Pre-application Due Date

Pre-applications are not required.

F.3 Application Due Date

Applications must be received by July 17, 2024, no later than 5:00 PM Eastern Time. Applicants are encouraged to transmit applications well before the deadline. APPLICATIONS RECEIVED AFTER THE DEADLINE WILL NOT BE REVIEWED OR CONSIDERED FOR AWARD.

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.

H.1 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.

H.2 Pre-Award Costs

Recipients may charge to an award resulting from this announcement, pre-award costs incurred within the ninety (90) calendar day period immediately preceding the effective date of the award, provided the costs are allowable in accordance with the applicable Federal cost principles referenced in 2 CFR part 200. Recipients must obtain the prior written approval of the CO 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 the award is made for a lesser amount than the applicant expected.

H.3 Risk Assessment

Pursuant to 2 CFR 200.206, DOE will conduct an additional review of the risk posed by applications submitted under this FOA. Such risk assessment will consider:

- (1) Funding stability;

- (2) Quality of management systems and ability to meet the management standards prescribed in 2 CFR 200 as amended and adopted by 2 CFR 910;
- (3) History of performance;
- (4) Audit reports and findings; and
- (5) The applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-federal entities.

DOE may make use of other publicly available information and the history of an applicant's performance under DOE or other federal agency awards.

Depending on the severity of the findings and whether the findings were resolved, DOE may elect not to fund the applicant.

In addition to this review, DOE must comply with the guidelines on government-wide suspension and debarment in 2 CFR 180 and must require non-federal entities to comply with these provisions. These provisions restrict federal awards, subawards, and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in federal programs or activities.

Further, as DOE invests in critical infrastructure and funds critical and emerging technology areas, DOE also considers possible threats to U.S. research, technology, and economic security from undue foreign government influence when evaluating risk. If high risks are identified and cannot be sufficiently mitigated, DOE may elect to not fund the applicant. As part of the research, technology, and economic security risk review, DOE may contact the applicant and/or proposed project team members for additional information to inform the review. This risk review is conducted separately from the technical merit review.

H.4 Prohibition related to Foreign Government-Sponsored Talent Recruitment Programs 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.

Definitions

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.

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.5 Foreign National Participation

All applicants selected for an award under this FOA and project participants (including subrecipients and contractors) who anticipate involving foreign nationals in the performance of an award may be required to provide DOE with specific information about each foreign national to satisfy requirements for foreign national participation. A “foreign national” is defined as any person who is not a U.S. citizen by birth or naturalization. The volume and type of information collected may depend on various factors associated with the award. DOE concurrence may be required before a foreign national can participate in the performance of any work under an award.

DOE may elect to deny a foreign national’s participation in the award. Likewise, DOE may elect to deny a foreign national’s access to a DOE site, and/or DOE information, technologies, equipment, programs, or personnel.

H.6 Foreign Collaboration Considerations

Consideration of new collaborations with foreign entities and governments. The recipient will be required to provide DOE with advanced written notification of any potential collaboration with foreign entities or governments in connection with its DOE-funded award scope. The recipient will then be required to await further guidance from DOE prior to contacting the proposed foreign entity or government regarding the potential collaboration or negotiating the terms of any potential agreement.

Existing collaborations with foreign entities and governments. The recipient will be required to provide DOE with a written list of all existing foreign collaborations in which has entered in connection with its DOE-funded award scope.

Description of collaborations that should be reported. In general, a collaboration will involve some provision of a thing of value to, or from, the recipient. A thing of value includes but may not be limited to all resources made available to, or from, the recipient in support of and/or related to the DOE award, regardless of whether or not they have monetary value. Things of value also may include in-kind contributions (such as office/laboratory space, data, equipment, supplies, employees, students). In-kind contributions not intended for direct use on the DOE award but resulting in provision of a thing of value from or to the DOE award must also be reported. Collaborations do not include routine workshops, conferences, use of the recipient’s services and facilities by foreign investigators resulting from its standard published process for

evaluating requests for access, or the routine use of foreign facilities by awardee staff in accordance with the recipient's standard policies and procedures.

H.7 Foreign Travel

If international travel is proposed for your project, please note that your organization must comply with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. § 40118), commonly referred to as the "Fly America Act," and implementing regulations at 41 CFR 301-10.131 through 301-10.143. The law and regulations require air transport of people or property to, from, between, or within a country other than the U.S., the cost of which is supported under this award, to be performed by or under a cost-sharing arrangement with a U.S. flag carrier, if service is available. Foreign travel costs are allowable only with the written prior approval of the contracting officer assigned to the award.

H.8 Buy America Requirements for Infrastructure Projects

Federally assisted projects which involve infrastructure work, undertaken by applicable recipient types, require that:

- all iron, steel, and manufactured products used in the infrastructure work are produced in the U.S.; and
- all construction materials used in the infrastructure work are manufactured in the U.S.

Whether a given project must apply this requirement is project-specific and dependent on several factors, such as the recipient's entity type, whether the work involves "infrastructure," as that term is defined in Section 70914 of the Bipartisan Infrastructure Law, and whether the infrastructure in question is publicly owned or serves a public function.

Applicants are strongly encouraged to consult Appendix A of this FOA to determine whether their project may have to apply this requirement, both to make an early determination as to the need of a waiver, as well as to determine what impact, if any, this requirement may have on the proposed project's budget.

I. OTHER SUBMISSION AND REGISTRATION REQUIREMENTS

I.1 Where to Submit

Applications must be submitted through www.NEUP.gov.

I.2 Application Validity Timeframe

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

PART V APPLICATION REVIEW INFORMATION

NOTE: The following requirements apply to all FOA areas unless specific requirements are identified.

A. CRITERIA

A.1 Initial Review Criteria

Prior to a comprehensive merit evaluation, DOE will perform an initial review to determine that:

- a. Proposed work is relevant to the NE mission;
- b. Applicant is eligible for an award;
- c. Information and documents, required by the FOA, have been submitted; and
- d. Applications submitted do not exceed the number of applications permitted per institution:
 - i. No more than one application per research reactor under the University Research RU Infrastructure Support area; and
 - ii. No more than one application under the GSI area.

Applications that fail to pass the initial review will not be forwarded for merit review and will be eliminated from further consideration.

A.2 Merit Review Criteria

The following evaluation criteria and weights will be used to evaluate applications submitted in response to this FOA in each area. Rating criteria include whether applicant has shown how the project will increase or enhance research and/or teaching capabilities.

A.2.1 University Research Reactor Upgrades Infrastructure

- (1) (40%) Safety and/or Security: potential of the requested equipment, instrumentation, or modification to:
 - a. Enhance the safety, performance, control, or operational reliability of research reactor systems; or
 - b. Increase the quality, safety/security, or efficiency of the operation of the research reactor facility;
- (2) (20%) Impact: potential of the requested equipment, instrumentation, or modification to facilitate, improve, or expand ongoing NE research and training capabilities;
- (3) (20%) Utilization: as a result of the proposed equipment, the amount of student and faculty usage of the research reactor facility and the amount and variety of research and/or services actually provided by the facility; and
- (4) (20%) Execution: capability to implement the full scope of the project, including timely project completion, personnel qualifications, budget, and feasibility.

A.2.2 University General Scientific Infrastructure (GSI) Support

- (1) (25%) Impact: potential of the requested equipment, instrumentation, or modification to facilitate, improve, or expand ongoing NE research, training and NSUF capabilities (if applicable);
- (2) (25%) Utilization: as a result of the proposed equipment, the amount of student, faculty, or researcher usage of the capabilities and the amount and variety of research and/or services actually provided by the facility;
- (3) (25%) Execution; capability to implement the full scope of the project including timely project completion, personnel qualifications, budget, and feasibility; and
- (4) (25%) Educational and/or Research Innovation: uses of equipment for educational or research purposes.

NSUF Priority Bonus Consideration

Up to 3 bonus points will be attributed if the proposed upgrade improves an existing NSUF partner facility or creates a capability that is identified as a prospective partner facility.

A.3 Other Selection Factors

The SO may also consider the following program policy factors in the selection process under all FOA areas, as appropriate (not listed in order of importance):

- Degree to which proposed project optimizes/maximizes use of available NE funding to achieve DOE program goals and objectives. This includes how those infrastructure projects support NE research; it may also include how the infrastructure project supports other complementary efforts or projects, which, when taken together, will best achieve program research goals and objectives.
- Application selection may optimize an appropriate mix of projects to achieve NE research goals and objectives.
- Impact of the proposed project on the NSUF.
- Other Cost/Budget considerations, including how well the proposed budget for the equipment or instrumentation will achieve the proposed objectives, and availability of funding.
- The demonstrated ability of the applicant to complete projects in the specified timeframe. This includes prior year DOE applicant awards in progress or not yet completed, as well as any existing or pending no-cost extensions.
- Existing NS&E Program, or realistic plan to establish NS&E program.
- Cost share or cost match, if any, proposed.
- Extent or degree to which projects provide a balanced programmatic effort, a variety of research capabilities among various sizes and kinds of organizations, and their geographic distribution.

- Projects that contribute to energy equity.
- Projects that support the Justice40 Initiative.

The above program policy factors may be used by the SO to assist in determining which application(s) shall receive DOE funding support. These factors, while not indicators of the application's technical excellence, applicant's ability, etc., are essential to the process of selecting the application that, individually or collectively, will best achieve the program objectives and maximize public benefits.

B. REVIEW AND SELECTION PROCESS

B.1 Merit Review

Applications that pass the initial review will be subjected to a merit review in accordance with the guidance provided in DOE's *Merit Review Guide for Financial Assistance and Unsolicited Proposals*. This guide is available under Financial Assistance Policy and Guidance at [Merit Review Guide for Financial Assistance and Unsolicited Proposals - Current Guides | Department of Energy](https://www.energy.gov/management/articles/merit-review-guide-financial-assistance-and-unsolicited-proposals-current). <https://www.energy.gov/management/articles/merit-review-guide-financial-assistance-and-unsolicited-proposals-current> _

B.2 Selection

The SO will consider the merit and risk reviews recommendation, program policy factors, and the amount of funds available.

B.3 Review of Risk

Pursuant to 2 CFR subpart 200.206, DOE will conduct an additional review of the risk posed by applications submitted under this FOA. Such review of risk will include:

1. Quality of the application;
2. Reports and findings from audits performed under 2 CFR part 200 or OMB Circular A-133; and
3. Systems maintained under 2 CFR part 180.

DOE may make use of other publicly available information and the history of an applicant's performance under DOE or other Federal agency awards.

Applicants with no prior performance of DOE awards may be asked to provide information about their financial stability and or their ability to comply with the management standards of 2 CFR part 200.

Research, Technology and Economic Security Risk Reviews. Further, as DOE invests in critical infrastructure and funds critical and emerging technology areas, DOE also considers possible vectors of undue foreign influence in evaluating risk. If high risks are identified and cannot be sufficiently mitigated, DOE may elect to not fund the applicant. As part of the research, technology, and economic security risk review, DOE may contact the applicant and/or proposed project team members for additional information to inform the review. This risk review is conducted separately from the technical merit review.

B.4 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 200.206 - Federal awarding agency review of risk posed by applicants.

B.5 Government Discussions with Applicant

The Government may enter into discussions with a selected applicant for any reason deemed necessary, including but not limited to: 1) the budget is not appropriate or reasonable for the requirement; 2) only a portion of the application is selected for award; 3) the Government needs additional information to determine whether the recipient is capable of complying with the requirements in 2 CFR part 200; and/or 4) special terms and conditions are required. Failure to resolve satisfactorily the issues identified by the Government will preclude award to the applicant.

C. ANTICIPATED NOTICE OF SECTION AND AWARD DATES

DOE anticipates making selection announcements around the end of March 2025. . DOE intends to have projects supported under this FOA begin work August 1, 2025. DOE reserves the right to make additional award selections using applications submitted in response to this FOA. Award(s) for this project are subject to the availability of Federal funding.

PART VI AWARD ADMINISTRATION INFORMATION

A. AWARD NOTICES

A.1 Applicants Selected for Award Negotiations

Successful applicants will receive written notification that they have been selected for award negotiations. Receipt of a notification letter selecting an application for award negotiations does not authorize the applicant to commence performance of the project. If an application is selected for award negotiations, it is not a commitment by DOE to issue an award nor is it a guarantee of federal government funding. Applicants do not receive an award unless and until award negotiations are complete and the CO executes the funding agreement, accessible by the prime recipient in FedConnect.

Applicants must designate a primary and a backup point-of-contact in the SF424 application document with whom DOE will communicate to conduct award negotiations. The applicant must be responsive during award negotiations (i.e., provide requested documentation) and meet the negotiation deadlines. If the applicant fails to do so or if award negotiations are otherwise unsuccessful, DOE will cancel the award negotiations and rescind the selection. DOE reserves the right to terminate award negotiations at any time for any reason.

A.2 Unsuccessful Applicants

DOE will notify in writing each applicant whose application has not been selected for award. The notification will provide an explanation of why the application was not selected.

A.3 Nondisclosure and Confidentiality Agreements Representations

In submitting an application in response to this 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.

1. 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:
 - a. “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.”
 - b. The limitation above shall not contravene requirements application 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 provision listed in paragraph (a), 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.4 Notice of Award

An Assistance Agreement issued and signed by the CO 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.

A.5 Participants and Collaborating Organizations

If selected for award negotiations, the selected applicant must submit a list of personnel who are proposed to work on the project, both at the recipient and subrecipient level and a list of proposed collaborating organizations prior to award. Recipients will have an ongoing responsibility to notify DOE of changes to the personnel and collaborating organizations and submit updated information during the life of the award.

A.6 Current and Pending Support

If selected for award negotiations, within 30 days of the selection notice the selectee must submit: 1) current and pending support disclosures and resumes for any new PIs or senior/key personnel, and 2) updated disclosures if there have been any changes to the current and pending support submitted with the application. Throughout the life of the award, the recipient has an ongoing responsibility to submit: 1) current and pending support disclosure statements and resumes for any new PI and senior/key personnel, and 2) updated disclosures if there are changes to the current and pending support previously submitted to DOE. Also, see Section Part IV - D.11.

A.7 Post Selection Information Requests

If selected for award negotiations, DOE reserves the right to require that selected applicants provide additional or clarifying information regarding the application submissions, the project, the project team, the award requirements, and any other matters related to anticipated award.

B. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS

B.1 Administrative Requirements

The administrative requirements for DOE grants and cooperative agreements are contained in 2 CFR part 200, as amended by 2 CFR part 910 (see <https://www.ecfr.gov/>). Grants and cooperative agreements 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 <https://www.nsf.gov/bfa/dias/policy/rtc/index.jsp>.

B.2 System For Award Management and Unique Entity Identifier Requirements

Applicants that do not have an exemption under 2 CFR 25.110 must:

- (1) Be registered in the System for Award Management (SAM) at <https://www.sam.gov> prior to submitting an application or plan;
- (2) Provide its unique entity identifier in each application or plan it submits to DOE;
- (3) Maintain an active SAM registration with current information, including information on a its immediate and highest-level owner and subsidiaries, as well as on all predecessors that have been awarded a federal contract or financial assistance award within the last three years, if applicable, at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency;
- (4) Remain registered in the SAM database after the initial registration;
- (5) Update its information in the SAM database as soon as it changes;
- (6) Review its information in the SAM database on an annual basis from
- (7) The date of initial registration or subsequent updates to ensure it is current, accurate and complete; and
- (8) Not make a subaward to any entity unless the entity has provided its unique entity identifier. Subrecipients are not required to obtain an active SAM registration but must obtain a Unique Entity Identifier.
- (9) For purposes of this FOA provision:
 - a. System for Award Management (SAM) means the Federal repository into which an applicant must provide information required for the conduct of business as a recipient of Federal funds. Additional information about registration procedures may be found at the SAM internet site (currently at <https://www.sam.gov>).
 - b. Unique Entity Identifier means the identifier assigned by SAM to uniquely identify business entities.
 - c. Entity includes non-Federal entities as defined at 2 CFR 200.1 and includes all of the

following for purposes of this part:

- i. A foreign organization;
 - ii. A foreign public entity;
 - iii. A domestic for-profit organization; and
 - iv. A Federal agency.
- d. Subaward has the meaning given in 2 CFR 200.1.
- e. Subrecipient has the meaning given in 2 CFR 200.1.

B.3 Subaward and Executive Reporting

Additional administrative requirements necessary for DOE grants and cooperative agreements to comply with the Federal Funding and Transparency Act of 2006 (FFATA) are in 2 CFR part 170 (see [eCFR :: 2 CFR Part 170 -- Reporting Subaward and Executive Compensation Information](#)). Prime awardees must register with the new FFATA Subaward Reporting System (FSRS) database and report the required data on their first-tier sub-awardees. Prime awardees must report the executive compensation for their own executives as part of their registration profile in the SAM.

B.4 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/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 FOA.

The National Policy Assurances to be incorporated as award terms are located at <http://www.nsf.gov/bfa/dias/policy/rte/appc.pdf> and at <http://energy.gov/management/office-management/operational-management/financial-assistance/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 material pedigree records available for submission for DOE review.
 - **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 personnel training records available 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 (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. The peer reviews shall be documented and maintained by the university. Peer review documentation and results shall be provided to DOE.

B.5 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.6 Lobbying Restrictions

By accepting funds under this award, you agree 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.7 Corporate Felony Conviction and Federal Tax Liability Representations

In submitting an application in response to this 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.
- 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 apply:

- 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 U.S. (but not foreign corporations).
- It includes both for-profit and non-profit organizations.

B.8 Statement of Federal Stewardship

The recipient's responsibilities are listed below:

Complying with all award requirements, including performing the activities supported by this award, including providing the required personnel, facilities, equipment, supplies and service.

- 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 management and operating (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:
 - o **NE Program Information Collection System (PICS:NE):** 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.
 - o **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 recognize Department liabilities more accurately 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.

B.9 Nondisclosure And Confidentiality Agreements Representations

In submitting an application in response to this FOA the Applicant represents that:

- (1) 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.
- (2) 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:
 - a. “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.”
 - b. The limitation above 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 provision listed in paragraph (a), 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.

B.10 Fraud, Waste, and Abuse

The mission of the DOE Office of Inspector General (OIG) is to strengthen the integrity, economy, and efficiency of the Department’s programs and operations, including deterring and detecting fraud, waste, abuse, and mismanagement. The OIG accomplishes this mission primarily through investigations, audits, and inspections of DOE activities to include grants, cooperative agreements, loans, and contracts.

The OIG maintains a hotline for reporting allegations of fraud, waste, abuse, or mismanagement. To report such allegations, please visit <https://www.energy.gov/ig/ig-hotline>.

Additionally, recipients of DOE awards must be cognizant of the requirements of 2 CFR 200.113 Mandatory disclosures, which states:

The non-Federal entity or applicant for a federal award must disclose, in a timely manner, in writing to the Federal awarding agency or pass-through entity all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award. Non-Federal entities that have received a federal award including the term and condition outlined in appendix XII of 2 CFR Part 200 are required to report certain civil, criminal, or administrative proceedings to SAM.gov. Failure to make required disclosures can result in any of the remedies described in 2 CFR 200.339. (See also 2 CFR part 180, 31 U.S.C. § 3321, and 41 U.S.C. § 2313.) [85 FR 49539, Aug. 13, 2020]

Applicants and subrecipients (if applicable) are encouraged to allocate sufficient costs in the project budget to cover the costs associated for personnel and data infrastructure needs to support performance management and program evaluation needs, including but not limited to independent program and project audits to mitigate risks for fraud, waste, and abuse.

B.11 Post Selection Information Requests

If selected for award negotiations, DOE reserves the right to require that selected applicants provide additional or clarifying information regarding the application submissions, the project, the project team, the award requirements, and any other matters related to anticipated award.

C. NO-COST TIME EXTENSIONS

Unilateral no-cost time extensions will **NOT** be permitted to awards made under this FOA. All no-cost time extensions must provide adequate justification and receive written approval from the CO. No-cost time extensions should be requested as soon as the need is identified, and normally, no later than 3 months before the original project end date.

One no-cost time extension request may be granted for up to 12 months, pending review and approval. No-cost time extension information and form can be found at:

<https://neup.inl.gov/SitePages/Research%20and%20Development.aspx>.

D. 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 under Award Form at:

<https://www.energy.gov/management/financial-assistance-forms-and-information-applicants-and-recipients>.

PART VII QUESTIONS/AGENCY CONTACTS

A. QUESTIONS

Questions regarding the content of this FOA must be submitted to the Agency Contact listed in below in Part VII B. Questions pertaining to items such as application process, eligibility, or application document requirements should be directed to NEUP@inl.gov.

Answers to submitted questions containing information about the FOA or the FOA process that would be necessary for the preparation of applications will be posted to www.NEUP.gov as soon as practical. 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.

Interested parties are encouraged to ask questions as early in the FOA process as possible. Questions and comments concerning this FOA shall be submitted not later than five business days prior to the application due date. Questions submitted after that date may not allow the Government sufficient time to respond.

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

B. AGENCY CONTACT

Name: Mr. Andrew Ford

E-mail: fordaj@id.doe.gov

Phone: 208-526-3059

C. INFORMATIONAL WEBINAR

NE holds a webinar each year to discuss changes to its FOAs and work scope areas for upcoming opportunities. Applicants can watch the live webinar and submit questions to be answered in real time. All webinar presentations are recorded and posted on www.NEUP.gov for review by all applicants.

Webinar presentations from past years can also be found in the “Archives” section of the www.NEUP.gov website.

PART VIII OTHER INFORMATION

A. AMENDMENTS

Notices of any amendments to this announcement will be posted on www.FedConnect.net and www.Grants.gov, and, as a courtesy, will also be posted on both <https://nsuf.inl.gov/> and <https://NEUP.inl.gov>.

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

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 marked with double brackets [] in the margins with the following statement in the header.

“This page contains proprietary information that (name of applicant) requests not be released to persons outside the Government, except for purposes of review and evaluation.”

DOE will make its own determination about the confidential status of the information and treat it according to its determination.

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 independent reviews, as well as routine, nondiscretionary administrative activities. The applicant, by submitting its application, consents to the use of non-Federal reviewers/administrators. Non-Federal reviewers must sign conflict of interest 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

Patent Rights. Under the Bayh-Dole Act (35 U.S.C. § 200 et seq.), recipient may elect to retain title to their subject inventions.

Rights in Technical Data. The government and recipient have 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 an agreement to satisfy DOE's own needs or to ensure the commercialization of technology developed under a DOE agreement.

Copyright. 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 7, 2021, in connection with a 100-day review of critical supply chains as directed under E.O. 14017, America's Supply Chains, the DOE Science and Energy Determination of Exceptional Circumstances (S&E DEC) was announced as part of a series of new policy actions to support U.S. job creation and bolster the domestic manufacturing supply chain. As a result, the Intellectual Property Provisions 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.

The standard DOE financial assistance intellectual property provisions applicable to various types of recipients are located at:

<https://energy.gov/gc/standard-intellectual-property-ip-provisions-financial-assistance-awards>

G. UNDERSTANDING COST SHARING AND COST MATCHING

Cost share is often confused with some form of cost match. The following sections describe the differences and provide calculation examples.

G.1 Cost Sharing

Cost share is calculated as a percentage of the total allowable costs of the project. It is NOT a percentage of the DOE funds. The cost share percentage is calculated from the entire project, including all awardee funds, DOE funds, subcontracts, and (if applicable) FFRDC requirements.

When determining the cost share value, 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 examples of how the cost share amount is 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.

$$\text{Cost Share} = (\text{Cost Share Percentage}) \times (\text{Total Project Cost})$$

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

$$\text{Cost Share} = \$30,000$$

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.

$$\text{DOE Share} = \$120,000 \qquad \text{Awardee (or third party) Share} = \$30,000$$

Example 2

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

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

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

$$\text{Cost Share} = (\text{Cost Share Percentage}) \times (\text{total project cost})$$

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

$$\text{Cost Share} = \$60,000$$

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.

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

$$\text{Awardee Share} = \$60,000$$

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	<u>\$20,000</u>	<u>\$20,000</u>	<u>\$0</u>
Total Project Cost	\$150,000	\$120,000	\$30,000

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

G.2 Cost Matching

Cost matching is a ratio dollar match for requested amounts more than a specified value. Cost match is calculated from the entire project, including all awardee funds, DOE funds, subcontracts, and (if applicable) FFRDC requirements.

When determining the cost match value, 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, the cost match can be calculated.

Below are examples of how the cost match amount is 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	\$150,000
Subcontract	\$130,000
Total Project Cost	\$300,000

A cost match requirement of 1:1 dollar match above \$250,000 was specified in the funding announcement.

$$\text{Cost Match} = \left(\frac{N_{App}}{N_{App} + N_{DOE}} \right) \times (\text{Total Project Cost} - \$250,000)$$

$$\text{Cost Match} = \left(\frac{1}{1+1} \right) \times (\$300,000 - \$250,000)$$

$$\text{Cost Match} = \$25,000$$

$$\text{DOE Share} = \$275,000 \quad \text{Awardee (or third party) Share} = \$25,000$$

Example 2

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	\$0
Equipment	\$80,000
Supplies	\$150,000
Subcontract	\$120,000
Total Project Cost	\$450,000

A cost match requirement of 1:1 dollar match above \$250,000 was specified in the funding announcement.

$$\text{Cost Match} = \left(\frac{N_{App}}{N_{App} + N_{DOE}} \right) \times (\text{Total Project Cost} - \$250,000)$$

$$\text{Cost Match} = \left(\frac{1}{1+1} \right) \times (\$450,000 - \$250,000)$$

$$\text{Cost Match} = \$100,000$$

DOE Share = \$350,000 Awardee (or third party) Share = \$100,000

H. NOTICE REGARDING ELIGIBLE/INELIGIBLE ACTIVITIES

Political 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. 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>.

J. CONFERENCE SPENDING

The recipient shall not expend funds for the purpose of defraying the cost to the U.S. Government of a conference that was more than \$20,000 [described in subsection (c) of the Consolidated and Further Continuing Appropriations Act of 2013]; or 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 that is not directly and programmatically related to the purpose of the grant or cooperative agreement.

K. EXPORT CONTROL

The U.S. government regulates the transfer of information, commodities, technology, and software considered to be strategically important to the U.S. to protect national security, foreign policy, and economic interests without imposing undue regulatory burdens on legitimate international trade. There is a network of federal agencies and regulations that govern exports that are collectively referred to as “Export Controls.” All recipients and subrecipients are responsible for ensuring compliance with all applicable U.S. Export Control laws and regulations relating to any work performed under a resulting award.

The recipient must immediately report to DOE any export control violations related to the project funded under the DOE award, at the recipient or subrecipient level, and provide the corrective action(s) to prevent future violations.

L. PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

As set forth in 2 CFR 200.216, recipients and subrecipients are prohibited from obligating or expending project funds (federal funds and recipient cost share) to procure or obtain; extend or

renew a contract to procure or obtain; or enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Section 889 of Public Law 115-232, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

See Public Law 115-232, Section 889, 2 CFR 200.216, and 2 CFR 200.471 for additional information.

APPENDIX A – REQUIRED USE OF AMERICAN IRON, STEEL, MANUFACTURED PRODUCTS, AND CONSTRUCTION MATERIALS BUY AMERICA REQUIREMENTS FOR INFRASTRUCTURE PROJECTS

A. DEFINITIONS

For purposes of the Buy America requirements, the following definitions apply:

Construction materials includes an article, material, or supply—other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives²—that is or consists primarily of:

- non-ferrous metals;
- plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- glass (including optic glass);
- lumber; or
- drywall.

Infrastructure includes, at a minimum, the structures, facilities, and equipment for, in the United States, roads, highways, and bridges; public transportation; dams, ports, harbors, and other maritime facilities; intercity passenger and freight railroads; freight and intermodal facilities; airports; water systems, including drinking water and wastewater systems; electrical transmission facilities and systems; utilities; broadband infrastructure; and buildings and real property. Infrastructure includes facilities that generate, transport, and distribute energy.

In addition to the above, the infrastructure in question must be publicly owned or must serve a public function; privately owned infrastructure that is solely utilized for private use is not considered “infrastructure” for purposes of Buy America applicability. The Agency, not the applicant, will have the final say as to whether a given project includes infrastructure, as defined herein. Accordingly, in cases where the “public” nature of the infrastructure is unclear, DOE strongly recommends that applicants complete their full application with the assumption that Buy America requirements will apply to the proposed project.

Project means the construction, alteration, maintenance, or repair of infrastructure in the United States.

B. BUY AMERICA REQUIREMENTS FOR INFRASTRUCTURE PROJECTS

In accordance with section 70914 of the BIL, none of the project funds (includes federal share

² BIL, § 70917(c)(1)

and recipient Cost Share) may be used for a project for infrastructure unless:

- (1) all iron and steel used in the project are produced in the United States--this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the U.S.;
- (2) all manufactured products used in the project are produced in the U.S.—this means the manufactured product was manufactured in the U.S.; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the U.S. is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation; and
- (3) all construction materials³ are manufactured in the U.S.—this means that all manufacturing processes for the construction material occurred in the U.S.. The Buy America requirements only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does Buy America requirements apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

The Buy America requirements only apply to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does the Buy America requirements apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

These requirements must flow down to all sub-awards, all contracts, subcontracts, and purchase orders for work performed under the proposed project.

For additional information related to the application and implementation of these Buy America requirements, please see OMB Memorandum M-22-11, issued April 18, 2022:

<https://www.whitehouse.gov/wp-content/uploads/2022/04/M-22-11.pdf>

C. DOE SUBMISSION REQUIREMENTS FOR FULL APPLICATION

Within the first two pages of the workplan, applicants must provide a short statement on whether the project will involve the construction, alteration, and/or repair of infrastructure in the U.S. The ultimate determination about whether a project includes infrastructure remains with DOE, but the applicant's statement will assist project planning and integration of domestic preference requirements, which may impact the project's proposed budget.

³ Excludes cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents or additives.

D. WAIVERS

In limited circumstances, DOE may waive the application of the Buy America requirements where DOE determines that:

- (1) applying the Buy America requirements would be inconsistent with the public interest;
- (2) the types of iron, steel, manufactured products, or construction materials are not produced in the U.S. in sufficient and reasonably available quantities or of a satisfactory quality; or
- (3) the inclusion of iron, steel, manufactured products, or construction materials produced in the U.S. will increase the cost of the overall project by more than 25 percent.

If an applicant is seeking a waiver of the Buy America requirements, it must include a written waiver request with the Full Application. A waiver request must include:

- A detailed justification for the use of “non-domestic” iron, steel, manufactured products, or construction materials to include an explanation as to how the non-domestic item(s) is essential to the project;
- A certification that the applicant or recipient made a good faith effort to solicit bids for domestic products supported by terms included in requests for proposals, contracts, and nonproprietary communications with potential suppliers;
- Applicant /Recipient name and Unique Entity Identifier (UEI);
- Total estimated project cost, DOE and cost-share amounts;
- Project description and location (to the extent known);
- List and description of iron or steel item(s), manufactured goods, and construction material(s) the applicant or recipient seeks to waive from Domestic Content Procurement Preference requirement, including name, cost, country(ies) of origin (if known), and relevant PSC and NAICS code for each;
- Waiver justification including due diligence performed (e.g., market research, industry outreach) by the applicant or recipient; and
- Anticipated impact if no waiver is issued.

DOE may require additional information before considering the waiver request.

Waiver requests are subject to public comment periods of no less than 15 days and must be reviewed by the Made in America Office. There may be instances where an award qualifies, in whole or in part, for an existing waiver described at [\[link to awarding agency web site with information on currently applicable general applicability waivers\]](#).

The applicant does not have the right to appeal DOE’s decision concerning a waiver request.