

**U.S. Department of Energy (DOE)
Idaho Operations Office**



**Nuclear Reactor Safety Training and
Workforce Development Program**

Funding Opportunity Announcement (FOA) Number: DE-FOA-0003410

FOA Type: Initial

Assistance Listing Number: 81.121

This FOA will be open continuously for up to 5 years or when funds are no longer available.

Informational Webinar (Video links and presentation available at https://id.energy.gov/Home/NSTWD)	September 25, 2024
FOA Issue Due Date	September 30, 2024
Application Due Date	January 14, 2025 at 5:00 pm ET
Anticipated Award Date	May-June 2025

- To apply to this FOA, applicants must register with and submit application materials through Office of Nuclear Energy, Competitively Awarded Projects at proposalsworkforce.inl.gov.
- If an application is selected for award negotiations, it is not a commitment to issue an award. It is imperative that the applicant/selectee be responsive during award negotiations. Failure to do so may result in cancelation of further award negotiations and rescission of the selection.
- **Unique Entity Identifier (UEI) and System for Award Management (SAM)** – Each applicant is required to: (1) register in the SAM at <https://www.sam.gov> before submitting an application; (2) provide a valid UEI in the application; and (3) maintain an active SAM registration with current information at all times during which it has an active federal award or an application or plan under consideration by a federal awarding agency (unless the applicant is excepted from those requirements under 2 CFR 25.110). DOE may not make a federal award to an applicant until the applicant has complied with all applicable UEI and SAM requirements. If an applicant has not fully complied with the requirements by the time DOE is ready to make a federal award, DOE will determine that the applicant is not qualified to receive a federal award and use that determination as a basis for making a federal award to another applicant.

NOTE: Due to the high number of UEI requests and SAM registrations, entity legal business name and address validations are taking longer than expected to process. Entities should start the UEI and SAM registration process as soon as possible. If entities have technical difficulties with the UEI validation or SAM registration process, they should use the [HELP](#) feature on [SAM.gov](https://www.sam.gov). SAM.gov will address service tickets in the order in which they are received and asks that entities not create multiple service tickets for the same request or technical issue. Additional entity validation resources can be found here: [GSAFSD Tier 0 Knowledge Base - Validating your Entity](#).

NOTE: All FOA information will be posted at the www.Grants.gov website and DOE-ID's NSTWD informational website (<https://id.energy.gov/Home/NSTWD>) Electronic application submission site is proposalsworkforce.inl.gov.

Electronic applications and instructions are available at the <https://id.energy.gov/Home/NSTWD> website. To begin an application: (1) go to proposalsworkforce.inl.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. If you have any questions about your registration, contact the 208-526-7203 or NRST@inl.gov.

Any questions regarding the FOA or application requirements must be directed to NRST@id.doe.gov.

Questions

- Questions relating to the applications site can be directed to 208-526-7203 or NRST@inl.gov.
- Questions regarding the content of the FOA must be emailed to NRST@id.doe.gov. DOE will try to respond to a question within 3 business days, unless a similar question and answer have already been posted on the <https://id.energy.gov/Home/NSTWD> website.

SUMMARY OVERVIEW OF KEY INFORMATION

Issuing Agency	Department of Energy, Idaho Operations Office
Program Overview	This program will provide funding to support the development of nuclear reactor safety training and workforce development programs.
Objective	The objective of this FOA is to provide funding to implement new nuclear reactor safety training and workforce development programs.
Eligible Applicants	Domestic Entities – Prime applicant: Institutions of Higher Education (IHEs), including Historically Black Colleges and Universities (HBCUs), Tribal Colleges and Universities (TCUs), and other Minority Serving Institutions (MSI). Sub-applicants: IHEs, including HBCUs, TCUs, and other MSIs; for-profit entities; non-profit entities; state and local governmental entities; Indian Tribes; utilities; and national laboratories.
Funding	Scope of work: approximately \$100M Federal funding; 50% cost share requirement
Deadlines	Applications due: January 14, 2025, at 5:00 pm ET It is anticipated that future application dates may be available within a 5-year period, depending on availability of funds.

CHECKLIST FOR AVOIDING COMMON ERRORS

Item	Issue
Applications	Submitted to proposalsworkforce.inl.gov .
Page Limits	Strictly follow page limits and font size throughout application documents, including, but not limited to: <ul style="list-style-type: none"> • Project Narrative File (TA1 - 50-pages; TA2 – 10 pages) • Project Team Resumes (3-page max. per Resume) • Benefit of Collaboration (8-page) • Capabilities (4-pages)
Project 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 or use de minimus rate
Budget Justification	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.
Font Size	Pay particular attention to required font format and sizes, typically, Times New Roman, 11 pt. font.
Forms	Use associated links for any forms.

Table of Contents

SUMMARY OVERVIEW OF KEY INFORMATION	iv
Table of Contents	vi
PART I – FUNDING OPPORTUNITY DESCRIPTION	1
A. BACKGROUND AND OBJECTIVES.....	1
A.1 Bipartisan Infrastructure Law (BIL)	1
B. PROGRAM PURPOSE	2
C. APPLICATION TOPIC AREAS.....	4
D. APPLICATIONS SPECIFICALLY NOT OF INTEREST.....	4
E. COMMUNITY BENEFITS PLAN: JOB QUALITY AND EQUITY.....	4
F. AUTHORIZING STATUTES.....	5
G. NOTICE OF BIPARTISAN INFRASTRUCTURE LAW SPECIFIC REQUIREMENTS	5
PART II – AWARD INFORMATION.....	7
A. AWARD OVERVIEW.....	7
A.1 Estimated Funding	7
A.2 Funding Ceiling	7
B. EXPECTED NUMBER OF AWARDS.....	7
C. PERIOD OF PERFORMANCE.....	8
D. NUMBER OF SUBMITTALS.....	9
E. AWARD STRUCTURE.....	9
F. NEW APPLICATIONS ONLY.....	9
G. DOE FUNDING AGREEMENTS.....	9
G.1 Grants	9
G.2 Cooperative Agreements.....	9
G.3 Funding Agreements with Federally Funded Research and Development Center.....	10
PART III – ELIGIBILITY INFORMATION	11
A. ELIGIBLE APPLICANTS.....	11
A.1 Domestic Entities	11
A.2 Foreign Entities.....	12
B. COST SHARING.....	12

B.1	Cost Share Percentage	12
B.2	Legal Responsibility.....	12
B.3	Cost Share Allocation	13
B.4	Cost Share Types and Allowability	13
B.5	Cost Share Contributions by FFRDCs	14
B.6	Cost Share Verification	14
B.7	Cost Share Payment	14
C.	COMPLIANCE CRITERIA.....	15
D.	RESPONSIVENESS CRITERIA	15
E.	OTHER ELIGIBILITY REQUIREMENTS.....	15
E.1	Requirements for DOE/NNSA and Non-DOE/NNSA FFRDCs Included as a Subrecipient.....	15
E.2	Limitation on Number of Applications Eligible for Review	17
E.3	Questions Regarding Eligibility	17
	PART IV – APPLICATION AND SUBMISSION INFORMATION.....	18
A.	APPLICATION PROCESS.....	18
B.	ADDITIONAL INFORMATION ON SUBMISSION	18
C.	APPLICATION FORMS	19
D.	CONTENT AND FORM OF THE APPLICATION.....	20
D.1	Application Content Requirements.....	20
D.2	Conflict-of-Interest (COI) Acknowledgement.....	21
D.3	SF-424 (R&R): Application for Federal Assistance	22
D.4	Project Abstract	22
D.5	Project Narrative	22
D.6	Resumes	25
D.7	Benefit of Collaboration	25
D.8	Capabilities.....	26
D.9	Letters of Commitment Funding	27
D.10	SF-424 Research and Related (R&R) Lead Budget Form (Request for All Lead Institutions) .	27
D.11	SF-424 Research and Related (R&R) Subaward Budget Form	27
D.12	Budget for DOE/NNSA FFRDC Contractor (Required for National Laboratory Participants) .	28
D.13	Budget Justification (Required for Prime Applicants and all Sub-Applicants)	28
D.14	Current and Pending Support	29
D.15	Locations of Work.....	31

D.16	Coordination and Management Plan	32
D.17	Authorization for Non-DOE/NNSA or DOE/NNSA FFRDCs (If Applicable)	33
D.18	SF-LLL: Disclosure of Lobbying Activities (Required for All Lead Applicants)	33
D.19	Transparency of Foreign Connections	33
D.20	Community Partnership Documentation.....	35
D.21	Impacted Indian Tribes Documentation	35
D.22	Community Benefits Plan: Job Quality and Equity	38
D.23	Summary Slides	42
D.24	Intellectual Property Management Plan	42
D.25	Environmental Considerations Summary	43
D.26	Potentially Duplicative Funding Notice	44
E.	POST SELECTION INFORMATION REQUESTS	44
F.	UNIQUE ENTITY IDENTIFIER (UEI) AND SYSTEM FOR AWARD MANAGEMENT (SAM).....	45
G.	SUBMISSION DATES AND TIMES	45
H.	INTERGOVERNMENTAL REVIEW.....	46
I.	FUNDING RESTRICTIONS	46
I.1	Allowable Costs	46
I.2	Pre-Award Costs	46
I.3	National Environmental Policy Act (NEPA) Requirements Related to Pre-Award Costs	46
J.	PERFORMANCE OF WORK IN THE UNITED STATES.....	47
K.	FOREIGN TRAVEL	47
L.	EQUIPMENT AND SUPPLIES	47
M.	BUILD AMERICA BUY AMERICA REQUIREMENTS FOR INFRASTRUCTURE PROJECTS (IF APPLICABLE).....	47
N.	DAVIS-BACON ACT REQUIREMENTS (IF APPLICABLE).....	48
O.	LOBBYING	50
P.	RISK ASSESSMENT	50
Q.	INVOICE REVIEW AND APPROVAL.....	51
R.	PROHIBITION RELATED TO FOREIGN GOVERNMENT-SPONSORED TALENT RECRUITMENT PROGRAMS.....	52
S.	AFFIRMATIVE ACTION AND PAY TRANSPARENCY REQUIREMENTS	52
T.	FOREIGN COLLABORATION CONSIDERATIONS.....	53
	PART V – APPLICATION REVIEW INFORMATION	55

- A. CRITERIA..... 55**
 - A.1 Initial Review Criteria.....55
 - A.2 Topic Area 1 Applications.....55
 - A.3 Topic Area 2 Applications.....57
- B. Budget Evaluation..... 59**
- C. STANDARDS FOR APPLICATION EVALUATION..... 59**
- D. OTHER SELECTION FACTORS 60**
 - D.1 Program Policy Factors.....60
- E. EVALUATION AND SELECTION PROCESS..... 60**
 - E.1 Overview60
 - E.2 Pre-Selection Interviews60
 - E.3 Pre-Selection Clarification61
 - E.4 Recipient Responsibility and Qualifications.....61
 - E.5 Selection.....62
- PART VI – AWARD ADMINISTRATION INFORMATION 63**
- A. AWARD NOTICES..... 63**
 - A.1 Ineligible Submissions63
 - A.2 Application Notifications.....63
 - A.3 Applicants Selected for Award Negotiations63
 - A.4 Alternate Selection Determinations.....63
 - A.5 Unsuccessful Applicants64
- B. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS..... 64**
 - B.1 Award Administrative Requirements.....64
 - B.2 Foreign National Participation64
 - B.3 Subaward and Executive Reporting64
 - B.4 National Policy Requirements64
 - B.5 Environmental Review in Accordance with National Environmental Policy Act (NEPA)65
 - B.6 Flood Resilience65
- C. APPLICANT REPRESENTATIONS AND CERTIFICATIONS 66**
 - C.1 Lobbying Restrictions66
 - C.2 Corporate Felony Conviction and Federal Tax Liability Representations.....66
 - C.3 Nondisclosure and Confidentiality Agreements Representations.....66
 - C.4 Statement of Federal Stewardship.....67

C.5 Statement of Substantial Involvement.....68

C.6 Intellectual Property Management Plan69

C.7 Subject Invention Utilization Reporting69

C.8 Intellectual Property Provisions.....70

D. REPORTING 70

E. CONTINUATION REVIEW 71

F. NO-COST TIME EXTENSIONS 72

G. REBUDGET REQUEST 72

H. CONFERENCE SPENDING 72

I. UNIFORM COMMERCIAL CODE (UCC) FINANCING STATEMENTS..... 72

J. REAL PROPERTY AND EQUIPMENT 73

K. IMPLEMENTATION OF EXECUTIVE ORDER 13798, PROMOTING FREE SPEECH AND RELIGIOUS LIBERTY..... 73

L. PARTICIPANTS AND COLLABORATING ORGANIZATIONS..... 73

M. CURRENT AND PENDING SUPPORT 73

N. U.S. MANUFACTURING COMMITMENTS 74

O. INTERIM CONFLICT OF INTEREST POLICY FOR FINANCIAL ASSISTANCE 75

P. FRAUD, WASTE, AND ABUSE 75

Q. HUMAN SUBJECTS RESEARCH 76

R. CONSTRUCTION SIGNAGE..... 76

S. OPERATIONS WORKFORCE CONTINUITY PLAN 76

PART VII – QUESTIONS/AGENCY CONTACTS 78

PART VIII – OTHER INFORMATION 79

A. FOA MODIFICATIONS 79

B. GOVERNMENT RIGHT TO REJECT OR NEGOTIATE 79

C. COMMITMENT OF PUBLIC FUNDS..... 79

D. TREATMENT OF APPLICATION INFORMATION..... 79

E. EVALUATION AND ADMINISTRATION BY NON-FEDERAL PERSONNEL 80

F. NOTICE REGARDING ELIGIBLE/INELIGIBLE ACTIVITIES 80

G. NOTICE OF RIGHT TO CONDUCT A REVIEW OF FINANCIAL CAPABILITY..... 80

H. REQUIREMENT FOR FULL AND COMPLETE DISCLOSURE..... 81

I. RETENTION OF SUBMISSIONS..... 81

J.	TITLE TO SUBJECT INVENTIONS.....	81
K.	GOVERNMENT RIGHTS IN SUBJECT INVENTIONS.....	82
L.	RIGHTS IN TECHNICAL DATA.....	83
M.	COPYRIGHT.....	83
N.	EXPORT CONTROL.....	83
O.	PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT.....	84
P.	PERSONALLY IDENTIFIABLE INFORMATION (PII).....	84
Q.	ANNUAL INDEPENDENT AUDITS.....	84
R.	INFORMATIONAL WEBINAR.....	85
	<i>Appendix A – Cost Share Information.....</i>	86
	<i>Appendix B – Buy America Requirements for Infrastructure Projects.....</i>	90
	<i>Appendix C – Open-Source Software.....</i>	95

LIST OF ACRONYMS

BABA	Build America Buy America Act
BIL	Bipartisan Infrastructure Law
CBOO	Community Benefits Outcomes and Objectives
CEJST	Climate and Economic Justice Screening Tool
CEQ	Council on Environmental Quality
COI	Conflict of Interest
DBA	Davis-Bacon Act
DEC	Determination of Exceptional Circumstances
DEIA	Diversity, Equity, Inclusion, and Accessibility
DOE	Department of Energy
DOL	Department of Labor
EO	Executive Order
FAR	Federal Acquisition Regulation
FCOI	Financial Conflicts of Interest
FFATA	Federal Funding and Transparency Act of 2006
FFRDC	Federally Funded Research and Development Center
FOA	Funding Opportunity Announcement
FY	Fiscal Year
HBCUs	Historically Black Colleges and Universities
IHE	Institution of Higher Education
IPMP	Intellectual Property Management Plan
IRA	Inflation Reduction Act
M&O	Management and Operating
MSI	Minority Serving Institution
NCE	No Cost Time Extension
NDA	Non-Disclosure Acknowledgement
NE	Office of Nuclear Energy
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NNSA	National Nuclear Security Administration
NRST	Nuclear Reactor Safety Training and Workforce Development Program
NSF	National Science Foundation
OFCCP	Office of Federal Contractor Compliance Programs

OIG	Office of Inspector General
OMB	Office of Management and Budget
OSS	Open-Source Software
OSTI	Office of Scientific and Technical Information
OTA	Other Transactions Authority
PDF	Portable Document Format
PICS	Program Information Collection System
PII	Personal Identifiable Information
RD&D	Research, Development, and Demonstration
R&R	Research and Related
SAM	System for Award Management
SMART	Specific, Measurable, Achievable, Relevant, and Timely
SOPO	Statement of Project Objectives
SPOC	Single Point of Contact
STEM	Science, Technology, Engineering, and Mathematics
TA1	Topic Area 1
TA2	Topic Area 2
UCC	Uniform Commercial Code
UEI	Unique Entity Identifier
U.S.	United States
USG	United States Government
WBS	Work Breakdown Structure
WP	Work Proposal

PART I – FUNDING OPPORTUNITY DESCRIPTION

A. BACKGROUND AND OBJECTIVES

Human-caused climate change is making the world reconsider how electricity is generated. The United States Government (USG), under the leadership of the Biden Administration, has made unprecedented investments in clean energy production with the goals of a decarbonized electricity sector by 2035 and a carbon free economy by 2050. Nuclear power provides almost half of the clean electricity in the United States today and is poised to play a critical role in the nation’s transition to clean energy. This requires continued operation of the existing fleet as well as expanding its capacity through upgrades as well as the deployment of additional nuclear reactors. Recognizing the need for clean, firm, baseload generation to achieve this ambitious goal while providing economic opportunity and supporting good-paying jobs, the Biden Administration has joined together with other nations in a pledge to triple nuclear energy by 2050. Importantly, this large increase in nuclear energy also is estimated to require approximately 375,000 additional trained technical and non-technical workers to research, design, build, maintain, and operate the new reactors.

The Biden Administration’s policies, including the Bipartisan Infrastructure Law (BIL) in November 2021 and the Inflation Reduction Act (IRA) in August 2022 are providing billions of dollars toward the development of clean electricity generation. Many of these new incentives/programs are designed to increase the utilization of clean, firm electricity from nuclear energy. This funding opportunity was authorized by the BIL and is administered by the Department of Energy (DOE), Office of Nuclear Energy (NE) for developing the workforce needed to meet the future demand of nuclear energy.

The mission of NE is to advance nuclear energy science and technology to meet U.S. energy, environmental, and economic needs. NE has identified the following four mission 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.

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

A.1 Bipartisan Infrastructure Law (BIL)

The DOE NE Idaho Operations Office is issuing this Nuclear Reactor Safety Training and Workforce Development Program (NRST) FOA. Awards made under this FOA will be funded,

in whole or in part, with funds appropriated by the Infrastructure Investment and Jobs Act,¹ more commonly known as BIL.

BIL is a once-in-a-generation investment in modernizing and upgrading American infrastructure to enhance U.S. competitiveness, drive the creation of good-paying jobs with a free and fair chance to join a union, tackle the climate crisis, and ensure strong access to economic, environmental, and other benefits for disadvantaged communities.² BIL appropriates more than \$62 billion to the DOE³ to invest in American manufacturing and workers; expand access to energy efficiency and clean energy; deliver reliable, clean, and affordable power to more Americans; and demonstrate and deploy the technologies of tomorrow through clean energy demonstrations.

DOE's BIL investments will support efforts to build a clean and equitable energy economy that achieves a zero-carbon electricity system by 2035, and to put the United States on a path to achieve net-zero emissions economy-wide by no later than 2050⁴ to benefit all Americans.

BIL will invest up to \$100 million for the five (5) year period encompassing Fiscal Years (FYs) 2025 through 2030 for workforce development programs focused on nuclear safety training that supports the continued safe operation of existing nuclear power plants.

The activities to be funded under this FOA support BIL as outlined in Consolidated Appropriations Act of 2024 and the broader government-wide approach to provide funding to implement a new nuclear safety training program to maximize the benefits of the clean energy transition as the nation works to curb the climate crisis, empower workers, and advance environmental justice.

This FOA is expected to be continuously open (with modifications as needed) until funding is no longer available. Consideration of additional rounds of applications will be given if adequate funding remains available. Applications for the first round are due in January 2025 and subsequent rounds will be announced as needed.

B. PROGRAM PURPOSE

This FOA supports the administration goals as describe in Part I, Section A.

¹ Infrastructure Investment and Jobs Act, Public Law 117-58 (November 15, 2021). <https://www.congress.gov/bill/117th-congress/house-bill/3684>. This FOA uses the more common name Bipartisan Infrastructure Law (BIL).

² Pursuant to [Executive Order \(EO\) 14008](#), "Tackling the Climate Crisis at Home and Abroad," January 27, 2021, and the Office of Management and Budget's [Interim Justice40 Implementation Guidance M-21-28](#) and [Addendum M-23-09](#), DOE recognizes disadvantaged communities as the census tracts identified as disadvantaged by the White House Council on Environmental Quality's Climate and Economic Justice Screening Tool (CEJST), located at <https://screeningtool.geoplatform.gov/>, as well as all Federally Recognized Tribes (whether or not they have land). See https://www.whitehouse.gov/wp-content/uploads/2023/01/M-23-09_Signed_CEQ_CPO.pdf. DOE's Justice40 Implementation Guidance is located at <https://www.energy.gov/sites/default/files/2022-07/Final%20DOE%20Justice40%20General%20Guidance%20072522.pdf>.

³ U.S. Department of Energy. November 2021. "DOE Fact Sheet: The Bipartisan Infrastructure Deal Will Deliver for American Workers, Families and Usher in the Clean Energy Future." <https://www.energy.gov/articles/doe-fact-sheet-bipartisan-infrastructure-deal-will-deliver-american-workers-families-and-0>

⁴ [EO 14008](#), "Tackling the Climate Crisis at Home and Abroad," January 27, 2021.

As part of the whole-of-government approach to advance equity and encourage worker organizing and collective bargaining,^{5,6,7} and in alignment with BIL sections as outlined in the Consolidated Appropriations Act of 2024. This FOA and any related activities will seek to encourage meaningful engagement and participation of workforce organizations, including labor unions, as well as underserved groups and disadvantaged communities, including Federally Recognized Indian Tribes. Consistent with Executive Order (EO) 14008,⁸ this FOA is designed to help meet the goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities, as defined pursuant to the Executive Order⁹, and to drive creation of accessible, good-paying jobs with the free and fair chance for workers to join a union.

To meet the needs of an expanding nuclear reactor fleet, the nuclear energy workforce is estimated to require 375,000 additional trained workers to research, design, build, maintain, and operate new reactors, while maintaining the current nuclear reactor fleet. More information on these needs can be found at: <https://liftoff.energy.gov/wp-content/uploads/2023/05/20230320-Liftoff-Advanced-Nuclear-vPUB-0329-Update.pdf>.

To address this challenge, all applications to this FOA must:

- Establish a consortium with Institutions of Higher Education (IHEs), for-profit entities, nonprofit entities, State and local governmental entities, Indian Tribes, DOE/ National Nuclear Security Administration (NNSA) FFRDCs, labor organizations/unions, and utilities.
- Identify gaps in training, recruiting, and retaining skilled workers in the current nuclear workforce.
- Develop or enhance one or more industry recognized nuclear reactor safety credential(s) that can be used to establish a national standard for workers to work across reactor types.
- Identify pathways for sustainability of developed training programs and certificates past the project period of performance by establishing multi-stakeholder and industry-wide partnerships, proposing implementation plans following the program, and training module development.

⁵ [EO 13985](#), “Advancing Racial Equity and Support for Underserved Communities Through the Federal Government,” January 20, 2021. [EO 14091](#), “Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government,” February 16, 2023.

⁶ [EO 14025](#), “Worker Organizing and Empowerment,” April 26, 2021.

⁷ [EO 14052](#), “Implementation of the Infrastructure Investment and Jobs Act,” November 18, 2021.

⁸ [EO 14008](#), “Tackling the Climate Crisis at Home and Abroad,” January 27, 2021.

⁹ Pursuant to [EO 14008](#), “Tackling the Climate Crisis at Home and Abroad,” January 27, 2021, and the Office of Management and Budget’s [Interim Justice40 Implementation Guidance M-21-28](#) and [Addendum M-23-09](#), DOE recognizes disadvantaged communities as the census tracts identified as disadvantaged by the White House Council on Environmental Quality’s Climate and Economic Justice Screening Tool (CEJST), located at <https://screeningtool.geoplatform.gov/>, as well as all Federally Recognized Tribes (whether or not they have land). See https://www.whitehouse.gov/wp-content/uploads/2023/01/M-23-09_Signed_CEQ_CPO.pdf. DOE’s Justice40 Implementation Guidance is located at <https://www.energy.gov/sites/default/files/2022-07/Final%20DOE%20Justice40%20General%20Guidance%20072522.pdf>.

C. APPLICATION TOPIC AREAS

This FOA provides award opportunities to domestic entities as defined in Part III Section A. All work for projects selected under this FOA must be performed in the United States.

For applicants meeting the eligibility definition of Part III Section A, this FOA contains two (2) separate funding opportunity Topic Areas as described below:

1. Topic Area 1 (TA1) – Training and Workforce Program Demonstration and Implementation

Focuses on the demonstration and implementation of reactor safety training programs, as well as the establishment or enhancement of industry-recognized nuclear reactor safety training credentials. Consortia in this category will have already clearly identified nuclear reactor safety training gaps and will execute a project that will result in one or more training programs and industry recognized credentials implemented by workforce development training providers such as IHEs, non-profit training providers, private training providers, federally registered apprenticeships, etc.

2. Topic Area 2 (TA2) – Curriculum Focused Training Program Development

Development-focused opportunity targeting the identification and development of training pathways, curriculum, and faculty development at universities and community colleges to support reactor safety training programs, as well as establishing sustainable long-term partnerships with utilities, employers, labor-management programs Tribal Nations, state and/or local governments, labor organizations, K-12 formal and informal institutions, etc. The applicant should propose a plan for implementing the developed training curriculum with the established partnership.

D. APPLICATIONS SPECIFICALLY NOT OF INTEREST

The following types of applications will be deemed nonresponsive and will not be reviewed or considered:

- Applications that do not support or establish an industry recognized nuclear reactor safety credential.
- Applications that fall outside the technical parameters specified in Part(s) I.A. and I.B. of the FOA.
- Applications focused specifically in areas not of interest to the NE mission, such as fusion energy, medical physics, nuclear forensics, or environmental management.

E. COMMUNITY BENEFITS PLAN: JOB QUALITY AND EQUITY

To support the goal of building a clean and equitable energy economy, BIL-funded projects are expected to (1) support meaningful community and labor engagement; (2) invest in quality jobs; (3) advance diversity, equity, inclusion, and accessibility (DEIA); and (4) contribute to the President's goal that 40% of the overall benefits of certain federal investments flow to

disadvantaged communities (the Justice40 Initiative).¹⁰ To ensure these goals are met, applications must include a Community Benefits Plan that describes how the proposed project would incorporate the four objectives stated above.

Applicants are encouraged to submit Community and Labor Partnership Documentation from Federally Recognized Indian Tribes and established labor and community-based organizations that demonstrate the applicant's ability to achieve the above goals as outlined in the Community Benefits Plan. Within the Community Benefits Plan, the applicant is encouraged to provide details on how to ensure the delivery of measurable community and jobs benefits, ideally using negotiated agreements between the applicant and the community, and/or the applicant and labor unions referred to collectively here as "Workforce and Community Agreements." These include community benefits agreements, Tribal agreements, community workforce agreements, project labor agreements, and other collective bargaining agreements. See Part IV Section D.22. for the Community Benefits Plan content requirements.

F. AUTHORIZING STATUTES

The programmatic authorizing statutes are Department of Energy – Energy Programs – Nuclear Energy in division J of the Infrastructure Investment and Jobs Act (Public Law 117 – 58), section 311 of Public Law No.: 118-42 (03/08/2024), Consolidated Appropriations Act, 2024, section 31 of the Atomic Energy Act of 1954, as amended (42 U.S.C. §§ 2011, et seq.), section 4 of the Nuclear Safety, Research, Demonstration, and Development Act of 1980, and section 10745 of the Research and Development, Competition, and Innovation Act (division B of Public Law 117–167).

Funding for the grant(s) awarded under this FOA is subject to Congressional appropriations. The grant(s) will be awarded in accordance with Title 2 of the Code of Federal Regulations, Chapter II Subchapter H, Part 200 (2 CFR Part 200) and Title 2 of the Code of Federal Regulations, Chapter II Subchapter H, Part 910 (2 CFR Part 910). Awards will be made in accordance with regulatory requirements going into effect October 1, 2024.

G. NOTICE OF BIPARTISAN INFRASTRUCTURE LAW SPECIFIC REQUIREMENTS

Be advised that special terms and conditions apply to projects funded by the BIL relating to:

- Cybersecurity Plan;
- Davis-Bacon Act;

¹⁰ The Justice40 Initiative, established by [EO 14008](#), sets a goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities. Consistent with Justice40 guidance, DOE recognizes disadvantaged communities as the census tracts defined and identified as disadvantaged by the White House Council on Environmental Quality's Climate and Economic Justice Screening Tool (CEJST), located at <https://screeningtool.geoplatform.gov/>, as well as all Federally Recognized Tribes (whether or not they have land). See https://www.whitehouse.gov/wp-content/uploads/2023/01/M-23-09_Signed_CEQ_CPO.pdf.

- Reporting, tracking, and segregation of incurred costs;
- Reporting on job creation and preservation;
- Publication of information on the internet;
- Access to records by Inspectors General and the Government Accountability Office;
- Requiring all of the iron, steel, manufactured goods, and construction materials used in the infrastructure activities of applicable projects are produced in the United States;
- Protecting whistleblowers and requiring prompt referral of evidence of a false claim to an appropriate inspector general; and
- Certification and registration.

Recipients of funding appropriated by the BIL must comply with requirements of all applicable federal, state, and local laws, regulations, DOE policy and guidance, and instructions in this FOA. Recipients must flow down the requirements to sub-recipients to ensure the recipient's compliance with the requirements.

PART II – AWARD INFORMATION

A. AWARD OVERVIEW

A.1 Estimated Funding

DOE expected funding for all awards over a five-year period is approximately \$100 million of federal funding for new awards under this FOA, subject to the availability of appropriated funds. NE anticipates \$50 million in funding from FY 2023 and FY 2024 for awards in this FOA for FY 2025. During the five-year period, DOE may issue one, multiple, or no awards. NE encourages applicants to propose projects at the appropriate funding level to accomplish the FOA's objectives and will evaluate all applications that fall below the ceiling outlined in Part II Section A.2. **Applicants should recognize that the request must be sufficient to establish an industry recognized nuclear reactor safety certification.**

Applications are to be written so each proposed task within a budget period is completed within the specified budget period. DOE may establish more than one budget period for each award and fund only the initial budget period(s). Funding for all budget periods, including the initial budget period, is not guaranteed. If selected, DOE may decide to fund only a portion of the application or the entire application for award. If only a portion of the application is selected for negotiation, a new application can be submitted for the portion that was not selected for negotiation in a subsequent application cycle.

A.2 Funding Ceiling

Topic Area	Topic Area Title	Anticipated Number of Awards	Anticipated Minimum Award Size for Any One Individual Award (Fed Share)	Anticipated Maximum Award Size for Any One Individual Award (Fed Share)	Approximate Total Federal Funding Available for All Awards	Anticipated Period of Performance (months)
TA1	Training and Workforce Program Demonstration and Implementation	0 to 8	\$5 Million	\$40 Million	\$40 Million	60
TA2	Curriculum Focused Training Program Development	0 to 10	\$500,000	\$2 Million	\$10 Million	24

B. EXPECTED NUMBER OF AWARDS

Topic Area 1 – Training and Workforce Program Demonstration and Implementation: DOE anticipates making up to eight cooperative agreement awards under this FOA. DOE may

issue one or more, or may choose not to make any awards based on the current year budget situation, the merit of the applications received, and other selection factors contained in Part V. If selected, DOE may decide to fund only a portion of the application or the entire application for award.

Topic Area 2 – Curriculum Focused Training Program Development: DOE anticipates making up to 10 total grants under this FOA. DOE may issue one, multiple, or choose not to make any awards based on the merit of the applications received and the selection and other program policy factors contained in Part V.

	Topic Areas	Anticipated No. of Awards
TA1	Training and Workforce Program Demonstration and Implementation	0 - 8
TA2	Curriculum Focused Training Program Development	0 - 10

C. PERIOD OF PERFORMANCE

The period of performance for awards under this FOA is anticipated to start within 30 days after issuance of an award.

Topic Area 1 – Training and Workforce Program Demonstration and Implementation: DOE anticipates making cooperative agreement awards with an estimated project period of performance for up to five years with multiple budget periods. Projects must submit a continuation request for each budget period.

NOTE: Project continuation will be contingent upon 1) availability of funds appropriated by Congress for the purpose of this program; 2) the availability of future-year budget authority; 3) substantial progress towards meeting the objective of the approved application; 4) submittal of required reports/other deliverable; 5) compliance with the terms and conditions of the award; and 6) DOE approval of a continuation application. Included in the evaluation of whether the recipient is making substantial progress towards meeting the objectives of the approved application, DOE will evaluate demonstrative project performance, project schedule adherence, meeting of milestone objectives, quality of deliverables, compliance with reporting requirements, and overall contribution to the program goals and objectives. As a result of this evaluation, DOE will make an annual determination to continue the project, re-direct the project, or not approve the continuation application and discontinue funding the project.

A continuation application is required to be submitted to the DOE Technical Project Officer and the DOE Contract Specialist for approval at least 90 days prior to the end of the current budget period. Upon approval of the continuation application, an amendment is issued to authorize the expenditure of funds for the project during the new budget period. The required content of the continuation application will be included in the terms and conditions of the initial agreement. Both fully funded or partially funded awards require a continuation application.

Topic Area 2 – Curriculum Focused Training Program Development: DOE anticipates making grant awards with an estimated project period of performance for approximately two years with one budget period.

D. NUMBER OF SUBMITTALS

In round one, applicants may submit only one application in either TA1 or TA2 as the lead applicant under this FOA. The applicant is considered to be the prime applicant.

Applicants are eligible to apply to future rounds.

There are no limitations to the number of applications submitted for an entity that is the non-prime applicant (i.e. subcontractor, contractor, or sub-applicant).

E. AWARD STRUCTURE

1. Awards will be made to consortia comprising a lead university applicant and eligible sub-recipients partnering to deliver the training program(s).
2. The program shall require a cost share of at least 50 percent of the total project costs as described in Appendix A (e.g., \$1 federal funding: \$1 non-federal funding match) with the cost share coming from non-federal sources unless otherwise allowed by law.

F. NEW APPLICATIONS ONLY

DOE will accept only new applications under this FOA. DOE will not consider applications for renewals of existing DOE-funded awards through this FOA.

G. DOE FUNDING AGREEMENTS

Through grants and cooperative agreements, DOE provides financial and other support to projects that have the potential to realize the FOA objectives. DOE does not use such agreements to acquire property or services for the direct benefit or use of the U.S. government.

G.1 Grants

DOE will use grants for Topic Area 2 to provide financial and other support to prime recipients to accomplish a public purpose of support or stimulation authorized by federal statute.

G.2 Cooperative Agreements

DOE will use cooperative agreements for Topic Area 1 to provide financial and other support to prime recipients.

Through cooperative agreements, DOE provides financial or other support to accomplish a public purpose of support or stimulation authorized by federal statute. Under cooperative agreements, the government and prime recipients share responsibility for the direction of projects.

DOE has substantial involvement in all projects funded via cooperative agreements. See Part VI Section C.5. of the FOA for more information on what substantial involvement may involve.

G.3 Funding Agreements with Federally Funded Research and Development Center¹¹

FFRDCs are funded independently of the remainder of the project team. The FFRDC then executes an agreement with any non-FFRDC project team members to arrange work structure, project execution, and any other matters. Regardless of these arrangements, the entity that applied as the prime recipient for the project will remain the prime recipient for the project.

¹¹ FFRDCs are public-private partnerships that conduct research for the U.S. government. A listing of FFRDCs can be found at <http://www.nsf.gov/statistics/ffrdclist/>.

PART III – ELIGIBILITY INFORMATION

A. ELIGIBLE APPLICANTS

To be considered for substantive evaluation, an applicant’s submission must meet the criteria set forth below. If the application does not meet these eligibility requirements, it will be considered ineligible and removed from further evaluation.

A.1 Domestic Entities

Domestic entities are eligible to apply as prime applicants or sub-applicant. The following types of domestic entities are eligible to participate as a **prime applicant** of this FOA:

1. IHEs

The following types of domestic entities are eligible to participate as a **sub-applicant** of the FOA:

1. IHEs
2. For-profit entities
3. Nonprofit entities
4. State and local governmental entities
5. Indian Tribes, as defined in section 4 of the Indian Self-Determination and Education Assistance Act, 25 U.S.C. § 5304¹²
6. Labor organizations/unions
7. Utilities
8. DOE/NNSA FFRDCs
9. Labor-management programs

¹² “**Indian Tribe**,” for the purposes of this FOA and as defined in in section 4 of the Indian Self-Determination and Education Assistance Act ([25 U.S.C. § 5304](#)), [1]means any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act ([85 Stat. 688](#)) [[43 U.S.C. § 1601, et seq.](#)], which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians. Federally Recognized Indian Tribes are also considered disadvantaged communities for the purposes of Justice40 requirements in this FOA per https://www.whitehouse.gov/wp-content/uploads/2023/01/M-23-09_Signed_CEQ_CPO.pdf.

Universities located in proximity to nuclear power plants with decades of operational safety experience and challenges are expected to receive priority consideration.

DOE/NNSA FFRDCs are eligible to apply for funding as a sub-recipient but are not eligible to apply as a prime recipient.

Federal agencies and instrumentalities (other than DOE) are eligible to participate as a subrecipient but are not eligible to apply as a prime applicant. To qualify as a domestic entity, the entity must be organized, chartered, or incorporated (or otherwise formed) under the laws of a particular state or territory of the United States or under the laws of the United States; have majority domestic ownership and control; and have a physical place of business in the United States.

Entities banned from doing business with the U.S. government, such as entities debarred, suspended, or otherwise excluded from or ineligible for participating in federal programs, are not eligible.

Nonprofit organizations described in Section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995, are **not** eligible to apply for funding.

A.2 Foreign Entities

Foreign entities are not eligible to apply as either a prime applicant or sub-applicant.

B. COST SHARING

Applicants are bound by the cost share proposed in their application if selected for award negotiations.

B.1 Cost Share Percentage

The cost share must be at least 50%¹³ of the total project costs.¹⁴ The cost share must come from non-federal sources unless otherwise allowed by law.

To help applicants calculate proper cost share amounts, DOE has included a cost share information sheet as Appendix A to this FOA.

B.2 Legal Responsibility

Although the cost share requirement applies to the entire project, including work performed by

¹³ H.R.4366, PUBLIC LAW 118-42—MAR. 9, 2024 Consolidated Appropriations Act, 2024 Division D, explanatory statement; and statutory requirement from EPACT 2005, 42 USC 16352, SEC. 988 Cost Sharing.

¹⁴ Total project costs are the sum of the government share, including FFRDC costs if applicable, and the recipient share of project costs.

members of the project team other than the prime recipient, the prime recipient is legally responsible for paying the entire cost share. If the funding agreement is terminated prior to the end of the project period, the prime recipient is required to contribute at least the cost share percentage of total expenditures incurred through the date of termination.

The prime recipient is solely responsible for managing cost share contributions by the project team and enforcing cost share obligation assumed by project team members in subawards or related agreements.

B.3 Cost Share Allocation

Each project team is free to determine how best to allocate the cost share requirement among the team members. The amount contributed by individual project team members may vary, as long as the cost share requirement for the entire project is met.

B.4 Cost Share Types and Allowability

Every cost share contribution must be allowable under the applicable federal cost principles, as described in Part IV Section I. of the FOA. In addition, cost share must be verifiable upon submission of the application. Cost share may be provided in the form of cash or cash equivalents, or in-kind contributions. Cost share must come from non-federal sources (unless otherwise allowed by law), such as project participants, state or local governments, or other third-party financing. DOE Loan Guarantees cannot be leveraged by applicants to provide the required cost share or otherwise support the same scope that is proposed under a project.

Cost share may be provided by the prime recipient, subrecipients, or third parties (entities that do not have a role in performing the scope of work). Vendors/contractors may not provide cost share. Any partial donation of goods or services is considered a discount and is not allowable.

Cash contributions include but are not limited to personnel costs, fringe costs, supply and equipment costs, indirect costs, and other direct costs.

In-kind contributions are those where a value of the contribution can be readily determined, verified, and justified but where no actual cash is transacted in securing the good or service comprising the contribution. Allowable in-kind contributions include but are not limited to the donation of volunteer time or the donation of space or use of equipment.

Project teams may use funding or property received from state or local governments to meet the cost share requirement, so long as the federal government did not provide the funding to the state or local government.

The prime recipient and subrecipient(s) may not use the following sources to meet cost share obligations:

- Revenues or royalties from the prospective operation of an activity beyond the project period

- Proceeds from the prospective sale of an asset of an activity
- Federal funding or property (e.g., federal grants, equipment owned by the federal government)
- Expenditures that were reimbursed under a separate federal program

Project teams may not use the same cash or in-kind contributions to meet cost share requirements for more than one project or program.

Cost share contributions must be specified in the project budget, verifiable from the prime recipient's records, and necessary and reasonable for proper and efficient accomplishment of the project. As all sources of cost share are considered part of total project cost, the cost share dollars will be scrutinized under the same federal regulations as federal dollars to the project. Every cost share contribution must be reviewed and approved in advance by the Contracting Officer and incorporated into the project budget before the expenditures are incurred.

Applicants are encouraged to refer to 2 CFR 200.306 as adopted and supplemented by 2 CFR 910.130 for additional cost sharing requirements.

B.5 Cost Share Contributions by FFRDCs

Because FFRDCs are funded by the federal government, costs incurred by FFRDCs generally may not be used to meet the cost share requirement. FFRDCs may contribute cost share only if the contributions are paid directly from the contractor's Management Fee or another non-federal source.

B.6 Cost Share Verification

Applicants are required to provide written assurance of their proposed cost share contributions in their applications.

Upon selection for award negotiations, applicants are required to provide additional information and documentation regarding their cost share contributions. Please refer to Appendix A of the FOA.

B.7 Cost Share Payment

DOE requires prime recipients to contribute the cost share amount incrementally over the life of the award. Specifically, the prime recipient's cost share for each billing period must always reflect the overall cost share ratio negotiated by the parties (i.e., the total amount of cost sharing on each invoice when considered cumulatively with previous invoices must reflect, at a minimum, the cost sharing percentage negotiated). As FFRDC funding will be provided directly to the FFRDC(s) by DOE, prime recipients will be required to provide project cost share at a percentage commensurate with the FFRDC costs, on a budget period basis, resulting in a higher interim invoicing cost share ratio than the total award ratio.

In limited circumstances, and where it is in the government's interest, the DOE Contracting

Officer may approve a request by the prime recipient to meet its cost share requirements on a less frequent basis, such as monthly or quarterly. Regardless of the interval requested, the prime recipient must be up to date on cost share at each interval. Such requests must be sent to the Contracting Officer during award negotiations and include the following information: (1) a detailed justification for the request; (2) a proposed schedule of payments, including amounts and dates; (3) a written commitment to meet that schedule; and (4) such evidence as necessary to demonstrate that the prime recipient has complied with its cost share obligations to date. The Contracting Officer must approve all such requests before they go into effect.

C. COMPLIANCE CRITERIA

All applicant submissions must:

- Comply with the applicable content and form requirements listed in Part IV. of the FOA
- Include all required documents
- Be uploaded and submitted to proposalsworkforce.inl.gov
- Be submitted by the deadline stated in the FOA (see cover page)

DOE will not review or consider submissions submitted through means other than proposalsworkforce.inl.gov, submissions submitted after the applicable deadline, or incomplete submissions.

D. RESPONSIVENESS CRITERIA

All Applications Specifically Not of Interest, as described in Part I Section D. of the FOA, are deemed nonresponsive and are not reviewed or considered.

E. OTHER ELIGIBILITY REQUIREMENTS

E.1 Requirements for DOE/NNSA and Non-DOE/NNSA FFRDCs Included as a Subrecipient

DOE/NNSA and non-DOE/NNSA FFRDCs may be proposed as a sub-applicant on another entity's application subject to the following guidelines:

- a. Authorization for non-DOE/NNSA FFRDCs
The federal agency sponsoring the FFRDC must authorize in writing the use of the FFRDC on the proposed project and this authorization must be submitted with the application. The use of a FFRDC must be consistent with its authority under its award.
- b. Authorization for DOE/NNSA FFRDCs
The cognizant Contracting Officer for the FFRDC must authorize in writing the use of the FFRDC on the proposed project and this authorization must be submitted with the application. The following wording is acceptable for this authorization:

Authorization is granted for the Laboratory to participate in the proposed project. The work proposed for the Laboratory is consistent with or complementary to the missions of the Laboratory and will not adversely impact execution of the DOE assigned programs at the Laboratory.

c. Funding, Cost Share, and Subaward with FFRDCs

The value of and funding for the FFRDC portion of the work will not normally be included in the award. DOE/NNSA FFRDCs participating as a subrecipient on a project will be funded directly through the DOE field work proposal (WP) process. Non-DOE/NNSA FFRDCs participating as a subrecipient will be funded through an interagency agreement with the sponsoring agency.

Although the FFRDC portion of the work is excluded from the award, the applicant's cost share requirement will be based on the total cost of the project, including the applicant's, the subrecipient's, and the FFRDC's portions of the project.

Unless instructed otherwise by the DOE Contracting Officer for the DOE award, all FFRDCs are required to enter into a Cooperative Research and Development Agreement¹⁵ (CRADA) or, if the role of the DOE/NNSA FFRDC is limited to technical assistance and intellectual property is not anticipated to be generated from the DOE/NNSA FFRDC's work, a Technical Assistance Agreement (TAA), with at least the prime recipient before any project work begins. Any questions regarding the use of a CRADA or TAA should be directed to the cognizant DOE field intellectual property (IP) counsel.

The CRADA or TAA is used to ensure accountability for project work and provide the appropriate management of IP, e.g., data protection and background IP. The CRADA or TAA must be agreed upon by all parties and submitted to DOE or other sponsoring agency, when applicable, for approval, or submitted to DOE for notice under the Master Scope of Work process, when applicable, using any DOE or other sponsoring agency approved CRADA or TAA template without substantive changes by the time the award is made to the prime recipient.

d. Responsibility

The prime recipient will be the responsible authority regarding the settlement and satisfaction of all contractual and administrative issues, including but not limited to disputes and claims arising out of any agreement between the prime recipient and the FFRDC.

e. Limit on FFRDC Effort

¹⁵ A cooperative research and development agreement is a contractual agreement between a national laboratory contractor and a private company or university to work together on research and development. For more information, see <https://www.energy.gov/gc/downloads/doe-cooperative-research-and-development-agreements>

The scope of work to be performed by the FFRDC should not be more significant than the scope of work to be performed by the prime applicant.

E.2 Limitation on Number of Applications Eligible for Review

An entity may submit only one application to this FOA. If an entity submits more than one application, DOE will request a determination from the applicant's authorizing representative as to which application should be reviewed. Any other submissions received listing the same entity as the applicant will not be eligible for further consideration. This limitation does not prohibit an applicant from collaborating on other applications (e.g., as a potential subrecipient or partner) so long as the entity is listed as the applicant on only one submission under this FOA.

E.3 Questions Regarding Eligibility

DOE will not make eligibility determinations for potential applicants prior to the date on which applications to this FOA must be submitted. The decision whether to apply in response to this FOA lies solely with the applicant.

PART IV – APPLICATION AND SUBMISSION INFORMATION

A. APPLICATION PROCESS

The application process includes the submission of an application.

All submissions must conform to the form and content requirements described below, including maximum page lengths.

- Each must be submitted in Adobe PDF format unless stated otherwise.
- Each must be written in English.
- All spreadsheets are to be uploaded in Excel file format to proposalworkforce.inl.gov. Do **NOT** lock any cells in the spreadsheet.
- All non-budget documentation (use templates where provided) is to be prepared using standard 8.5" × 11" paper with 1-inch margins (top, bottom, left, right) and a font size no smaller than Times New Roman 11 point. This is a requirement for all pages included in the document (i.e., table of contents, references, etc.). The preferred file format is Adobe Portable Document Format (PDF) for all documents except for spreadsheets. References must be included as footnotes or endnotes in a font size of 10 or larger. Footnotes and endnotes are counted toward the maximum page requirement.
- Applicants must comply with all pertinent page limitations. Page numbers are required. 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."

B. ADDITIONAL INFORMATION ON SUBMISSION

DOE-ID's NRST informational website (<https://id.energy.gov/Home/NSTWD>) Electronic application submission site is proposalworkforce.inl.gov.

Apply for this FOA at proposalworkforce.inl.gov. Electronic applications and instructions are available at the <https://id.energy.gov/Home/NSTWD> website. To access these materials: (1) go to proposalworkforce.inl.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. If you have any questions about your registration, contact the 208-526-7203 or NRST@inl.gov. Any questions regarding the FOA or application requirements must be directed to NRST@id.doe.gov.

C. APPLICATION FORMS

Application forms and instructions are available at <https://id.energy.gov/Home/NSTWD> and a courtesy copy can be found at the proposalsworkforce.inl.gov website. To access these materials: (1) go to proposalsworkforce.inl.gov; (2) select “Login” from the top right-hand corner of the screen; (3) enter your user credentials; (4) select “Applications” from the menu; and (5) click on “Create New Application” for the type of application you are creating.

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

Any required FOA submittal, modification, or withdrawal received at the Government office designated in this FOA after the exact time specified for receipt of that submittal is “late” and will not be considered.

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

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

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

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

If electronic applications cannot be submitted, applicants can contact:

NE External Innovation Integration Office
Attn: Angie Good
PO Box 1625 MS 3730
Idaho Falls, Idaho 83415
Telephone: 208-526-9613 Fax: 208-526-1844 E-mail: NRST@inl.gov

D. CONTENT AND FORM OF THE APPLICATION

Applicants must complete the following application forms found on DOE-ID's NRST informational website (<https://id.energy.gov/Home/NSTWD>) Electronic applications can be submitted at proposalsworkforce.inl.gov.

All application documents must be marked with the Tracking ID Number issued by the system to the applicant.

D.1 Application Content Requirements

Each application must be limited to a single concept. Applications must conform to the following requirements and must not exceed the stated page limits.

Component	File Format	Required From	Signature Required
Conflict of Interest	Checkbox	Certified by Prime Applicant for all Participants when submitting application	
SF-424 (R&R): Application for Federal Assistance	PDF	Prime Applicant	Yes
Project Abstract (2-page limit)	PDF	Prime Applicant	
Project Narrative File (TA1 - 50-page limit TA2 – 10 pages)	PDF	Prime Applicant	
Resumes 3-page limit	PDF	3 pages each	
Benefits of Collaborations 8-page limit	PDF	Prime Applicant	
Capabilities 4-page limit	PDF	Prime Applicant	
Letters of support or commitment 1-page limit per letter	PDF	Sub-Applicant and third party cost share providers	
SF-424 (R&R) Lead Budget Form	Form - Excel	Prime Applicant	
SF-424 (R&R) Subaward Budget (if applicable)	Form - Excel	Collaborators who meet minimum requirements (work estimated to be \$250,000 or more or 50% of the total work effort, whichever is less) *	
Budget for DOE National Laboratory Contractor or FFRDC, if applicable	PDF	National Laboratory Applicants (including non-funded collaborators)*	Yes
Budget Justification	PDF	Prime Applicant	
Subaward Budget Justification (if applicable)	PDF	Collaborators who meet minimum requirements (work estimated to be \$250,000 or more or 50% of the total work effort, whichever is less) *	
Current and Pending Support	PDF	Prime Applicant	
Coordination and Management Plan	PDF	Prime Applicant	

Component	File Format	Required From	Signature Required
Locations of Work and Project/ Performance Site Location(s) Form	PDF	Prime Applicant and Sub-Applicant	
DOE Work Proposal for FFRDC, (see DOE O 412.1A, Attachment 2)	PDF	National Laboratory Applicants (including non-funded collaborators)	
Authorization from cognizant Contracting Officer for FFRDC	PDF	National Laboratory Applicants (including non-funded collaborators)	Yes
SF-LLL Disclosure of Lobbying Activities	PDF	Prime Applicant	Yes
Transparency of Foreign Connections Foreign Government Ownership Disclosure	PDF	Prime Applicant	
Community Partnership Documentation Each letter 1-page limit, total of 10-pages	PDF	Prime Applicant	
Impacted Indian Tribes Documentation	PDF	Prime Applicant	
Summary Slides – 2 slide limit	MS PowerPoint	Prime Applicant	
Community Benefits Plan: Job Quality and Equity	PDF	Prime Applicant	
Intellectual Property Management Plan	PDF	Prime Applicant	
Environmental Considerations Summary	PDF	Prime Applicant	
Potentially Duplicative Funding Notice	PDF	Prime Applicant	

Note: The maximum file size that can be uploaded to proposalsworkforce.inl.gov website is 100MB.

DOE provides detailed guidance on the content and form of each component below.

D.2 Conflict-of-Interest (COI) Acknowledgement

The DOE interim Conflict of Interest Policy for Financial Assistance (COI Policy) can be found at <https://www.energy.gov/management/department-energy-interim-conflict-interest-policy-requirements-financial-assistance>. This policy is applicable to all non-Federal entities applying for, or that receive, DOE funding by means of a financial assistance award (e.g., a grant, cooperative agreement, or technology investment agreement) and, through the implementation of this policy by the entity, to each Investigator who is planning on participating in, or is participating in, the project funded wholly or in part under the DOE financial assistance award. DOE's interim COI Policy establishes standards that provide a reasonable expectation that the design, conduct, and reporting of projects funded wholly or in part under DOE financial assistance awards will be free from bias resulting from financial conflicts of interest or organizational conflicts of interest. The applicant is subject to the requirements of the interim

COI Policy and within each application for financial assistance, the applicant must certify that it is or will be by the time of receiving any financial assistance award, compliant with all requirements in the interim COI Policy.

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

Name File: NRST COI “Insert ID #”

D.3 SF-424 (R&R): Application for Federal Assistance

Applicants must complete the SF-424 (R&R): Application for Federal Assistance, which is available on DOE-ID’s NRST informational website (<https://id.energy.gov/Home/NSTWD>)

Effective January 1, 2020, the System for Award Management (SAM) is the central repository for common government-wide certifications and representations required of Federal grants recipients. As registration in SAM is required for eligibility for a federal award and registration must be updated annually, Federal agencies use SAM information to comply with award requirements and avoid increased burden and costs of separate requests for such information, unless the recipient fails to meet a federal award requirement, or there is a need to make updates to their SAM registration for other purposes.

Name File: NRST Prime Applicant SF424 “Insert ID#”.pdf

D.4 Project Abstract

The project summary/abstract must contain a summary of the proposed activity, suitable for dissemination to the public. It should be a self-contained document that identifies the following: the name of the applicant; the name of the PI(s); the project title; a list of major deliverables; the scope and objectives of the project; a description of the project, including major tasks (phases, planned approach, etc.) and methods to be employed; the potential impact of the project (i.e., benefits, outcomes); and the names of senior/key personnel (for collaborative projects). This document must not include any proprietary or sensitive business information as NE may make it available to the public after awards are made. Pages outside the specified page limits and font size, including references, will be redacted and unavailable for evaluators to review.

Applicants should use the provided template found on the application site; 2-page limit

Name File: NRST Project Abstract “Insert ID #”.pdf

D.5 Project Narrative

Topic Area 1 – Narrative Description

Applicant shall provide a written narrative addressing the project strategy. The documentation provided shall include the items specified below:

- Application title.
- Project Objectives: Provide a clear, concise statement of specific objectives/aims of the proposed project in support of the NE mission.
- Proposed scope description.
- Logical path to accomplishing scope, including descriptions of tasks. This section will provide a clear, concise statement of the specific objectives/aims of the proposed project. This section should be formatted to address each of the merit review criterion listed in Part V, Section A. Provide sufficient information so that reviewers will be able to evaluate the application in accordance with these merit review criteria including:
 - How the consortium addresses national training and current and future workforce challenges, across reactor types and/or utilities.
 - The extent to which the proposed methods address challenges related to local, regional, and national training and workforce needs.
 - How the project leads to a nuclear reactor safety certification.
 - How the project plans to create a certification that would be industry recognized and accepted by multiple locations, power plants, or utilities.
 - How the team plans to create sustainability and longevity of the certification after project funding expires. These considerations may include support from utility, broad industry, and other stakeholder phasing plans that align with industry needs, or other ways to create sustainability within the consortia.
- Relevance and Outcomes/Impacts: This section will provide a clear explanation of its importance and relevance to the NE mission as described in the objectives in Part I Section A.
- Schedule: Define timelines for execution including all important activities or phases of the project. Successful applicants must use this schedule when reporting project progress.
- Milestones and deliverables.
- Type/Description of facilities that will be used to execute the scope (if applicable).
- The roles and responsibilities of each partnering organization in the execution of the project. Describe the role and work to be performed by each participant/investigator, the business arrangements between the applicant and participants, and how the various efforts will be integrated and managed.
- Unique challenges to accomplishing the work and planned mitigations.
- Information, data, plans, or drawings necessary to explain the details of the application.

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

TA1 - 50-pages, 11-point font.

Name File: NRST Project Narrative “Insert ID #”.pdf

Topic Area 2 – Narrative Description

Applicant shall provide a written narrative addressing the project strategy. The documentation provided shall include the items specified below:

- Application title.
- Project Objectives: Provide a clear, concise statement of specific objectives/aims of the proposed project in support of the NE mission.
- Proposed scope description.
- Logical path to accomplishing scope, including descriptions of tasks. This section will provide a clear, concise statement of the specific objectives/aims of the proposed project. This section should be formatted to address each of the merit review criterion listed in Part V, Section A. Provide sufficient information so that reviewers will be able to evaluate the application in accordance with these merit review criteria including:
 - How the consortium addresses national training and current and future workforce challenges, across reactor types and/or utilities.
 - The extent to which the proposed methods address challenges related to local, regional, and national training and workforce needs.
 - Outline the curriculum, faculty development needed and how those activities directly address identified gaps.
 - Describe the team's strategy to effectively engage for-profit, nonprofit, state and local governments, labor organizations, tribal nations, and others to establish pathways for adoption and implementation of curriculum and/or proposed programs.
- Relevance and Outcomes/Impacts: This section will provide a clear explanation of its importance and relevance to the NE mission as described in the objectives in Part I Section A.
- Schedule: Define timelines for execution including all important activities or phases of the project. Successful applicants must use this schedule when reporting project progress.
- Milestones and deliverables.
- Type/Description of facilities that will be used to execute the scope (if applicable).
- The roles and responsibilities of each partnering organization in the execution of the project. Describe the role and work to be performed by each participant/investigator, the business arrangements between the applicant and participants, and how the various efforts will be integrated and managed.

- Unique challenges to accomplishing the work and planned mitigations.
- Information, data, plans, or drawings necessary to explain the details of the application.

TA2 – 10 pages, 11-point font.

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

Name File: NRST Project Narrative “Insert ID #”.pdf

D.6 Resumes

A resume provides information reviewers can use to evaluate an individual’s relevant skills and the experience of the key project personnel. Applicants must submit a resume (limited to three pages) for each project manager and Senior/Key Personnel that includes the following:

1. Contact information
2. Education: All academic institutions attended, major/area, degree
3. Training: (e.g.,) certification or credential from a Registered Apprenticeship or Labor Management Partnership
4. Professional experience: Beginning with the current position, list professional/academic positions in chronological order with a brief description
5. List all 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 over the past 5 years
6. There should be no lapses in time over the past 10 years or since age 18, whichever period is shorter

3-page limit, 11-point font.

Name File: NRST Resume “Insert ID#”.pdf

D.7 Benefit of Collaboration

The applicant shall provide a narrative that includes an explanation of the contribution that will be made by the collaborating organizations and/or facilities to be utilized.

This narrative should include:

- Identification of any universities located in proximity to a nuclear power plant with decades of operational safety experience and challenges.
 - Discussion of the contributions of those universities, their impact on the project, and the consortiums plan to sustainably support activities at consortium partners

after the conclusion of the award.

- Estimation of specific impact the award will have on universities and nuclear power plants that qualify under the definition above.
- If universities that qualify under this definition are part of the consortium, but do not have a significant role, the prime applicant should describe the strategic reasons for including the university partner.
- Clear roles and responsibilities about how each partner will enable the overall success of the project and create impact in their domain space.

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

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

8-page limit, 11-point font.

Name File: NRST Benefit of Collaboration “Insert ID#”.pdf

D.8 Capabilities

Provide information on the following, as applicable:

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

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

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

4-page limit, 11-point font.

Name File: NRST Capabilities “Insert ID #”.pdf

D.9 Letters of Commitment Funding

Submit letters of commitment from all subrecipient and third-party cost share providers. 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).

Letters of support or endorsement for the project from entities that do not have a substantive role in the project will not be accepted.

Each letter must not exceed one page, 11-point font.

Name File: NRST LOC “Insert ID#”.pdf

D.10 SF-424 Research and Related (R&R) Lead Budget Form (Request for All Lead Institutions)

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

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

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

Name File: NRST Budget “Insert ID #”.xls

D.11 SF-424 Research and Related (R&R) Subaward Budget Form

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

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

Name File: NRST Subaward Budget “Insert ID #”.xls

D.12 Budget for DOE/NNSA FFRDC Contractor (Required for National Laboratory Participants)

If using a DOE/NNSA FFRDC contractor, the FFRDC must provide a DOE Field Work Proposal in accordance with the requirements in DOE Order 412.1A, Administrative (Admin) Change 1, Work Authorization System dated 05/21/2014. FWP’s can be obtained from respective laboratory financial administrators. FFRDCs are permitted to propose costs in accordance with their established DOE contracts (e.g., overhead, fees, etc.). NOTE: If no funds are to be subawarded to the FFRDC, the DOE Field Work Proposal is not required.

Name File: NRST FWP “Insert ID #”.pdf

D.13 Budget Justification (Required for Prime Applicants and all Sub-Applicants)

For your convenience, a [Budget Justification Supporting Documentation](#) is available at <https://id.energy.gov/Home/NSTWD>. Applicants should include costs associated with implementing award requirements (e.g., Buy America requirements for infrastructure projects, Davis-Bacon, Community Benefits Plan, reporting, oversight, construction signage¹⁶) and with required annual audits and incurred cost proposals in their proposed budget documents. Such costs may be reimbursed as a direct or indirect cost.

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

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

Provide an explanation of the source, nature, amount, and availability of the cost share.

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

¹⁶ After receiving a DOE award, recipients are encouraged to display DOE Investing in America signage during and after construction. Guidance can be found at: (<https://www.energy.gov/design>). Proposed signage costs that meet these specifications are an allowable cost and should be included in the proposed project budget.

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

In an appendix to the Budget Justification, the following information for each third party contributing to cost sharing must be identified: (1) the name of the organization; (2) the proposed dollar amount to be provided; (3) the amount as a percentage of the total project cost; and (4) the proposed cost sharing - cash, services, or property.

Save the Budget Justification in a single file.

Name File: NRST Budget Justification "Insert ID #".pdf

D.14 Current and Pending Support

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 Principal Investigator or Lead Project Manager and all Senior/Key Personnel at the applicant and sub-applicant 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 connections with 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 through end date)
- The person-months of effort per year dedicated to the award or activity

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.

PIs and Senior/Key Personnel must provide a separate disclosure statement listing the required information above regarding current and pending support. Each individual must sign and date their respective disclosure statement and include the following certification statement:

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

The information may be provided in the approved common disclosure format available at [Common Form for Current and Pending \(Other\) Support \(nsf.gov\)](https://www.nsf.gov). Regardless of the format used, the individual must include a signature, date, and a certification statement using the language included in the paragraph above.

Save the Current and Pending Support in a single PDF file using the following convention for the title:

Name File: NRST CPS "Insert ID #".pdf

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 physically relocate to the foreign state for the above purpose. Some programs allow for or encourage continued employment at United States 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 United States 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 a DOE award.¹⁷

D.15 Locations of Work

The applicant must provide a list of locations where project work will be performed by the prime recipient or subrecipient(s) including the following information for each location:

- Location Type
- Location Type Category
- Is this a Principal Place of Performance?
- Prime or Subrecipient Location?
- If Subrecipient, Subrecipient/Community Name
- Facility Name (if applicable)
- Is location in a foreign country?
- Street Address, City, State, 5-Digit Zip Code - +4
- Briefly describe the primary activity at this location or with this population. For example, management headquarters; construction, operations, production; raw materials extraction,

¹⁷ Typically, these individuals have doctoral or other professional degrees, although individuals at the masters or baccalaureate level may be considered Senior/Key Personnel if their involvement meets this definition. Consultants, graduate students, and those with a postdoctoral role also may be considered Senior/Key Personnel if they meet this definition.

etc.

- Latitude/Longitude
- Does the location of work qualify as a disadvantaged community according to the according to the CEJST?
- Does the location or community that will receive benefits qualify as a disadvantaged community according to the CEJST?
- If a disadvantaged community, add the census tract number or describe the distributed disadvantaged community served (e.g., migrant workers)
- Will a Federally Recognized Tribe or Tribal entity receive benefits?
- Is the location of work sited on Tribal land or does it intersect with Tribal subsurface rights?
- If a geographically defined disadvantaged community, add the census tract number or describe the distributed (dispersed) disadvantaged community served (e.g., migrant workers)
- % of work performed at this location

Applicants must provide the Locations of Work Documentation as a Microsoft Word file.

Name File: NRST Work Location “Insert ID#”.pdf

As an additional, required upload, please complete the Project/Performance Site Location form, found on the application site.

Name File: NRST Site Location “Insert ID#”.pdf

D.16 Coordination and Management Plan

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

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

Name File: NRST CMP “Insert ID #”.pdf

D.17 Authorization for Non-DOE/NNSA or DOE/NNSA FFRDCs (If Applicable)

The federal agency sponsoring the FFRDC must authorize in writing the use of the FFRDC on the proposed project and this authorization must be submitted with the application. The use of a FFRDC must be consistent with the contractor's authority under its award.

The cognizant Contracting Officer for the FFRDC must authorize in writing the use of the FFRDC on the proposed project and this authorization must be submitted with the application. The following wording is acceptable for this authorization:

Authorization is granted for the Laboratory to participate in the proposed project. The work proposed for the Laboratory is consistent with or complementary to the missions of the Laboratory and will not adversely impact execution of the DOE assigned programs at the Laboratory.

Name File: NRST FFRDC Auth "Insert ID #".pdf

D.18 SF-LLL: Disclosure of Lobbying Activities (Required for All Lead Applicants)

Recipients and subrecipients may not use any federal funds to influence or attempt to influence, directly or indirectly, congressional action on any legislative or appropriation matters.

Recipients and subrecipients are required to complete and submit SF-LLL, "Disclosure of Lobbying Activities" (grants.gov/forms/forms-repository/sf-424-individual-family) to ensure that non-federal funds have not been paid and will not be paid to any person for influencing or attempting to influence any of the following in connection with the application:

- An officer or employee of any federal agency
- A Member of Congress
- An officer or employee of Congress
- An employee of a Member of Congress

Name File: NRST SF-LLL "Insert ID #".pdf

D.19 Transparency of Foreign Connections

Applicants must provide the following information as it relates to the proposed recipient and subrecipient(s). 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 physical 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, including the People's Republic of China.
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, directly or indirectly, 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 equipment that will be used on the project:
 - a. Unmanned aircraft, control, and communication components originally made or manufactured in a foreign country of risk (including relabeled or rebranded equipment).
 - b. Coded equipment where the source code is written in a foreign country of risk.
 - c. Equipment from a foreign country of risk that will be connected to the internet or other remote communication system.
 - d. Any companies from a foreign country of risk that will have physical or remote access to any part of the equipment used on the project after delivery.
10. Any foreign business entity, offshore entity, or entity outside the United States related to the proposed recipient or subrecipient.
11. 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.
12. 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.
13. 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%.

14. 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.
15. 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.

Save the Transparency of Foreign Connections information in a single PDF file using the following convention for the title:

Name File: NRST TFC “Insert ID #”.pdf

D.20 Community Partnership Documentation

In support of the Community Benefits Plan, applicants are encouraged to submit documentation to demonstrate existing or planned partnerships with community entities, such as organizations that work with local stakeholders most vulnerable to or affected by the project. Examples of such entities include organizations that carry out workforce development programs, labor unions, Indian Tribes, Tribal organizations, and community-based organizations that work with disadvantaged communities. The partnership documentation can be a letter on a partner’s letterhead outlining the planned partnership and signed by an officer of the entity, a Memorandum of Understanding, or another similar agreement. Such letters must state the specific nature of the partnership and must not be general letters of support. If the applicant intends to enter into Workforce and Community Agreements as part of the Community Benefits Plan, they should include letters from proposed partners.

Each letter must not exceed one page. In total, the partnership documentation must not exceed 10 pages.

Name File: NRST Community Partner “Insert ID#”.pdf

D.21 Impacted Indian Tribes Documentation

For any application that potentially impacts Indian Tribes or is on Tribal land¹⁸, including when the potentially impacted Indian Tribe is the applicant, applicants are required to submit additional documentation at the time of application, and possibly during negotiation and prior to award. For any project that potentially impacts Indian Tribes, applicants are required to submit

¹⁸ Tribal land is as defined in 25 U.S.C. §§ 3501(2), (3), (4)(A) and (13)

documentation demonstrating that an authorized representative¹⁹ of each potentially impacted Indian Tribe is, at a minimum, aware of the nature of the application and its potential impacts to the relevant Indian Tribes. The notified authorized representative must be holding their position while the award is open for applications, and documentation must demonstrate affirmative awareness of the application (e.g. a delivery record from certified mail, a reply by the authorized representative).

For any project intended to be sited on Tribal land(s) or intersecting with Tribal subsurface rights, applicants are required to submit documentation demonstrating support from the relevant Indian Tribes at the time of application. Documentation of support submitted at the time of application will be considered to also demonstrate awareness of an Indian Tribe (specified above). Documentation may include either:

- A letter of support from Tribal leadership. The letter must be signed by an authorized representative of the Indian Tribe. The signer(s) must be holding their position while the award is open for applications or negotiations.
- A Tribal Council Resolution, Board resolution (including the Board of Directors of an Alaska Native Corporation (ANC)), or similar act passed by the legislative body of the Tribal government or Board of Directors of an ANC, expressing support for the project.

Applicants are encouraged to reference or include any applicable community benefits agreements in the Tribal support documentation, and to integrate any Tribal support documentation in the community benefits plan as appropriate. For projects not intended to be sited on Tribal land(s) or intersecting with Tribal subsurface rights, but that may have other potential impacts on Tribal resources or reserved rights, letters of support or resolutions of support are strongly encouraged and, depending on the nature of the impact, may be required if selected for negotiation of an agreement. Applicants are encouraged to reach out to Indian Tribes as early as possible in the application process to give Indian Tribes ample time to evaluate and respond.

The following resources may be useful to help determine if a project may impact an Indian Tribe(s) resources or reserved rights and the appropriate contacts. These resources are not exhaustive, and many Indian Tribes have resources or reserved rights which extend beyond their Tribal lands, or are covered within treaties, statutes, or case-law. Applicants are encouraged to do additional research:

- Map of Indian Lands: <https://bia-geospatial-internal.geoplatform.gov/indianlands/>
- Tribal Treaties Database: <https://treaties.okstate.edu/>
- Directory of federally recognized Tribes and Tribal leaders:

¹⁹ An authorized representative must be an elected official or designated leader according to the traditions, constitution, or charter of the Indian Tribe, or someone with relevant delegated authority within the Tribal government. Examples include: Chief, Chairman, Chairwoman, Governor, Nation Representative, President, Chief Executive Officer, Chief Financial Officer, Speaker of the Council, Speaker of the Congress, Tribal administrator

<https://www.bia.gov/service/tribal-leaders-directory>

- Best Practices for Identifying and Protecting Tribal Treaty Rights, Reserved Rights, and other similar rights in federal regulatory actions:
https://www.bia.gov/sites/default/files/dup/inline-files/best_practices_guide.pdf

To help determine if an Indian Tribe's resources or reserved rights may be impacted by the project, applicants must address the following elements. If the applicant is an Indian Tribe, these elements should be addressed to ascertain impacts to Indian Tribes other than the applicant. Applicants do not need to reveal specific details about sacred sites such as specific location or specific ceremonies:

- Identify any [other] proposed actions which may impact an Indian Tribe(s) resources or reserved rights. Tribal resources and reserved rights include, and are not limited to, an Indian Reservation or Land (as defined in 25 U.S.C. § 3501) [or intersecting Tribal subsurface rights], historic homelands from which they were removed, cultural sites, sacred sites, water rights, mineral and other subsurface rights, fishing rights, and hunting rights. Identify the Tribe(s) potentially impacted and any sources of uncertainty or confidentiality.
- Explain any actions taken by the applicant to mitigate or address any potential impacts identified above, including engaging with the potentially impacted Indian Tribe(s), in the application.

Applicants are required to document any efforts taken to identify any potential impacts to Indian Tribes, Indian lands, Alaska Native regional and village land, traditional homelands, Tribal rights, or Tribal historic sites, or sacred sites. This includes any correspondence with Indian Tribes. These documents should be available on request to DOE. An applicant's failure to submit documentation of an Indian Tribe's awareness, or a letter of support, when required as described above, may constitute grounds for determining an application ineligible, non-responsive to the FOA/OT solicitation, not subject to further review and/or not otherwise subject to selection or award.

Any application that may potentially impact Indian Tribe(s) may be shared with the potentially impacted Indian Tribe(s). Applicants should include a Notice of Restriction on Disclosure and Use of Data identifying any business sensitive, trade secrets, proprietary, or otherwise confidential information. Such information shall be used or disclosed only for evaluation of the application or to determine whether the proposed project affects an Indian Tribe(s). If an applicant determines an Indian Tribe(s) will be impacted, the applicant must provide information on the project location, potential impacts and how the applicant will engage with Indian Tribe(s), during the period of performance of the agreement, and, if necessary, after the end of the agreement. Approval by DOE must be obtained before any activities take place that could impact Tribal resources or reserved rights, including but not limited to lands, cultural sites, sacred sites, water rights, mineral rights, fishing rights, and hunting rights. DOE will determine if formal government-to-government consultation is needed, and DOE will conduct that consultation accordingly, in addition to any engagement by applicant.

Name File: NRST Tribal Documentation “Insert ID#”.pdf

D.22 Community Benefits Plan: Job Quality and Equity

The Community Benefits Plan: Job Quality and Equity (Community Benefits Plan or Plan) must set forth the applicant’s approach to ensuring that federal investments advance four goals: (1) community and labor engagement; (2) investing in quality jobs; (3) advancing DEIA; and (4) contributing to the Justice40 Initiative. The Community Benefits Plan should indicate the applicant’s intention to engage meaningfully with labor and community stakeholders on these goals, including the potential of entering into formal Workforce and Community Agreements. Given project complexity and sensitivities, applicants should consider pursuing multiple agreements.

For your convenience, a Community Benefits Plan Template is available on proposalsworkforce.inl.gov. Applicants are strongly encouraged to use the template to complete their specific Plan. If the template is not used, the Plan must address all of the elements described below, and as outlined in the template.

The applicant’s Community Benefits Plan should include at least one Specific, Measurable, Achievable, Relevant, and Timely (SMART) milestone per budget period to measure progress on the proposed actions. The Plan will be evaluated as part of the technical review process. If DOE selects a project, the selectee is responsible for developing a Community Benefits Outcomes and Objectives (CBOO) document. DOE will incorporate the CBOO into the award and the recipient must implement its CBOO when carrying out its project. Public transparency around the plan and SMART commitments ensure accountability. As such, DOE plans to make the content of each CBOO available publicly. In addition, DOE will evaluate the recipient’s progress during the award period of performance, including as part of the Go/No-Go review process.

This Plan must address the technical review criterion titled “Community Benefits Plan: Job Quality & Equity.” See Part V of the FOA.

The Community Benefits Plan must address the following:

1. **Community and Labor Engagement:** The Community Benefits Plan must describe the applicant’s actions to date and plans to engage with community partners, such as state and local governments, Indian Tribes, labor unions, and community-based organizations that support or work with underserved populations, as well as disadvantaged communities as defined for purposes of the Justice40 Initiative²⁰. By facilitating community input, social buy-in, and accountability, such engagement has

²⁰ Pursuant to [EO 14008](#), “Tackling the Climate Crisis at Home and Abroad,” January 27, 2021, and the Office of Management and Budget’s [Interim Justice40 Implementation Guidance M-21-28](#) and [Addendum M-23-09](#), DOE recognizes disadvantaged communities as the census tracts identified as disadvantaged by the White House Council on Environmental Quality’s Climate and Economic Justice Screening Tool (CEJST), located at <https://screeningtool.geoplatform.gov/>, as well as all Federally Recognized Tribes (whether or not they have land). See https://www.whitehouse.gov/wp-content/uploads/2023/01/M-23-09_Signed_CEQ_CPO.pdf. DOE’s Justice40 Implementation Guidance is located at <https://www.energy.gov/media/277188>

the potential to substantially reduce or eliminate delays, litigation, and other risks associated with project implementation.

Although Tribal governments are included in this section on community and labor stakeholders, American Indian and Alaska Native Tribal Nations have rights as sovereign governments recognized under the Constitution of the United States, treaties, statutes, Executive Orders, and court decisions. Applicants are required to make Indian Tribes aware of potential impacts and obtain letters of support when projects are on Tribal land or intersect with Tribal subsurface rights, as required under “Impacted Indian Tribes Documentation” of Part IV Section D.21 of this FOA.

Community and labor engagement should lay the groundwork for the negotiation of Workforce and Community Agreements, which could take the form of one or more kinds of negotiated agreements with Indian Tribes, communities, labor unions, or, ideally, each. Registered apprenticeship programs, labor-management training partnerships, quality pre-apprenticeship programs, and local and targeted hiring goals are key components of workforce agreements. Community agreements can include economic benefits for Tribes and local and disadvantaged communities as well as provisions such as a community-governed fund, a community steering committee, and environmental, wealth-building, energy or other benefits for communities or Tribes.

Applicants should also provide Community and Labor Partnership Documentation from representative organizations reflecting substantive engagement and feedback on the applicant’s approach to community benefits, including quality jobs; diversity, equity, inclusion, and accessibility; and the Justice40 Initiative detailed below.

2. **Investing in Quality Jobs:** A well-qualified, skilled, and trained workforce is necessary to ensure project stability, continuity, and success, and to meet program goals. High-quality jobs are critical to attracting and retaining the qualified workforce required.

The Plan must describe the applicant’s approach to investing in workforce education and training of both new and incumbent workers and ensuring jobs are of sufficient quality to attract and retain skilled workers in the industry.

The National Labor Relations Act requires that employees have the right to organize and bargain collectively through labor organizations of their choosing, thereby creating a workplace more amenable to resolving disputes before work disruptions occur. This helps assure project efficiency, continuity, and multiple public benefits.

The Plan should include:

- A. A summary of the applicant’s plan to attract, train, and retain a skilled and well-qualified workforce for planning, construction, *and* ongoing operations/production activities, as applicable. A collective bargaining agreement, labor-management partnership, or other similar agreement could provide evidence of such a plan. Alternatively, applicants may describe:

-
- i. Wages, benefits, and other worker supports to be provided, benchmarked against prevailing wages for construction and local median wages for other relevant occupations as well as other measures of job quality;
 - ii. Commitments to invest in workforce education and training, including measures to reduce attrition, increase productivity from a committed and engaged workforce, and support the development of a resilient, skilled, and stable workforce for the project; and
 - iii. Efforts to engage employees in the design and execution of workplace safety and health plans.
 - B. It is the policy of the United States to eliminate the causes of certain substantial obstructions to the free flow of commerce by encouraging the practice and procedure of collective bargaining and by protecting the exercise by workers of full freedom of association. Applicant should provide a description of how and if they plan to affirmatively support worker organizing and collective bargaining. For example, this might include a commitment to negotiate pre-hire project labor agreements for construction activity, a pledge to remain neutral during any union organizing campaigns, intention or willingness to permit union recognition through card check (as opposed to requiring union elections), intention or willingness to enter into binding arbitration to settle first contracts, a pledge to allow union organizers access to appropriate onsite non-work places (e.g., lunch rooms), a pledge to refrain from holding captive audience meetings, and other supportive commitments or pledges.
 3. **DEIA:** The Community Benefits Plan must include a section describing how DEIA objectives will be incorporated into the project. The section should detail how the applicant will partner with underrepresented²¹ businesses, residents of disadvantaged communities, educational institutions, and training organizations that serve workers who face barriers to accessing quality jobs, and/or other project partners to help address DEIA.

The following is a list of potential DEIA actions that could be included in a Plan. This list is offered to provide guidance to applicants and is not intended to be comprehensive:

- A. Commit to partnering or contracting with Minority Serving Institutions²² or businesses majority owned or controlled by residents of disadvantaged

²¹ “Underrepresented” refers to populations sharing a particular characteristic, as well as geographic communities, that are shown to have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, as exemplified by communities that have been denied fair, just, and impartial treatment, which may include Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; persons otherwise adversely affected by persistent poverty or inequality; women; and veterans

²² Minority-Serving Institution is defined in [7 CFR § 3430.302](#).

- communities, underrepresented persons or groups of underrepresented persons;
- B. To fill open positions for the DOE-funded project, partner with workforce training organizations serving underrepresented populations and those facing systemic barriers to quality employment, such as those with disabilities, women, returning citizens, opportunity youth, and veterans;
 - C. Provide workers with comprehensive support services, such as childcare and transportation, to increase representation and access in project's construction and operations jobs.
4. **Justice40 Initiative:** Applicants must provide an overview of benefits to disadvantaged communities that the project can deliver, supported by measurable milestones. The Justice40 Initiative section should include:

- A. Identification of applicable disadvantaged communities to which the anticipated project benefits will flow, by making clear whether Federally Recognized Tribes or Tribal entities will benefit or if benefits will flow to disadvantaged communities as identified by the Climate and Economic Justice Screening Tool (CEJST) (<https://screeningtool.geoplatform.gov/>).
- B. Identification of applicable benefits that are quantifiable, measurable, and trackable, including, at a minimum, a discussion of the relevance of each of the eight DOE Justice40 Initiative benefits outlined below.

Benefits include (but are not limited to) measurable direct or indirect investments or positive project outcomes that achieve or contribute to the following in disadvantaged communities: (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 quality job creation, the clean energy job pipeline, and job training for individuals; (5) increases in clean energy enterprise creation and contracting; (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. Applicants should also discuss how the project will maximize all the benefits listed in number 4 above.

- C. A description of the mechanism and timing of anticipated benefits are expected to flow to disadvantaged communities. For example, whether the benefits will be provided directly within the disadvantaged communities identified in the Justice40 Initiative section or in another way; whether the benefits will flow during project development and/or after project completion; and how the applicant will track benefits delivered.
- D. A discussion of anticipated negative environmental, social or economic impacts as described in B. above on local and disadvantaged communities including communities geographically near the project or directly affected by project construction or operations, as well as known impacts upstream (in the supply chain, e.g., raw material extraction) or downstream (e.g., waste disposal).

Applicants should discuss any anticipated negative or positive environmental impacts associated with the project, and how they will mitigate any negative impacts, including cumulative negative impact. Within the context of negative or positive impacts created by the project, applicants should use the CEJST to quantitatively discuss existing environmental impacts in the project area. See <https://screeningtool.geoplatform.gov/>.

For projects funded under this FOA, DOE will provide specific reporting guidance for the benefits described above.

The Community Benefits Plan must not exceed [12] pages, 11-point font.

File Name: NRST Community of Benefits Plan “Insert ID #”.pdf

See the Community Benefits Plan Template and [About Community Benefits Plans](#) for more guidance.

D.23 Summary Slides

Applicants must provide not more than 2 slides summarizing the proposed project. The Summary Slide must include the following information:

- A project summary
- Project location (location of work)
- Proposed project goals
- Any key graphics (illustrations, charts and/or tables)
- The project’s key idea/takeaway
- Topline community benefits
- Project title, prime recipient, PI/LPM, and Senior/Key Personnel information
- Requested DOE funds and proposed applicant cost share

Save the Summary Slide in a single Microsoft PowerPoint file.

Name File: NRST Summary Slides “Insert ID#”.pptx

D.24 Intellectual Property Management Plan

Applicants must submit an executed Intellectual Property Management Plan (IPMP) between the members of the consortia or team.

The award will set forth the treatment of and obligations related to intellectual property rights between DOE and the individual members. The IPMP should describe how the members will handle intellectual property rights and issues between themselves while ensuring compliance

with federal intellectual property laws, regulations, and policies (see Part VIII Sections K.- N. of this FOA for more details on applicable federal intellectual property laws and regulations). Guidance regarding the contents of IPMP is available from DOE upon request.

The following is a list of examples of items the IPMP may cover:

- The treatment of confidential information between members (e.g., the use of NDAs)
- The treatment of background intellectual property (e.g., any requirements for identifying it or making it available)
- The treatment of inventions made under the award (e.g., any requirements for disclosing to the other members on an application, filing patent applications, paying for patent prosecution, and cross-licensing or other licensing arrangements between the members)
- The treatment of data produced, including software, under the award (e.g., any publication process or other dissemination strategies, copyrighting strategy, or arrangement between members)
- Any technology transfer and commercialization requirements or arrangements between the members
- The treatment of any intellectual property issues that may arise due to a change in membership of the consortia or team
- The handling of disputes related to intellectual property between the members

Save the Intellectual Property Management Plan in a single PDF file using the following convention for the title:

Name: NRST IPMP “Insert ID #”.pdf

D.25 Environmental Considerations Summary

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.

D.26 Potentially Duplicative Funding Notice

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 in writing of the potential duplication and eliminate any inappropriate duplication of funding.

Save the Potentially Duplicative Funding Notice in a single PDF file using the following convention for the title:

File Name: NRST PDFN "Insert ID #".pdf

E. 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. The following is a list of examples of information that may be required:

- Personnel proposed to work on the project and collaborating organizations (See Part VI Section L Participants and Collaborating Organizations)
- Current and Pending Support (See Part IV Section D14. and Part VI Section M Current and Pending Support)
- Community Benefits Outcomes and Objectives (See Section IV.D.22.)
- An Intellectual Property Management Plan describing how the project team/consortia members will handle intellectual property rights and issues between themselves while ensuring compliance with federal intellectual property laws, regulations, and policies in accordance with Part VI Section C.6. Intellectual Property Management Plan
- Indirect cost information
- Other budget information
- Letters of Commitment from third parties contributing to cost share
- Name and phone number of the Designated Responsible Employee for complying with national policies prohibiting discrimination (See 10 CFR 1040.5)

- Information for the DOE Office of Civil Rights to process assurance reviews under 10 CFR 1040
- Representation of Limited Rights Data and Restricted Software, if applicable
- Information related to Davis-Bacon Act requirements
- Information related to any proposed Workforce and Community Agreement, as defined above in “Community Benefits Plan: Job Quality and Equity,” that applicants may have made with the relevant community
- Any proposed or required Project Labor Agreements or Collective Bargaining Agreements
- Operations Workforce Continuity Plan
- Environmental Questionnaire
- Point of contact sheet

F. UNIQUE ENTITY IDENTIFIER (UEI) AND SYSTEM FOR AWARD MANAGEMENT (SAM)

Each applicant is required to: (1) register in the SAM at <https://www.sam.gov> before submitting an application; (2) provide a valid UEI in the application; and (3) maintain an active SAM registration with current information at all times during which it has an active federal award or an application or plan under consideration by a federal awarding agency (unless the applicant has an exception approved by the federal awarding agency under 2 CFR 25.110). DOE may not make a federal award to an applicant until the applicant has complied with all applicable UEI and SAM requirements. If an applicant has not fully complied with the requirements by the time DOE is ready to make a federal award, DOE will determine that the applicant is not qualified to receive a federal award and use that determination as a basis for making a federal award to another applicant.

NOTE: Due to the high demand of UEI requests and SAM registrations, entity legal business name and address validations are taking longer than expected to process. Entities should start the UEI and SAM registration process as soon as possible. If entities have technical difficulties with the UEI validation or SAM registration process, they should use the [HELP](#) feature on [SAM.gov](#). SAM.gov will work entity service tickets in the order in which they are received and asks that entities not create multiple service tickets for the same request or technical issue. Additional entity validation resources can be found here: [GSAFSD Tier 0 Knowledge Base - Validating your Entity](#).

G. SUBMISSION DATES AND TIMES

All required submissions must be submitted in proposalsworkforce.inl.gov no later than 5 p.m. ET on the dates provided on the cover page of this FOA.

H. INTERGOVERNMENTAL REVIEW

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

I. FUNDING RESTRICTIONS

I.1 Allowable Costs

All expenditures must be allowable, allocable, and reasonable in accordance with the applicable federal cost principles. Pursuant to 2 CFR 910.352, the cost principles in the Federal Acquisition Regulations (FAR) (48 CFR 31.2) apply to for-profit entities. The cost principles contained in 2 CFR Part 200, Subpart E apply to all entities other than for-profits.

I.2 Pre-Award Costs

Applicants selected for award negotiations (selectees) must request prior written approval to charge pre-award costs. Pre-award costs are those incurred prior to the effective date of the federal award directly pursuant to the negotiation and in anticipation of the federal award where such costs are necessary for efficient and timely performance of the scope of work. Such costs are allowable only to the extent that they would have been allowable if incurred after the date of the federal award and **only** with the written approval of the federal awarding agency, through the DOE Contracting Officer.

Pre-award expenditures are made at the selectee's risk. DOE is not obligated to reimburse costs: (1) in the absence of appropriations; (2) if an award is not made; or (3) if an award is made for a lesser amount than the selectee anticipated.

I.3 National Environmental Policy Act (NEPA) Requirements Related to Pre-Award Costs

DOE's decision whether and how to distribute federal funds under this FOA is subject to NEPA. Applicants should carefully consider and should seek legal counsel or other expert advice before taking any action related to the proposed project that would have an adverse effect on the environment or limit the choice of reasonable alternatives prior to DOE completing the NEPA review process.

DOE does not guarantee or assume any obligation to reimburse pre-award costs incurred prior to receiving written authorization from the Contracting Officer. If the applicant elects to undertake activities that DOE determines may have an adverse effect on the environment or limit the choice of reasonable alternatives prior to receiving such written authorization from the Contracting Officer, the applicant is doing so at risk of not receiving federal funding for its project and such costs may not be recognized as allowable cost share. Nothing contained in the pre-award cost reimbursement regulations or any pre-award costs approval letter from the Contracting Officer overrides the requirement to obtain the written authorization from the Contracting Officer prior to taking any action that may have an adverse effect on the environment or limit the choice of reasonable alternatives. Likewise, if an application is selected

for negotiation of award, and the prime recipient elects to undertake activities that are not authorized for federal funding by the Contracting Officer in advance of DOE completing a NEPA review, the prime recipient is doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

J. PERFORMANCE OF WORK IN THE UNITED STATES

1. **Requirement** – All work performed under awards issued under this FOA must be performed in the United States. The prime recipient must flow down this requirement to its subrecipients.
2. **Failure to Comply** – If the prime recipient fails to comply with the Performance of Work in the United States requirement, DOE may deny reimbursement for the work conducted outside the United States and such costs may not be recognized as allowable recipient cost share. The prime recipient is responsible should any work under this award be performed outside the United States, regardless of whether the work is performed by the prime recipient, subrecipients, contractors or other project partners.

K. FOREIGN TRAVEL

Foreign travel costs are not allowable under this FOA.

L. EQUIPMENT AND SUPPLIES

To the greatest extent practicable, all equipment and products purchased with funds made available under this FOA should be American-made. This requirement does not apply to used or leased equipment.

M. BUILD AMERICA BUY AMERICA REQUIREMENTS FOR INFRASTRUCTURE PROJECTS (IF APPLICABLE)

Pursuant to the Build America Buy America Act, subtitle IX of BIL (Buy America or BABA), and in accordance with 2 CFR Part 184, no funds for federal financial assistance which is subject to BABA requirements may be used for a project unless:

- All iron and steel used in the infrastructure work are produced in the United States;
- All manufactured products used in the project are produced in the United States; and
- All construction materials used in the infrastructure work are manufactured in the United States.

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 defined in Section 70914 of the BIL, and whether the infrastructure in question is publicly owned or serves a public function.

Applicants are strongly encouraged to consult Appendix B 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.

BABA requirements apply to DOE prime recipients that are "non-Federal entities." In accordance with Office of Management and Budget (OMB) [OMB Memorandum M-24-02](#) and 2 CFR 200.1, the term "non-Federal entity" includes states, local governments, territories, Indian Tribes, Institutes of Higher Education or non-profit organizations. DOE does not apply BABA requirements to for-profit entities.

Subawards should conform to the terms of the prime award from which they flow; in other words, for-profit prime recipients are not required to flow down these Buy America requirements to subrecipients, even if those subrecipients are non-Federal entities as defined above. Conversely, prime recipients which are non-Federal entities must flow the Buy America requirements down to all subrecipients, even if those subrecipients are for-profit entities.

The DOE financial assistance agreement will require each recipient to: (1) fulfill the commitments made in its application regarding the procurement of U.S.-produced products and (2) fulfill the commitments made in its application regarding the procurement of other key component metals and domestically manufactured products that are deemed available in sufficient and reasonably available quantities or of a satisfactory quality at the time of award negotiation. Applicants may seek waivers of these requirements in very limited circumstances and for good cause shown. Further details on requesting a waiver can be found in Appendix B and the terms and conditions of an award.

Applicants are strongly encouraged to consult Appendix B and 2 CFR Part 184 for more information.

N. DAVIS-BACON ACT REQUIREMENTS (IF APPLICABLE)

Projects awarded under this FOA will be funded under Division D of BIL. Accordingly, per Section 41101 of that law, all laborers and mechanics employed by the recipient, subrecipients, contractors, or subcontractors in the performance of construction, alteration, or repair work funded in whole or in part under this FOA shall be paid wages at rates not less than those prevailing on similar projects in the locality, as determined by the Secretary of Labor in accordance with Subchapter IV of Chapter 31 of Title 40, United States Code commonly referred to as the Davis-Bacon Act (DBA).

Applicants shall provide written assurance acknowledging the DBA requirements above, confirming that the laborers and mechanics performing construction, alteration, or repair work on projects funded in whole or in part by awards made as a result of this FOA are paid or will be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by Subchapter IV of Chapter 31 of Title 40, United States Code (Davis-Bacon Act).

Applicants acknowledge that they will comply with all the Davis-Bacon Act requirements,

including but not limited to:

1. Ensuring that the wage determination(s) and appropriate Davis-Bacon clauses and requirements are flowed down to and incorporated into any applicable subrecipient or contract awards
2. Ensuring that if wage determination(s) and appropriate Davis-Bacon clauses and requirements are improperly omitted from subrecipient or contract awards, the applicable wage determination(s) and clauses are retroactively incorporated to the start of performance
3. Being responsible for compliance by any subrecipient or contractor with the Davis-Bacon labor standards
4. Receiving and reviewing certified weekly payrolls submitted by all subrecipients or contractors for accuracy and to identify potential compliance issues
5. Maintaining original certified weekly payrolls for three years after the completion of the project and making those payrolls available to DOE or the U.S. Department of Labor (DOL) upon request, as required by 29 CFR 5.6(a)(2)
6. Conducting payroll and job-site reviews for construction work, including interviews with employees, with such frequency as may be necessary to assure compliance by its subrecipients or contractors and as requested or directed by DOE
7. Cooperating with any authorized representative of DOL in its inspection of records, interviews with employees, and other actions undertaken as part of a DOL investigation
8. Posting in a prominent and accessible place the wage determination(s) and DOL Publication: WH-1321, Notice to Employees Working on Federal or Federally Assisted Construction Projects
9. Notifying the Grants/Contracting Officer of all labor standards issues, including all complaints regarding incorrect payment of prevailing wages and/or fringe benefits, received from recipient, subrecipient, contractor, or subcontractor employees; significant labor standards violations, as defined in 29 CFR 5.7; disputes concerning labor standards pursuant to 29 CFR Parts 4, 6, and 8 and as defined in FAR 52.222-14; disputed labor standards determinations; DOL investigations; or legal or judicial proceedings related to the labor standards under this award, subrecipient award, contract or subcontract
10. Preparing and submitting to the Grants/Contracting Officer, the Office of Management and Budget Control Number 1910-5165, Davis-Bacon Semi-Annual Labor Compliance Report, by April 21 and October 21 of each year

Recipients of funding under this FOA will also be required to undergo Davis-Bacon Act compliance training and maintain competency in Davis-Bacon Act compliance. The Grants/Contracting Officer will notify the recipient of any DOE-sponsored Davis-Bacon Act compliance trainings. DOL offers free Prevailing Wage Seminars several times a year that meet this requirement, at <https://www.dol.gov/agencies/whd/government-contracts/construction/seminars/events>.

For additional guidance on how to comply with the Davis-Bacon provisions and clauses, see <https://www.dol.gov/agencies/whd/government-contracts/construction> and <https://www.dol.gov/agencies/whd/government-contracts/protections-for-workers-in->

[construction.](#)

Recipients of funding under this FOA must ensure the timely submission of weekly certified payrolls as part of its compliance with the Davis-Bacon Act.

DOE has contracted with [LCPtracker](#), a third-party DBA electronic payroll compliance software application. A waiver for the use of LCPtracker may be granted to a particular recipient if they are unable or limited in their ability to use or access the system. LCPtracker allows for certified payroll reports and workforce data to be uploaded electronically, 24 hours a day, 7 days per week and currently partners with several commercially available payroll systems. If a recipient uses a different payroll system, LCPtracker provides a free, spreadsheet template they can use to map out their payroll file, which would allow them to upload their employee and payroll data into the system. LCPtracker validation system checks payrolls for federal Davis-Bacon prevailing wage requirements by flagging mathematical errors or omission discrepancies for the recipient to review on a report. Examples include base hourly rate, total hourly rate, overtime, doubletime, apprentice approval, and fringe benefit contributions. Additionally, LCPtracker utilizes industry standard eSignature technology, thus allowing recipients to electronically sign payroll reports versus using a wet signature. Individual program offices will coordinate with recipients on access and training.

For more information, visit [Davis-Bacon Act Requirements for Recipients of Bipartisan Infrastructure Law Funding](#)

O. LOBBYING

Recipients and subrecipients may not use any federal funds to influence or attempt to influence, directly or indirectly, congressional action on any legislative or appropriation matters.

Recipients and subrecipients are required to complete and submit SF-LLL, “Disclosure of Lobbying Activities” (grants.gov/forms/forms-repository/sf-424-individual-family) to ensure that non-federal funds have not been paid and will not be paid to any person for influencing or attempting to influence any of the following in connection with the application:

- An officer or employee of any federal agency
- A Member of Congress
- An officer or employee of Congress
- An employee of a Member of Congress

P. 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. Financial stability
2. Quality of management systems and ability to meet the management standards prescribed

in 2 CFR Part 200 as adopted and supplemented by 2 CFR Part 910

3. History of performance
4. Audit reports and findings
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 Part 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 United States 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.

Q. INVOICE REVIEW AND APPROVAL

DOE employs a risk-based approach to determine the level of supporting documentation required for approving invoice payments. Recipients may be required to provide some or all of the following items with their requests for reimbursement:

- Summary of costs by cost categories
- Timesheets or personnel hours report
- Proof of compliance with the Davis-Bacon Act and electronic submittals of certified payroll reports
- Invoices/receipts for all travel, equipment, supplies, contractual, and other costs
- UCC filing proof for equipment acquired with project funds by for-profit recipients and subrecipients
- Explanation of cost share for invoicing period
- Analogous information for some subrecipients
- Other items as required by DOE

R. PROHIBITION RELATED TO FOREIGN GOVERNMENT-SPONSORED TALENT RECRUITMENT PROGRAMS

A. Prohibition

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

B. Definitions

- 1. Foreign Government-Sponsored Talent Recruitment Program.** An effort directly or indirectly organized, managed, or funded by a foreign government, 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 United States research facilities or receipt of federal research funds while concurrently working at and/or receiving compensation from a foreign institution, and some direct participants not to disclose their participation to U.S. entities. Compensation could take many forms including cash, research funding, complimentary foreign travel, honorific titles, career advancement opportunities, promised future compensation, or other types of remuneration or consideration, including in-kind compensation.
- 2. Foreign Country of Risk.** DOE has designated the following countries as foreign countries of risk: Iran, North Korea, Russia, and China. This list is subject to change.

S. AFFIRMATIVE ACTION AND PAY TRANSPARENCY REQUIREMENTS

All applicants must comply with all applicable federal labor and employment laws, including but not limited to Title VII of the Civil Rights Act of 1964, the Fair Labor Standards Act, the

Occupational Safety and Health Act, and the National Labor Relations Act, which protects employees' right to bargain collectively and engage in concerted activities for the purpose of workers' mutual aid or protection.

All federally assisted construction contracts exceeding \$10,000 annually will be subject to the requirements of Executive Order 11246, Equal Employment Opportunity:

1. Recipients, subrecipients, contractors, and subcontractors are prohibited from discriminating in employment decisions on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin.
2. Recipients and contractors are required to take affirmative action to ensure that equal opportunity is provided in all aspects of their employment. This includes flowing down the appropriate language to all subrecipients, contractors, and subcontractors.
3. Recipients, subrecipients, contractors, and subcontractors are prohibited from taking adverse employment actions against applicants and employees for asking about, discussing, or sharing information about their pay or, under certain circumstances, the pay of their co-workers.

DOL's Office of Federal Contractor Compliance Programs (OFCCP) uses a neutral process to schedule compliance evaluations. Consult OFCCP's Technical Assistance Guide²³ to gain an understanding of the requirements and possible actions the recipients, subrecipients, contractors, and subcontractors must take. Additional guidance may also be found in the National Policy Assurances, produced by DOE.

T. FOREIGN COLLABORATION CONSIDERATIONS

- A. Consideration of new collaborations with foreign entities, organizations, and governments. The recipient will be required to provide DOE with advanced written notification of any potential collaboration with foreign entities, organizations, 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, organization, or government regarding the potential collaboration or negotiating the terms of any potential agreement.
- B. Existing collaborations with foreign entities, organizations, and governments. The recipient will be required to provide DOE with a written list of all existing foreign collaborations in which it has entered in connection with its DOE-funded award scope.

²³ See OFCCP's Technical Assistance Guide at: <https://www.dol.gov/sites/dolgov/files/ofccp/Construction/files/ConstructionTAG.pdf?msclkid=9e397d68c4b111ec9d8e6fecb6c710ec> Also see the National Policy Assurances <http://www.nsf.gov/awards/managing/rte.jsp>

- C. 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.

PART V – APPLICATION REVIEW INFORMATION

A. CRITERIA

A.1 Initial Review Criteria

Prior to a comprehensive merit evaluation, DOE will perform an initial review to determine that (1) the applicant is eligible for the award; (2) the information required by the FOA has been submitted; (3) all mandatory requirements are satisfied; (4) the proposed project is relevant to the NE mission; (5) the proposed project is responsive to the objectives of the FOA (see Part I, Section A.); and (6) the proposed project is not duplicative of programmatic work. Applications that fail to pass the initial review may be eliminated from further consideration.

A.2 Topic Area 1 Applications

Applications will be evaluated against the technical review criteria shown below. All sub-criteria listed for Criterion 3 are of equal weight.

Criterion 1: Technical Merit, Innovation, Proposed Methods and Impact (40%)

This criterion involves the consideration of the following:

- The proposed methods are technically sound and can be conducted within the timeframe and budget.
- That the proposed methods are innovative to provide a multi-functional solution to identified nuclear reactor safety training and related workforce development.
- Whether the project team has correctly identified gaps in training, recruiting, and retaining skilled workers in the nuclear workforce.
- Whether the project team is proposing concrete, logical steps to delivering the scope of the project.
- The extent to which the proposed methods address national training and workforce challenges, across reactor types and/or utilities.
- The extent to which the proposed methods address challenges related to local, regional, and national training and workforce needs.

Criterion 2: Extent to which the application establishes or supports a sustainable, industry recognized nuclear reactor safety credential (30%)

This criterion involves the consideration of the following:

- Probability that the project leads to a nuclear reactor safety certification that can be used to establish a national standard for workers to work across reactor types.
- Probability that the certification would be industry recognized and accepted by multiple locations, power plants, or utilities.

- Consideration of the sustainability and longevity of the certification after project funding expires. These considerations may include utility support, broad industry support, or other ways to create sustainability within the consortia.

Criterion 3: Community Benefits Plan: Job Quality and Equity (20%)

This criterion involves consideration of the following:

Community and Labor Engagement

- Extent to which the applicant demonstrates community and labor engagement to date that results in support for the proposed project
- Extent to which the applicant has a clear and appropriately robust plan to engage—ideally through a clear commitment to negotiate enforceable Workforce & Community Agreements—with labor unions, Indian Tribes, Tribal organizations, and community-based organizations that support or work with disadvantaged communities and other affected stakeholders
- Extent to which the applicant has considered accountability to affected workers and community stakeholders, including those most vulnerable to project activities, with a plan to publicly share SMART Community Benefits Plan commitments
- Extent to which the applicant demonstrates that community and labor engagement will lead to the delivery of high-quality jobs for local and disadvantaged communities and underrepresented workers, minimal environmental impact, and allocation of project benefits to disadvantaged communities

Investing in Quality Jobs

- Quality and manner in which the proposed project will create and/or retain high quality, good-paying jobs with employer-sponsored benefits for all classifications and phases of work
- Extent to which the project provides employees with the ability to organize, bargain collectively, and participate, through labor organizations of their choosing, in decisions that affect them and that contribute to the effective conduct of business and facilitates amicable settlements of any potential disputes between employees and employers, providing assurances of project efficiency, continuity, and multiple public benefits
- Extent to which applicant demonstrates that they are a responsible employer, with ready access to a sufficient supply of appropriately skilled labor, and an effective plan to minimize the risk of labor disputes or disruptions

Diversity, Equity, Inclusion, and Accessibility

- Extent to which the Community Benefits Plan includes specific and high-quality actions to meet DEIA goals, which may include DEIA recruitment procedures, supplier diversity plans, and other DEIA initiatives
- Quality of any partnerships and agreements with apprenticeship readiness programs, or community-based workforce training and support organizations serving workers facing

systematic barriers to employment to facilitate participation in the project's construction and operations

Justice40 Initiative

- Extent to which the Community Benefits Plan identifies: specific, measurable benefits for disadvantaged communities, how the benefits will flow to disadvantaged communities, and how negative environmental impacts affecting disadvantaged communities would be mitigated
- Extent to which the project would contribute to meeting the objective that 40% of the overall benefits of climate and clean energy investments will flow to disadvantaged communities.

Criterion 4: Team Knowledge, Skills, and Capabilities and Project Resources (10%)

This criterion involves consideration of the following:

- Capability of the project manager(s) and the proposed team to address all aspects of the proposed work with a high probability of success. The qualifications, relevant expertise, and time commitment of the individuals on the team
- Diversity of expertise and perspectives of the team and the inclusion of industry partners that will amplify impact
- Sufficiency of the facilities to support the work
- Level of participation by project participants as evidenced by letter(s) of commitment and how well they are integrated into the Workplan
- Reasonableness of the project resources for the proposed project and objectives

A.3 Topic Area 2 Applications

Applications will be evaluated against the technical review criteria shown below. All sub-criteria listed for Criterion 3 are of equal weight.

Criterion 1: Technical Merit, Innovation, Proposed Methods and Impact (40%)

This criterion involves the consideration of the following:

- The proposed methods are technically sound and can be conducted within the timeframe and budget.
- That the proposed methods are innovative to provide a multi-functional solution to identified nuclear reactor safety training and related workforce development.
- Whether the project team has correctly identified gaps between skilled workforce and training needs.
- Whether the project team is proposing concrete, logical steps to delivering the scope of the project.
- The extent to which the proposed methods address national training and workforce challenges, across reactor types and/or utilities.

- The extent to which the proposed methods address challenges related to local, regional, and national training and workforce needs.

Criterion 2: Effectiveness of partnering, curriculum and faculty development (30%)

This criterion involves the consideration of the following:

- The effectiveness of proposed curriculum and faculty development activities and how well those activities connect to identified gaps.
- The effectiveness of the team's strategy to effectively engage for-profit, nonprofit, state and local governments, labor organizations, tribal nations, and others to establish Topic Areas for adoption of curriculum and/or proposed programs.

Criterion 3: Community Benefits Plan: Job Quality and Equity (20%)

This criterion involves consideration of the following:

Community and Labor Engagement

- Extent to which the applicant demonstrates community and labor engagement to date that results in support for the proposed project;
- Extent to which the applicant has a clear and appropriately robust plan to engage—ideally through a clear commitment to negotiate enforceable Workforce & Community Agreements—with labor unions, Indian Tribes, Tribal organizations, and community-based organizations that support or work with disadvantaged communities and other affected stakeholders;
- Extent to which the applicant has considered accountability to affected workers and community stakeholders, including those most vulnerable to project activities, with a plan to publicly share SMART Community Benefits Plan commitments; and
- Extent to which the applicant demonstrates that community and labor engagement will lead to the delivery of high-quality jobs for local and disadvantaged communities and underrepresented workers, minimal environmental impact, and allocation of project benefits to disadvantaged communities.

Investing in Quality Jobs

- Quality and manner in which the proposed project will create and/or retain high quality, good-paying jobs with employer-sponsored benefits for all classifications and phases of work;
- Extent to which the project provides employees with the ability to organize, bargain collectively, and participate, through labor organizations of their choosing, in decisions that affect them and that contribute to the effective conduct of business and facilitates amicable settlements of any potential disputes between employees and employers, providing assurances of project efficiency, continuity, and multiple public benefits; and
- Extent to which applicant demonstrates that they are a responsible employer, with ready access to a sufficient supply of appropriately skilled labor, and an effective plan to minimize the risk of labor disputes or disruptions.

Diversity, Equity, Inclusion, and Accessibility

- Extent to which the Community Benefits Plan includes specific and high-quality actions to meet DEIA goals, which may include DEIA recruitment procedures, supplier diversity plans, and other DEIA initiatives; and
- Quality of any partnerships and agreements with apprenticeship readiness programs, or community-based workforce training and support organizations serving workers facing systematic barriers to employment to facilitate participation in the project's construction and operations.

Justice40 Initiative

- Extent to which the Community Benefits Plan identifies: specific, measurable benefits for disadvantaged communities, how the benefits will flow to disadvantaged communities, and how negative environmental impacts affecting disadvantaged communities would be mitigated; and
- Extent to which the project would contribute to meeting the objective that 40% of the overall benefits of climate and clean energy investments will flow to disadvantaged communities.

Criterion 4: Team Knowledge, Skills, and Capabilities and Project Resources (10%)

This criterion involves consideration of the following:

- Capability of the project manager(s) and the proposed team to address all aspects of the proposed work with a high probability of success. The qualifications, relevant expertise, and time commitment of the individuals on the team.
- Diversity of expertise and perspectives of the team and the inclusion of industry partners that will amplify impact.
- Sufficiency of the facilities to support the work.
- Level of participation by project participants as evidenced by letter(s) of commitment and how well they are integrated into the Workplan.
- Reasonableness of the project resources for the proposed project and objectives.

B. Budget Evaluation

A budget evaluation will be conducted for highly rated applications as part of the review process to determine reasonableness of the total costs proposed relative to the amount of work proposed.

C. STANDARDS FOR APPLICATION EVALUATION

Applications that are determined to be eligible will be evaluated in accordance with this FOA, by the standards set forth in the guidance provided in the "DOE Merit Review Guide for Financial Assistance," effective October 1, 2020, which is available at:

<https://energy.gov/management/downloads/merit-review-guide-financial-assistance-and-unsolicited-proposals-current>.

D. OTHER SELECTION FACTORS

D.1 Program Policy Factors

In addition to the above criteria, the Selection Official may consider the following program policy factors in determining which applications to select for award negotiations:

- The degree to which the proposed team includes university participants located in proximity to nuclear power plants with decades of operational safety experience and challenges
- The degree to which the proposed project, including proposed cost share, optimizes the use of available DOE funding to achieve programmatic objectives
- Proposed cost share that exceeds minimum required amounts on the part of the applicant may be given preferential consideration.
- The degree to which the proposed project, or group of projects, represent a desired geographic distribution (considering past awards and current applications)
- The degree to which the proposed project incorporates applicant or team members from Minority Serving Institutions (including Historically Black Colleges and Universities (HBCUs) and Tribal Colleges and Universities (TCUs)); and partnerships with underrepresented businesses or Indian Tribes
- The degree to which the proposed project contributes to the diversity of organizations and organization types and sizes selected from the subject FOA when compared to the existing DOE project portfolio
- The degree to which the proposed project has broad public support from the communities most directly impacted by the project

E. EVALUATION AND SELECTION PROCESS

E.1 Overview

The evaluation process consists of multiple phases; each includes an initial eligibility review and a thorough technical review. Rigorous technical reviews of eligible submissions are conducted by reviewers that are experts in the subject matter of the FOA. Ultimately, the Selection Official considers the recommendations of the reviewers, along with other considerations such as program policy factors and risk reviews, in determining which applications to select.

E.2 Pre-Selection Interviews

As part of the evaluation and selection process, DOE may invite one or more applicants to participate in pre-selection interviews. Pre-selection interviews are distinct from and more formal than pre-selection clarifications (See Part V Section D.3. of the FOA). The invited applicant(s) will meet with DOE representatives to provide clarification on the contents of the application and to provide DOE an opportunity to ask questions regarding the proposed project. The information

provided by applicants to DOE through pre-selection interviews contributes to DOE's selection decisions.

DOE may arrange to meet with the invited applicants in person at DOE's offices or a mutually agreed upon location. DOE may also arrange site visits at certain applicants' facilities. In the alternative, DOE may invite certain applicants to participate in a one-on-one conference with DOE via webinar, videoconference, or conference call.

DOE will not reimburse applicants for travel and other expenses relating to the pre-selection interviews, nor will these costs be eligible for reimbursement as pre-award costs.

Participation in pre-selection interviews with DOE does not signify that applicants have been selected for award negotiations.

E.3 Pre-Selection Clarification

DOE may determine that pre-selection clarifications are necessary from one or more applicants. Pre-selection clarifications are distinct from and less formal than pre-selection interviews. These pre-selection clarifications will solely be for the purposes of clarifying the application. The pre-selection clarifications may occur before, during or after the merit review evaluation process. Information provided by an applicant that is not necessary to address the pre-selection clarification question will not be reviewed or considered. Typically, a pre-selection clarification will be carried out through either written response to DOE's written clarification questions or video or conference calls with DOE representatives.

The information provided by applicants to DOE through pre-selection clarifications is incorporated in their applications and contributes to the merit review evaluation and DOE's selection decisions. If DOE contacts an applicant for pre-selection clarification purposes, it does not signify that the applicant has been selected for negotiation of award or that the applicant is among the top ranked applications.

DOE will not reimburse applicants for expenses relating to the pre-selection clarifications, nor will these costs be eligible for reimbursement as pre-award costs.

E.4 Recipient Responsibility and Qualifications

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 responsibility and qualification information about the applicant that is in the entity information domain in [SAM.gov](https://sam.gov) (see 41 U.S.C. § 2313).

The applicant, at its option, may review information in the entity information domain in [SAM.gov](https://sam.gov) and comment on any information about itself that a federal awarding agency previously entered and is currently in the entity information domain in [SAM.gov](https://sam.gov).

DOE will consider any written comments by the applicant, in addition to the other information in the entity information domain in [SAM.gov](https://sam.gov), 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.

E.5 Selection

The Selection Official may consider the technical merit, the Merit Review Panel's recommendations, program policy factors, risk reviews, and the amount of funds available in arriving at selections for this FOA.

PART VI – AWARD ADMINISTRATION INFORMATION

A. AWARD NOTICES

A.1 Ineligible Submissions

Ineligible applications will not be further reviewed or considered for award. The Contracting Officer will notify by email the technical and administrative points of contact designated by the applicant. The notification letter will state the basis upon which the application is ineligible and not considered for further review.

A.2 Application Notifications

DOE will notify applicants of its determination by email to the technical and administrative points of contact designated by the applicant. The notification letter will inform the applicant whether or not its application was selected for award negotiations. Alternatively, DOE may notify one or more applicants that a final selection determination on particular applications will be made at a later date, subject to the availability of funds or other factors.

A.3 Applicants Selected for Award Negotiations

DOE may stagger its selection determinations. As a result, some applicants may receive their notification letter in advance of other Applicants. Successful applicants will receive notification by email 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 Contracting Officer executes the funding agreement, accessible by the prime recipient in FedConnect.

The award negotiation process takes approximately 120 days. Applicants must designate a primary and a backup point-of-contact 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 may cancel the award negotiations and rescind the selection. DOE reserves the right to terminate award negotiations at any time for any reason.

Please refer to Part IV Section I.2 of the FOA for guidance on pre-award costs.

A.4 Alternate Selection Determinations

In some instances, an applicant may receive a notification that its application was not selected for award negotiation and DOE designated the application to be an alternate. As an alternate, DOE may consider the application for federal funding in the future. A notification letter stating the

application is designated as an alternate does not authorize the applicant to commence performance of the project. DOE may ultimately determine to select or not select the application for award negotiations.

A.5 Unsuccessful Applicants

DOE shall notify by email each applicant whose application has not been selected for negotiation for award. This notice will provide a summary review of the proposal and an explanation of why the application was not selected.

B. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS

B.1 Award Administrative Requirements

The administrative requirements for DOE grants and cooperative agreements are contained in 2 CFR Part 200 as adopted and supplemented by 2 CFR Part 910.

B.2 Foreign National Participation

All applicants selected for award negotiations and recipients of an award under this FOA as well as 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 without U.S. citizenship or nationality (may include a stateless person). 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, information, technologies, equipment, programs, or personnel.

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 contained in 2 CFR Part 170. Prime recipients must register with the new FFATA Subaward Reporting System database and report the required data on their first tier subrecipients. Prime recipients must report the executive compensation for their own executives as part of their registration profile in SAM.

B.4 National Policy Requirements

The National Policy Assurances that are incorporated as a term and condition of award are located at: <http://www.nsf.gov/awards/managing/rtc.jsp>.

B.5 Environmental Review in Accordance with National Environmental Policy Act (NEPA)

DOE's decision whether and how to distribute federal funds under this FOA is subject to 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 applicants selected for award negotiations and recipients of 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 documents must be prepared to complete the NEPA review process, the recipient may be required to prepare the documents and the costs to prepare the necessary documents may be included as part of the project costs. DOE will independently evaluate the environmental document and will take responsibility for the contents, including ensuring the professional integrity of the discussion and analysis, as required by NEPA.

National Historic Preservation Act (NHPA)

DOE must comply with the requirements of Section 106 of the National Historic Preservation Act (NHPA) prior to deciding whether or how to distribute federal funds. Section 106 requires DOE to identify and consider adverse effects to historic properties that are listed in or eligible for listing in the National Register of Historic Places. DOE will perform a NHPA review under the umbrella of its NEPA review and will require applicants to assist in this review and consider impacts to historic properties.

B.6 Flood Resilience

Executive Order 11988, Floodplain Management, requires agencies engage in a decision-making process to evaluate the potential effects of any action it may take in a floodplain and to avoid development in a floodplain to the extent possible. DOE procedures for implementing the Executive Order are in 10 CFR part 1022. Executive Order 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input (reinstated by EO 14030, Climate-Related Financial Risk), directs federal agencies to “expand management from the current base flood level to a higher vertical elevation and corresponding horizontal floodplain to address current and future flood risk and ensure that projects funded with taxpayer dollars last as long as intended.” The higher flood elevation is based on one of three approaches: climate-informed science (preferred), freeboard value, or 0.2% annual flood change (500-year floodplain). Selectees will be required to indicate whether the proposed project location(s) is within a floodplain, how the floodplain was defined, and how the project's design has been modified to reduce the risk of flood loss and minimize the impact of floods on human safety, health, and welfare. Information to assist in the implementation of these requirements is available at:

- <https://www.energy.gov/nepa/articles/eo-13690-establishing-federal-flood-risk-management-standard-and-process-further>

- <https://www.fema.gov/floodplain-management/intergovernmental/white-house-flood-resilience-interagency-working-group>
- <http://floodstandard.climate.gov>

C. APPLICANT REPRESENTATIONS AND CERTIFICATIONS

C.1 Lobbying Restrictions

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

C.2 Corporate Felony Conviction and Federal Tax Liability Representations

In submitting an application to this FOA, the applicant represents that:

- A. It is **not** a corporation that has been convicted of a felony criminal violation under any federal law within the preceding 24 months
- B. 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, a corporation is any for-profit or nonprofit entity that has filed articles of incorporation in any of the 50 states, the District of Columbia, or the various territories of the United States [but not foreign corporations].

C.3 Nondisclosure and Confidentiality Agreements Representations

In submitting an application to this FOA the applicant represents that:

- A. 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.
- B. It **does not and will not** use any federal funds to implement or enforce any nondisclosure and/or confidentiality policy, form, or agreement it uses unless it contains the following provisions:

“These provisions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive Order relating to (1) classified information, (2)

communications to Congress, (3) the reporting to an Inspector General of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety, or (4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive Orders and statutory provisions are incorporated into this agreement and are controlling.’’

1. The limitation above shall not contravene requirements applicable to Standard Form 312 Classified Information Nondisclosure Agreement (<https://fas.org/sgp/othergov/sf312.pdf>), Form 4414 Sensitive Compartmented Information Disclosure Agreement (<https://fas.org/sgp/othergov/intel/sf4414.pdf>), or any other form issued by a federal department or agency governing the nondisclosure of classified information.
2. 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 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 during 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 U.S. Department of Justice, that are essential to reporting a substantial violation of law.

C.4 Statement of Federal Stewardship

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

Recipient’s Responsibilities. The recipient is responsible for:

- Complying with all award requirements, including performing the activities supported by this award, including providing the required personnel, facilities, equipment, supplies and services.
- Defining approaches and plans as may be required by this award, submitting the plans to DOE for review, and incorporating DOE’s comments.
- Managing and conducting the project activities, including coordinating with DOE M&O contractor(s) as required and as proposed in the recipient’s project plan on activities performed under the M&O contract(s) that are related to the project.

- Attending annual program review meetings and reporting project status, if requested by the program.
- Submitting technical reports as stated in the Federal Assistance Reporting Checklist and incorporating DOE comments.
- Completing reporting requirements as outlined in the instructions provided in the awards Attachment B “Federal Assistance Reporting Checklist and Instructions” including:
 - **NE Program Information Collection System (PICS:NE):** Awarded PIs are required to complete reporting requirements as outlined in the instructions provided in the awards Attachment B “Federal Assistance Reporting Checklist and Instructions”. Information provided in required award reporting will be utilized to populate PICS:NE (PICS:NE data entry will be done by DOE using information provided by the PI). PIs may be asked by the DOE PICS:NE representative for additional information during the initial work package setup process to accurately document the project plan, as well as through the award’s project period to populate information in PICS:NE. PIs may be requested to provide additional assistance for clarification purposes in assuring accuracy of the information being entered into PICS:NE.
 - **NE Program Accrual Information:** DOE policy requires the monthly tracking of uncosted obligations on financial assistance awards in the DOE accounting system to assist DOE in accomplishing more accurate project management and to more accurately recognize Department liabilities to the recipient. DOE personnel do this internally by subtracting paid costs and any costs accrued (yet to be paid incurred costs of the recipient) from the amounts obligated on the financial assistance award. In accomplishing this, DOE may request the recipient provide additional cost accrual information to accurately estimate/document the accrual in the DOE accounting system. If such information is needed, it will typically be done on awards over \$1M and DOE will normally do this using an e-mail to the recipient requesting the recipient identify the dollar value of work it has performed each month but not yet invoiced (or done a Treasury system draw on) as of month end. Recipients will cooperate with DOE in providing the needed cost accrual information.

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

C.5 Statement of Substantial Involvement

DOE has substantial involvement in work performed under awards made as a result of this FOA. DOE does not limit its involvement to the administrative requirements of the award. Instead,

DOE has substantial involvement in the direction and redirection of the technical aspects of the project. Substantial involvement includes but is not limited to the following:

1. DOE shares responsibility with the recipient for the management, control, direction, and performance of the project.
2. DOE may intervene in the conduct or performance of work under this award for programmatic reasons. Intervention includes the interruption or modification of the conduct or performance of project activities.
3. DOE may redirect or discontinue funding the project based on the outcome of DOE's evaluation of the project at the Go/No-Go decision point(s).
4. DOE participates in major project decision-making processes.

C.6 Intellectual Property Management Plan

As a quarter 1 milestone if selected for award, applicants must submit an executed Intellectual Property Management Plan (IPMP) between the members of the consortia or team.

The award will set forth the treatment of and obligations related to intellectual property rights between DOE and the individual members. The IPMP should describe how the members will handle intellectual property rights and issues between themselves while ensuring compliance with federal intellectual property laws, regulations, and policies (see Part IV Section C.8 of this FOA for more details on applicable federal intellectual property laws and regulations). Guidance regarding the contents of IPMP is available from DOE upon request.

The following is a list of examples of items the IPMP may cover:

- The treatment of confidential information between members (e.g., the use of NDAs)
- The treatment of background intellectual property (e.g., any requirements for identifying it or making it available)
- The treatment of inventions made under the award (e.g., any requirements for disclosing to the other members on an application, filing patent applications, paying for patent prosecution, and cross-licensing or other licensing arrangements between the members)
- The treatment of data produced, including software, under the award (e.g., any publication process or other dissemination strategies, copyrighting strategy or arrangement between members)
- Any technology transfer and commercialization requirements or arrangements between the members
- The treatment of any intellectual property issues that may arise due to a change in membership of the consortia or team
- The handling of disputes related to intellectual property between the members

C.7 Subject Invention Utilization Reporting

To ensure that prime recipients, subrecipients, and contractors holding title to subject inventions

are taking the appropriate steps to commercialize subject inventions, DOE may require that each prime recipient holding title to a subject invention submit annual reports for 10 years from the date the subject invention was disclosed to DOE on the utilization of the subject invention and efforts made by prime recipient or its licensees or assignees to stimulate such utilization. The reports must include information regarding the status of development, date of first commercial sale or use, gross royalties received by the prime recipient, and such other data and information as DOE may specify.

C.8 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>.

D. REPORTING

Reporting requirements are identified on the Federal Assistance Reporting Checklist, attached to the award agreement.

Recipients of funding will be required to provide regular progress reports, financial reports, and outcomes data to track the effectiveness of the training programs and overall awarded projects.

Performance metrics will be established to measure the success and impact of the funded initiatives.

Additional reporting requirements apply to BIL-funded projects. DOE may require specific data collection to track progress toward key departmental goals: ensuring justice and equity, investing in quality jobs, boosting domestic manufacturing, reducing greenhouse gas emissions, and advancing a Topic Area to private sector deployment. Examples of data that may be collected include:

- New manufacturing production or recycling capacity
- Jobs data, including:
 - Number and types of jobs provided, wages and benefits paid
 - Workforce demographics, including local hires
 - Efforts to minimize risks of labor disputes and disruptions
 - Dollar value of contributions to worker training; number of new employee certificates and training credentials; ratio of apprentice- to journey-level workers employed
 - Number of individuals trained, number of trainees placed in new full-time employment, number of trainings partnering with community-based organizations or labor unions
- Justice and Equity data, including:
 - Underrepresented businesses acting as vendors and subcontractors for bids on supplies, services, and equipment

- Value, number, and type of partnerships with MSIs
- Stakeholder engagement events, community engagement process
- Other relevant indicators from the Community Benefits Plan
- Number and type of energy efficient and clean energy equipment installed
- Funding leveraged, follow-on-funding, intellectual property generation and utilization

E. CONTINUATION REVIEW

Each project selected under this FOA will be subject to a periodic project evaluation referred to as a continuation review. A continuation review is a risk management tool and a project management best practice to ensure that, for the current phase or period of performance, technical success is definitively achieved and potential for success in future phases or periods of performance is evaluated, prior to beginning the execution of future phases. At the continuation review decision points, DOE will evaluate project performance, project schedule adherence, the extent milestone objectives are met, compliance with reporting requirements, and overall contribution to the program goals and objectives. Federal funding beyond the continuation review decision point (continuation funding) is contingent upon (1) availability of federal funds appropriated by Congress for the purpose of this program; (2) the availability of future-year budget authority; (3) recipient's technical progress compared to the Milestone Summary Table of the award; (4) recipient's submittal of required reports; (5) recipient's compliance with the terms and conditions of the award; (6) DOE's continuation decision; (7) the recipient's submission of a continuation application;²⁴ and (8) written approval of the continuation application by the Contracting Officer.

As a result of the continuation review, DOE may, at its discretion, authorize the following actions: (1) continue to fund the project, contingent upon the availability of funds appropriated by Congress for the purpose of this program and the availability of future-year budget authority; (2) recommend redirection of work under the project; (3) place a hold on federal funding for the project, pending further supporting data or funding; or (4) discontinue funding the project because of insufficient progress, change in strategic direction, or lack of funding.

The continuation review decision is distinct from a non-compliance determination. In the event a recipient fails to comply with the requirements of an award, DOE may take appropriate action, including but not limited to, redirecting, suspending, or terminating the award.

²⁴ A continuation application is a non-competitive application for an additional budget period within a previously approved project period. At least ninety (90) days before the end of each budget period, the recipient must submit its continuation application, which includes the following information:

- i. A progress report on the project objectives, including significant findings, conclusions, or developments, and an estimate of any unobligated balances remaining at the end of the budget period. If the remaining unobligated balance is estimated to exceed 20 percent of the funds available for the budget period, explain why the excess funds have not been obligated and how they will be used in the next budget period.
- ii. A detailed budget and supporting justification if there are changes to the negotiated budget, or a budget for the upcoming budget period was not approved at the time of award.
- iii. A description of any planned changes from the SOPO and/or Milestone Summary Table.

F. 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 approval from the Contracting Officer. No-cost time extensions should be requested as soon as the need is identified within the last year of the award.

G. 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 subpart 200.308). The request must include a detailed budget justification, and an updated budget in the same format for which was included in the original application. Any request for the purchase of equipment exceeding \$5K 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-researchand-related-budget-rr>.

H. CONFERENCE SPENDING

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

I. UNIFORM COMMERCIAL CODE (UCC) FINANCING STATEMENTS

Per 2 CFR 910.360 (Real Property and Equipment) when a piece of equipment is purchased by a for-profit recipient or subrecipient with federal funds, and when the federal share of the financial assistance agreement is more than \$1 million the recipient or subrecipient must:

Properly record, and consent to the Department's ability to properly record if the recipient fails to do so, UCC financing statement(s) for all equipment in excess of \$5,000 purchased with project funds. These financing statement(s) must be approved in writing by the Contracting Officer prior to the recording, and they shall provide notice that the recipient's title to all equipment (not real property) purchased with federal funds under the financial assistance agreement is conditional pursuant to the terms of this section, and that the government retains an undivided reversionary interest in the equipment. The UCC financing statement(s) must be filed before the Contracting Officer may reimburse the recipient for the federal share of the equipment unless otherwise provided for in the relevant financial assistance agreement. The recipient shall further make any amendments to the financing statements or additional recordings, including appropriate continuation statements, as necessary or as the Contracting Officer may direct.

J. REAL PROPERTY AND EQUIPMENT

Real property and equipment purchased with project funds (federal share and recipient cost share) are subject to the requirements at 2 CFR 200.310, 200.311, 200.313, and 200.316 (non-federal entities, except for-profit entities) and 2 CFR 910.360 (for-profit entities).

For projects selected for awards under this FOA, the recipients may (1) take disposition action on the real property and equipment; or (2) continue to use the real property and equipment after the conclusion of the award period of performance with Contracting Officer approval. The recipient's written request for Continued Use must identify the property and include: a summary of how the property will be used (must align with the authorized project purposes); a proposed use period (e.g., perpetuity, until fully depreciated, or a calendar date when the recipient expects to submit disposition instructions); acknowledgement that the recipient shall not sell or encumber the property or permit any encumbrance without prior written DOE approval; current fair market value of the property; and an estimated useful life or depreciation schedule for equipment.

When the property is no longer needed for authorized project purposes, the recipient must request disposition instructions from DOE. For-profit entity disposition requirements are set forth in 2 CFR 910.360. Property disposition requirements for other non-federal entities are set forth in 2 CFR 200.310 – 200.316. In addition, pursuant to the FY23 Consolidated Appropriations Act (Pub. L. No. 117-328), Division D, Title III, Section 309, at the end of the award period the Secretary or a designee of the Secretary, at their discretion, may vest unconditional title or other property interests acquired under this project regardless of the fair market value of the property.

K. IMPLEMENTATION OF EXECUTIVE ORDER 13798, PROMOTING FREE SPEECH AND RELIGIOUS LIBERTY

States, local governments, and other public entities may not condition subawards in a manner that would discriminate against or otherwise disadvantage subrecipients based on their religious character.

L. 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.

M. 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 Part IV Section E.

N. U.S. MANUFACTURING COMMITMENTS

A primary objective of DOE's multi-billion-dollar research, development, and demonstration investments is to cultivate new research and development ecosystems, manufacturing capabilities, and supply chains for and by United States industry and labor. Therefore, in exchange for receiving taxpayer dollars to support an applicant's project, the applicant/recipient and any subrecipient and contractor must agree to a U.S. Competitiveness provision requiring 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 applicant/recipient can show to the satisfaction of DOE that it is not commercially feasible. Award terms, including the specific U.S. Competitiveness Provision applicable to the various types of recipients and projects, are available at <https://www.energy.gov/gc/standard-intellectual-property-ip-provisions-financial-assistance-awards>.

Please note that a subject invention is any invention conceived or first actually reduced to practice in performance of work under an award. An invention is any invention or discovery which is or may be patentable. The recipient includes any awardee, recipient, subawardee, or subrecipient.

As noted in the U.S. Competitiveness Provision, if an entity cannot meet the requirements of the U.S. Competitiveness Provision, the entity may request a modification or waiver of the U.S. Competitiveness Provision. For example, the entity may propose modifying the language of the U.S. Competitiveness Provision in order to change the scope of the requirements or to provide more specifics on the application of the requirements for a particular technology. As another example, the entity may request that the U.S. Competitiveness Provision be waived in lieu of a net benefits statement or United States manufacturing plan. The statement or plan would contain specific and enforceable commitments that would be beneficial to the United States economy and competitiveness. Examples of such commitments could include manufacturing specific products in the United States, making a specific investment in a new or existing United States manufacturing facility, keeping certain activities based in the United States or supporting a certain number of jobs in the United States related to the technology. DOE may, in its sole discretion, determine that the proposed modification or waiver promotes commercialization and provides substantial United States economic benefits, and grant the request. If granted, DOE will modify the award terms and conditions for the requesting entity accordingly.

More information and guidance on the waiver and modification request process can be found in the DOE Financial Assistance Letter on this topic, available at <https://www.energy.gov/management/pf-2022-09-fal-2022-01-implementation-doe-determination-exceptional-circumstances-under>. Additional information on DOE's Commitment to Domestic Manufacturing for DOE-funded R&D is available at <https://www.energy.gov/gc/us-manufacturing>.

The U.S. Competitiveness Provision is implemented by DOE pursuant to a Determination of Exceptional Circumstances (DEC) under the Bayh-Dole Act and DOE Patent Waivers. See Part VIII Section J. Title to Subject Inventions of this FOA for more information on the DEC and DOE Patent Waivers.

O. INTERIM CONFLICT OF INTEREST POLICY FOR FINANCIAL ASSISTANCE

The DOE interim Conflict of Interest Policy for Financial Assistance (COI Policy)²⁵ 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. The term “Investigator” means the PI and any other person, regardless of title or position, who is responsible for the purpose, design, conduct, or reporting of a project funded by DOE or proposed for funding by DOE. Recipients must flow down the requirements of the interim COI Policy to any subrecipient non-federal entities. Further, for DOE funded projects, the recipient must include all financial conflicts of interest (FCOI) (i.e., managed and unmanaged/unmanageable) in its initial and ongoing FCOI reports.

It is understood that non-federal entities and individuals receiving DOE financial assistance awards will need sufficient time to come into full compliance with DOE’s interim COI Policy. To provide some flexibility, DOE allows for a staggered implementation. Specifically, prior to award, applicants selected for award negotiations must: ensure all Investigators complete their significant financial disclosures; review the disclosures; determine whether a FCOI exists; develop and implement a management plan for FCOIs; and provide DOE with an initial FCOI report that includes all FCOIs (i.e., managed and unmanaged/unmanageable). Recipients will have 180 days from the date of the award to come into full compliance with the other requirements set forth in DOE’s interim COI Policy. Prior to award, the applicant must certify that it is, or will be within 180 days of the award, compliant with all requirements in the COI Policy.

P. 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>.

²⁵ DOE’s interim COI Policy can be found at <https://www.energy.gov/management/department-energy-interim-conflict-interest-policy-requirements-financial-assistance>.

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.

Q. HUMAN SUBJECTS RESEARCH

Research involving human subjects, biospecimens, or identifiable private information conducted with DOE funding is subject to the requirements of DOE Order 443.1C, Protection of Human Research Subjects, 45 CFR Part 46, Protection of Human Subjects (subpart A which is referred to as the “Common Rule”), and 10 CFR Part 745, Protection of Human Subjects. Additional information on the DOE Human Subjects Research Program can be found at: [HUMAN SUBJECTS Human Subjects Pr... | U.S. DOE Office of Science \(SC\) \(osti.gov\)](#).

R. CONSTRUCTION SIGNAGE

After receiving a DOE award, recipients are encouraged to display DOE Investing in America signage during and after construction. Guidance can be found at: (<https://www.energy.gov/design>). Proposed signage costs that meet these specifications are an allowable cost and should be included in the proposed project budget. Recipients are required to obtain written authorization from the Contracting Officer before incurring any major construction costs

S. OPERATIONS WORKFORCE CONTINUITY PLAN

If selected for award negotiations, within 30 days of the award notice, the selectee must submit an Operations Workforce Continuity Plan. A Workforce Continuity Plan template is provided at <https://www.energy.gov/infrastructure/reporting-checklists> with the intent to reduce the administrative burden by promoting the use of common formats.

Selectees that have a Collective Bargaining Agreement that will cover operations activities under this award are not required to submit a separate Operations Workforce Continuity Plan or the

associated Workforce Continuity report on a quarterly frequency post-award.

PART VII – QUESTIONS/AGENCY CONTACTS

Upon the issuance of a FOA, DOE personnel are prohibited from communicating (in writing or otherwise) with applicants regarding the FOA except through the established question and answer process described below. Questions regarding this FOA must be submitted to NRST@id.doe.gov no later than seven (7) business days prior to the application due date and time. Please note, feedback on individual concepts will not be provided through Q&A.

All questions and answers related to this FOA will be posted on <https://id.energy.gov/Home/NSTWD>. DOE will attempt to respond to a question within three (3) business days unless a similar question and answer has already been posted on the website.

Questions related to the registration process and use of the application site should be submitted to NRST@inl.gov.

PART VIII – OTHER INFORMATION

A. FOA MODIFICATIONS

Amendments to this FOA will be posted on <https://id.energy.gov/Home/NSTWD> and the Grants.gov system. However, you will only receive an email when an amendment or a FOA is posted on these sites if you register for email notifications for this FOA in Grants.gov. DOE recommends that you register as soon after the release of the FOA as possible to ensure you receive timely notice of any amendments or other FOAs.

B. GOVERNMENT RIGHT TO REJECT OR NEGOTIATE

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

C. COMMITMENT OF PUBLIC FUNDS

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

D. TREATMENT OF APPLICATION INFORMATION

Applicants should not include trade secrets or business-sensitive, proprietary, or otherwise confidential information in their application unless such information is necessary to convey an understanding of the proposed project or to comply with a requirement in the FOA. Applicants are advised to not include any critically sensitive proprietary detail.

If an application includes trade secrets or business-sensitive, proprietary, or otherwise confidential information, it is furnished to the federal government in confidence with the understanding that the information shall be used or disclosed only for evaluation of the application. Such information will be withheld from public disclosure to the extent permitted by law, including the Freedom of Information Act. Without assuming any liability for inadvertent disclosure, DOE will seek to limit disclosure of such information to its employees and to outside reviewers when necessary for merit review of the application or as otherwise authorized by law. This restriction does not limit the federal government's right to use the information if it is obtained from another source.

If an applicant chooses to submit trade secrets or business-sensitive, proprietary, or otherwise confidential information, the applicant must provide **two copies** of any document of the submission (e.g., application) that contains such information. The first copy should be marked "non-confidential," with the information believed to be confidential deleted. The second copy should be marked "confidential" and must clearly and conspicuously identify the trade secrets or business-sensitive, proprietary, or otherwise confidential information and must be marked as described below. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under the Freedom of Information Act or otherwise. The federal

government is not liable for the disclosure or use of unmarked information and may use or disclose such information for any purpose as authorized by law.

The cover sheet of the application, and other applicant submission must be marked as follows and identify the specific pages containing trade secrets or business-sensitive, proprietary, or otherwise confidential information:

Notice of Restriction on Disclosure and Use of Data:

Pages [list applicable pages] of this document may contain trade secrets or business-sensitive, proprietary, or otherwise confidential information that is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with a financial assistance agreement between the submitter and the government. The government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source. [End of Notice]

In addition, (1) the header and footer of every page that contains trade secrets or business-sensitive, proprietary, or otherwise confidential information must be marked as follows: “Contains Trade Secrets, Business-Sensitive, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure,” and (2) every line or paragraph containing such information must be clearly marked with double brackets or highlighting. 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 initial review, merit review evaluation, peer review, or continuation review, the government may seek the advice of qualified non-federal personnel as reviewers. The government may also use non-federal personnel to conduct routine, nondiscretionary administrative activities, including DOE contractors. The applicant, by submitting its application, consents to the use of non-federal reviewers/administrators. Non-federal reviewers must sign conflict of interest (COI) and non-disclosure acknowledgements (NDA) prior to reviewing an application. Non-federal personnel conducting administrative activities must sign an NDA.

F. NOTICE REGARDING ELIGIBLE/INELIGIBLE ACTIVITIES

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

G. NOTICE OF RIGHT TO CONDUCT A REVIEW OF FINANCIAL CAPABILITY

DOE reserves the right to conduct an independent third-party review of financial capability for

applicants that are selected for negotiation of award (including personal credit information of principal(s) of a small business if there is insufficient information to determine financial capability of the organization).

H. REQUIREMENT FOR FULL AND COMPLETE DISCLOSURE

Applicants are required to make a full and complete disclosure of all information requested. Any failure to make a full and complete disclosure of the requested information may result in:

- The cancellation of award negotiations
- The modification, suspension, and/or cancellation of a funding agreement
- The initiation of debarment proceedings, debarment, and/or a declaration of ineligibility for receipt of federal contracts, subcontracts, and financial assistance and benefits
- Civil and/or criminal penalties

I. RETENTION OF SUBMISSIONS

DOE expects to retain copies of all applications and other submissions. No submissions will be returned. By applying to DOE for funding, applicants consent to DOE's retention of their submissions.

J. TITLE TO SUBJECT INVENTIONS

Ownership of subject inventions is governed pursuant to the authorities listed below:

- Domestic Small Businesses, Educational Institutions, and Nonprofits: Under the Bayh-Dole Act (35 U.S.C. § 200 et seq.), domestic small businesses, educational institutions, and nonprofits may elect to retain title to their subject inventions
- All other parties: The Federal Non-Nuclear Energy Act of 1974, 42 U.S.C. § 5908, provides that the government obtains title to new inventions unless a waiver is granted (see below)
- Class Patent Waiver

DOE has issued a class waiver that applies to this FOA. Under this class waiver, domestic large businesses may elect title to their subject inventions similar to the right provided to the domestic small businesses, educational institutions, and nonprofits by law. To avail itself of the class waiver, a domestic large business must agree that any products embodying or produced through the use of a subject invention first created or reduced to practice under this program will be substantially manufactured in the United States.

- Advance and Identified Waivers: Applicants not covered by a Class Patent Waiver or the Bayh-Dole Act may request a patent waiver that will cover subject inventions that may be invented under the award, in advance of or within 30 days after the effective date of the award. Even if an advance waiver is not requested or the request is denied, the recipient will have a continuing right under the award to request a waiver for identified inventions,

i.e., individual subject inventions that are disclosed to DOE within the timeframes set forth in the award's intellectual property terms and conditions. Any patent waiver that may be granted is subject to certain terms and conditions in 10 CFR 784.

- Determination of Exceptional Circumstances (DEC): On June 07, 2021, DOE approved a DEC under the Bayh-Dole Act to further promote domestic manufacture of DOE science and energy technologies. In accordance with this DEC, all awards, including subawards, under this FOA shall include the U.S. Competitiveness Provision in accordance with Part VI Section O. U.S. Manufacturing Commitments of this FOA. A copy of the DEC can be found at <https://www.energy.gov/gc/determination-exceptional-circumstances-decs>. Pursuant to 37 CFR 401.4, any nonprofit organization or small business firm as defined by 35 U.S.C. § 201 affected by any DEC has the right to appeal it by providing written notice to DOE within 30 working days from the time it receives a copy of the determination.
- DOE may issue and publish further DEC's on the website above prior to the issuance of awards under this FOA. DOE may require additional submissions or requirements as authorized by any applicable DEC.

K. GOVERNMENT RIGHTS IN SUBJECT INVENTIONS

Where prime recipients, subrecipients, and contractors retain title to subject inventions, the U.S. government retains certain rights.

Government Use License

The U.S. government retains a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States any subject invention throughout the world. This license extends to government contractors.

March-In Rights

The U.S. government retains march-in rights with respect to all subject inventions. Through "march-in rights," the government may require a prime recipient or subrecipient who has elected to retain title to a subject invention (or their assignees or exclusive licensees), to grant a license for use of the invention to a third party. In addition, the government may grant licenses for use of the subject invention when a prime recipient, subrecipient, or their assignees and exclusive licensees refuse to do so.

DOE may exercise its march-in rights only if it determines that such action is necessary under any of the four following conditions:

- The owner or licensee has not taken or is not expected to take effective steps to achieve practical application of the invention within a reasonable time
- The owner or licensee has not taken action to alleviate health or safety needs in a reasonably satisfied manner
- The owner has not met public use requirements specified by federal statutes in a reasonably satisfied manner

- The United States manufacturing requirement has not been met

Any determination that march-in rights are warranted must follow a fact-finding process in which the recipient has certain rights to present evidence and witnesses, confront witnesses and appear with counsel and appeal any adverse decision. To date, DOE has never exercised its march-in rights to any subject inventions.

L. RIGHTS IN TECHNICAL DATA

Data rights differ based on whether data is first produced under an award or instead was developed at private expense outside the award.

“Limited Rights Data”: The U.S. government will not normally require delivery of confidential or trade-secret-type technical data developed solely at private expense prior to issuance of an award, except as necessary to monitor technical progress and evaluate the potential of proposed technologies to reach specific technical and cost metrics.

Government Rights in Technical Data Produced Under Awards: The U.S. government retains unlimited rights in technical data produced under government financial assistance awards, including the right to distribute to the public. One exception to the foregoing is that invention disclosures may be protected from public disclosure for a reasonable time in order to allow for filing a patent application.

M. COPYRIGHT

The prime recipient and subrecipient(s) 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. In addition, for those awards requiring distribution of software as Open-Source Software, the additional information in Appendix C must be addressed in the application.

N. EXPORT CONTROL

The United States government regulates the transfer of information, commodities, technology, and software considered to be strategically important to the United States 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 United States Export Control laws and regulations relating to any work performed under a resulting award.

The recipient must immediately report to DOE any export control investigations, indictments, charges, convictions, and violations upon occurrence, at the recipient or subrecipient level, and provide the corrective action(s) to prevent future violations.

O. 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; exercise an option to procure, 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.

P. PERSONALLY IDENTIFIABLE INFORMATION (PII)

All information provided by the applicant must to the greatest extent possible exclude PII. “PII” refers to information that can be used to distinguish or trace an individual’s identity, such as their name, Social Security number, or biometric records, alone or combined with other personal or identifying information linked or linkable to a specific individual, such as date and place of birth or mother’s maiden name. (See [OMB Memorandum M-17-12](#) dated January 3, 2017.)

By way of example, applicants must screen resumes to ensure that they do not contain PII such as personal addresses, personal landline/cell phone numbers, and personal emails. **Under no circumstances should Social Security numbers (SSNs) be included in the application.** Federal agencies are prohibited from the collecting, using, and displaying unnecessary SSNs. (See the Federal Information Security Modernization Act of 2014 (Pub. L. No. 113-283, Dec 18, 2014; 44 U.S.C. § 3551).

Q. ANNUAL INDEPENDENT AUDITS

If a for-profit entity is a prime recipient and has expended \$1,000,000 or more of DOE awards during the entity’s fiscal year, an annual compliance audit performed by an independent auditor is required. For additional information, please refer to 2 CFR 910.501 and Subpart F.

If an educational institution, nonprofit organization, or state/local government is a prime recipient or subrecipient and has expended \$1,000,000 or more of federal awards during the non-federal entity’s fiscal year, a Single or Program-Specific Audit is required. For additional information, please refer to 2 CFR 200.501 and Subpart F.

Applicants and subrecipients (if applicable) should propose sufficient costs in the project budget to cover the costs associated with the audit. DOE will share in the cost of the audit at its applicable cost share ratio.

R. INFORMATIONAL WEBINAR

DOE will conduct one informational webinar during the FOA process. It will be held prior to the initial FOA release.

Attendance is not mandatory and will not positively or negatively impact the overall review of any applicant submissions. The webinar will be open to all applicants who wish to participate. Applicants should refrain from asking questions or communicating information that would reveal confidential and/or proprietary information specific to their project. The webinar date is listed on the cover page of the FOA.

APPENDIX A – COST SHARE INFORMATION

Cost Sharing or Cost Matching

The terms “cost sharing” and “cost matching” are often used synonymously. Even the DOE Financial Assistance Regulations, 2 CFR 200.306, use both terms in the titles specific to regulations applicable to cost sharing. DOE almost always uses “cost sharing,” as it conveys the concept that non-federal share is calculated as a percentage of the Total Project Cost. An exception is the State Energy Program Regulation, 10 CFR 420.12, State Matching Contribution. Here “cost matching” for the non-federal share is calculated as a percentage of the federal funds only, rather than the Total Project Cost.

How Cost Sharing Is Calculated

As stated above, cost sharing is calculated as a percentage of the Total Project Cost. FFRDC costs must be included in Total Project Costs. The following is an example of how to calculate cost sharing amounts for a project with \$1 million in federal funds with a minimum 20% non-federal cost sharing requirement:

- Formula: Federal share (\$) divided by federal share (%) = Total Project Cost
Example: \$1,000,000 divided by 80% = \$1,250,000
- Formula: Total Project Cost (\$) minus federal share (\$) = Non-federal share (\$)
Example: \$1,250,000 minus \$1,000,000 = \$250,000
- Formula: Non-federal share (\$) divided by Total Project Cost (\$) = Non-federal share (%)
Example: \$250,000 divided by \$1,250,000 = 20%

What Qualifies for Cost Sharing

While it is not possible to explain what specifically qualifies for cost sharing in one or two sentences, in general, if a cost is allowable under the cost principles applicable to the organization incurring the cost and is eligible for reimbursement under a DOE grant or cooperative agreement, it is allowable as cost share. Conversely, if the cost is not allowable under the cost principles and not eligible for reimbursement, it is not allowable as cost share. In addition, costs may not be counted as cost share if they are paid by the federal government under another award unless authorized by federal statute to be used for cost sharing.

The rules associated with what is allowable as cost share are specific to the type of organization that is receiving funds under the grant or cooperative agreement, though are generally the same for all types of entities. The specific rules applicable to:

- FAR Part 31 for For-Profit entities, (48 CFR Part 31); and
- 2 CFR Part 200 Subpart E - Cost Principles for all other non-federal entities.

In addition to the above regulations, other factors may come into play, such as timing of donations and length of the project period. For example, the value of 10 years of donated maintenance on a project that has a project period of five years would not be fully allowable as cost share. Only the value for the five years of donated maintenance that corresponds to the project period is allowable and may be counted as cost share.

Additionally, DOE generally does not allow pre-award costs for either cost share or reimbursement when these costs precede the signing of the appropriation bill that funds the award. In the case of a competitive award, DOE generally does not allow pre-award costs prior to the signing of the Selection Statement by the DOE Selection Official.

General Cost Sharing Rules on a DOE Award

- 1. Cash Cost Share** encompasses all contributions to the project made by the recipient or subrecipient(s) for costs incurred and paid for during the project. This includes when an organization pays for personnel, supplies, or equipment for their company with organizational resources. If the cost of the item or service is reimbursed, it is cash cost share. All cost share items must be necessary to the performance of the project.
- 2. In-Kind Cost Share** encompasses all contributions to the project made by the recipient or subrecipient(s) that do not involve a payment or reimbursement and represent donated items or services. In-Kind cost share items include volunteer personnel hours, donated existing equipment, and donated existing supplies. The cash value and calculations thereof for all In-Kind cost share items must be justified and explained in the Cost Share section of the project Budget Justification. All cost share items must be necessary to the performance of the project. Consult your DOE contact if you have questions before filling out the In-Kind cost share section of the Budget Justification.
- 3. Funds from other federal sources** may **not** be counted as cost share. This prohibition includes FFRDC subrecipients. Non-federal sources include any source not originally derived from federal funds. Cost sharing commitment letters from subrecipients must be provided with the original application.
- 4. Fee or profit**, including foregone fee or profit, are not allowable as project costs (including cost share) under any resulting award. The project may incur only those costs that are allowable and allocable to the project (including cost share) as determined in accordance with the applicable cost principles prescribed in FAR Part 31 for For-Profit entities and 2 CFR Part 200 Subpart E - Cost Principles for all other non-federal entities.

DOE Financial Assistance Rules 2 CFR Part 200 as adopted and supplemented by 2 CFR Part 910

As stated above, the rules associated with what is allowable cost share are generally the same for all types of organizations. Following are the rules found to be common, but again, the specifics are contained in the regulations and cost principles specific to the type of entity:

-
- (A) Acceptable contributions.** All contributions, including cash contributions and third-party in-kind contributions, must be accepted as part of the prime recipient's cost sharing if such contributions meet all of the following criteria:
- (1)** They are verifiable from the recipient's records.
 - (2)** They are not included as contributions for any other federally assisted project or program.
 - (3)** They are necessary and reasonable for the proper and efficient accomplishment of project or program objectives.
 - (4)** They are allowable under the cost principles applicable to the type of entity incurring the cost as follows:
 - a.** For-profit organizations. Allowability of costs incurred by for-profit organizations and those nonprofit organizations listed in Attachment C to OMB Circular A-122 is determined in accordance with the for-profit cost principles in 48 CFR Part 31 in the FAR, except that patent prosecution costs are not allowable unless specifically authorized in the award document. (v) Commercial Organizations. FAR Subpart 31.2—Contracts with Commercial Organizations; and
 - b.** Other types of organizations. For all other non-federal entities, allowability of costs is determined in accordance with 2 CFR Part 200 Subpart E.
 - (5)** They are not paid by the federal government under another award unless authorized by federal statute to be used for cost sharing or matching.
 - (6)** They are provided for in the approved budget.
- (B) Valuing and documenting contributions**
- (1)** Valuing recipient's property or services of recipient's employees. Values are established in accordance with the applicable cost principles, which mean that amounts chargeable to the project are determined on the basis of costs incurred. For real property or equipment used on the project, the cost principles authorize depreciation or use charges. The full value of the item may be applied when the item will be consumed in the performance of the award or fully depreciated by the end of the award. In cases where the full value of a donated capital asset is to be applied as cost sharing or matching, that full value must be the lesser or the following:
 - a.** The certified value of the remaining life of the property recorded in the recipient's accounting records at the time of donation; or
 - b.** The current fair market value. If there is sufficient justification, the Contracting Officer may approve the use of the current fair market value of the donated property, even if it exceeds the certified value at the time of donation to the project. The Contracting Officer may accept the use of any reasonable basis for determining the

fair market value of the property.

- (2) Valuing services of others' employees. If an employer other than the recipient furnishes the services of an employee, those services are valued at the employee's regular rate of pay, provided these services are for the same skill level for which the employee is normally paid.
- (3) Valuing volunteer services. Volunteer services furnished by professional and technical personnel, consultants, and other skilled and unskilled labor may be counted as cost sharing or matching if the service is an integral and necessary part of an approved project or program. Rates for volunteer services must be consistent with those paid for similar work in the recipient's organization. In those markets in which the required skills are not found in the recipient organization, rates must be consistent with those paid for similar work in the labor market in which the recipient competes for the kind of services involved. In either case, paid fringe benefits that are reasonable, allowable, and allocable may be included in the valuation.
- (4) Valuing property donated by third parties.
 - a. Donated supplies may include such items as office supplies or laboratory supplies. Value assessed to donated supplies included in the cost sharing or matching share must be reasonable and must not exceed the fair market value of the property at the time of the donation.
 - b. Normally only depreciation or use charges for equipment and buildings may be applied. However, the fair rental charges for land and the full value of equipment or other capital assets may be allowed, when they will be consumed in the performance of the award or fully depreciated by the end of the award, provided that the Contracting Officer has approved the charges. When use charges are applied, values must be determined in accordance with the usual accounting policies of the recipient, with the following qualifications:
 - i. The value of donated space must not exceed the fair rental value of comparable space as established by an independent appraisal of comparable space and facilities in a privately owned building in the same locality.
 - ii. The value of loaned equipment must not exceed its fair rental value.
- (5) Documentation. The following requirements pertain to the recipient's supporting records for in-kind contributions from third parties:
 - a. Volunteer services must be documented and, to the extent feasible, supported by the same methods used by the recipient for its own employees.
 - b. The basis for determining the valuation for personal services and property must be documented.

APPENDIX B – Buy America Requirements for Infrastructure Projects

Required Use of American Iron, Steel, Manufactured Products, and Construction Materials

A. Definitions

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

Components See 2 CFR 184.3 Definitions

Construction Materials See 2 CFR 184.3 Definitions

“Buy America Preference,” “Buy America Requirement,” or “domestic content procurement preference” means the requirements set forth in section 70914 of the Build America, Buy America Act, which requires the head of each Federal agency to ensure that none of the funds subject to the requirements are made available for a Federal award for an infrastructure project may be obligated unless all of the iron, steel, manufactured products, and construction materials incorporated into the project are produced in the United States.

Infrastructure See 2 CFR 184.4(c) and (d).

Manufactured Products See 2 CFR 184.3 Definitions

Predominantly of iron or steel See 2 CFR 184.3 Definitions.

Infrastructure project See 2 CFR 184.3 Definitions

B. Buy America Requirement for Infrastructure Projects (Buy America Requirement)

None of the award funds (includes federal share and recipient cost share) may be used for a project for infrastructure unless:

- (1) all iron and steel used in the project is produced in the United States—this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;
- (2) all manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States 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. See 2 CFR 184.5 for determining the cost of components for manufactured products; and

(3) all construction materials²⁶ are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States. See 2 CFR 184.6 for construction material standards.

The Buy America Requirement only applies to those articles, materials, and supplies that are consumed in, incorporated into, or affixed to the infrastructure in the 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 Requirement 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 Requirement only applies to an article, material, or supply classified into one of the following categories* based on its status at the time it is brought to the work site for incorporation into an infrastructure project:

- (i) Iron or steel products;
- (ii) Manufactured products; or
- (iii) Construction materials;

The Buy America Requirement only applies to the iron or steel products, manufactured products, and construction materials used for the construction, alteration, maintenance, or repair of public infrastructure in the United States when those items are consumed in, incorporated into, or permanently affixed to the infrastructure. An article, material, or supply incorporated into an infrastructure project should not be considered to fall into multiple categories, but rather must meet the Buy America Preference Requirement for only the single category in which it is classified.

The Buy America Requirement applies to public infrastructure projects in the United States. For purposes of this guidance, applicants should consider whether the infrastructure project will serve a public function. Infrastructure projects should generally be considered “public” if the infrastructure is: publicly owned, privately owned but operated on behalf of the public, or is a place of public accommodation. Review the implementation guidance in OMB Memorandum [OMB Memorandum M-24-02](#) and consult with DOE if you are unsure if your project is subject to Buy America requirements.

All iron and steel, manufactured products, and construction materials used in the infrastructure project must be produced in the United States.

* *Section 70917(c) Materials* are cement and cementitious materials; aggregates such as stone,

²⁶ Excludes cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents or additives.

sand, or gravel; or aggregate binding agents or additives as provided in section 70917(c) of BABA. Section 70917 (c) materials are excluded from Construction materials. Asphalt concrete pavement mixes are typically composed of asphalt cement (a binding agent) and aggregates such as stone, sand, and gravel. Accordingly, asphalt is also excluded from the definition of Construction materials.

Section 70917(c) materials, on their own, are not manufactured products. Further, Section 70917(c) materials should not be considered manufactured products when they are used at or combined proximate to the work site—such as is the case with wet concrete or hot mix asphalt brought to the work site for incorporation. However, certain Section 70917(c) materials (such as stone, sand, and gravel) may be used to produce a manufactured product, such as is precast concrete. Precast concrete is made of components, is processed into a specific shape or form, and is in such state when brought to the work site. Furthermore, wet concrete should not be considered a manufactured product if not dried or set prior to reaching the work site.

Further clarification is provided in 2 CFR Part 184 on the circumstances under which a determination is made that Section 70917(c) materials should be treated as components of a manufactured product. That determination is based on consideration of: (i) the revised definition of the “manufactured products” at 2 CFR 184.3; (ii) a new definition of “section 70917(c) materials” at 2 CFR 184.3; (iii) new instructions at 2 CFR 184.4(e) on how and when to categorize articles, materials, and supplies; and (iv) new instructions at 2 CFR 184.4(f) on how to apply the Buy America preference by category.

The recipient is responsible for flowing the Buy America Requirement down to all subawards, contracts, subcontracts, and purchase orders for work performed under the proposed infrastructure project, including to For-Profit Entities when the For-Profit Entity is a subrecipient or subawardee.

Recipients must certify or provide equivalent documentation for proof of compliance that a good faith effort was made to solicit bids for domestic products used in the infrastructure project under this award.

Recipients must also maintain certifications or equivalent documentation for proof of compliance that those articles, materials, and supplies that are consumed in, incorporated into, affixed to, or otherwise used in the infrastructure project, not covered by an approved waiver or an exemption provided in 2 CFR 184.8, are produced in the United States. The certification or proof of compliance must be provided by the suppliers or manufacturers of the iron, steel, manufactured products and construction materials and flow up from all subawardees, contractors and vendors to the recipient. Recipients must keep these certifications with the award/project files and be able to produce them upon request from DOE, auditors or Office of Inspector General.

C. DOE Submission Requirements for Application

Within the first two pages of the workplan or project description, applicants must provide a short statement on whether the project will involve the construction, alteration, maintenance and/or repair of infrastructure in the United States. The ultimate determination about whether a project includes infrastructure remains with DOE, but the applicant’s statement will assist project

planning and integration of the Buy America Requirement, which may impact the project's proposed budget and/or schedule.

The cover page should also include the project title, both the technical and business points of contact, names of all team member organizations, names of project managers, senior/key personnel and their organizations, and the project location(s).

D. Waivers

In limited circumstances, DOE may waive the application of the Buy America Requirement in an award where DOE determines that:

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

DOE will only process waiver requests after an award has been made but prior to any purchase of items the recipient is seeking to waive, and for which the requests have been submitted in accordance with the term and conditions of the award. Waiver requests must be reviewed by DOE and the Office of Management and Budget's Made in America Office and are subject to a public comment period of no less than 15 calendar days.

DOE or OMB may request additional information for consideration of the waiver. DOE may reject or grant waivers in whole or in part depending on its review, analysis, and/or feedback from OMB or the public. DOE's final determination regarding approval or rejection of the waiver request may not be appealed by a recipient.

Requests to waive the Buy America Requirement must include the following:

- Waiver type (Public Interest, Non-Availability, or Unreasonable Cost);
- Recipient name and Unique Entity Identifier (UEI);
- Award information (Federal Award Identification Number, Assistance Listing number);
- A brief description of the project, its location, and the specific infrastructure involved;
- Total estimated project cost, with estimated federal share and recipient cost share breakdowns;
- Total estimated infrastructure costs, with estimated federal share and recipient cost share breakdowns;
- List and description of iron or steel item(s), manufactured goods, and/or

construction material(s) the recipient seeks to waive from the Buy America Requirement, including name, cost, quantity(ies), country(ies) of origin, and relevant Product Service Codes (PSC) and North American Industry Classification System (NAICS) codes for each;

- A detailed justification as to how the non-domestic item(s) is/are essential the project;
- A certification that the recipient made a good faith effort to solicit bids for domestic products supported by terms included in requests for proposals, contracts, and non-proprietary communications with potential suppliers;
- A justification statement—based on one of the applicable justifications outlined above—as to why the listed items cannot be procured domestically, including the due diligence performed (e.g., market research, industry outreach, cost analysis, cost-benefit analysis) by the recipient to attempt to avoid the need for a waiver. This justification may cite, if applicable, the absence of any Buy America-compliant bids received for domestic products in response to a solicitation;
- A description of the market research conducted that includes who conducted the market research, when it was conducted, sources that were used, and the methods used to conduct the research; and Anticipated impact to the project if no waiver is issued.

APPENDIX C – OPEN-SOURCE SOFTWARE

Open-source Software Distribution Plan

Applications for which open-source software distribution is required must submit a plan describing how software produced under this FOA will be distributed. For a DOE National Laboratory or a FFRDC, the data rights clause (including rights and requirements pertaining to computer software) in its M&O contract shall apply and take precedence over any requirement set forth in this Appendix. The plan must include the following elements:

1. A complete description of any existing software that will be modified or incorporated into software produced under this FOA, including a description of the license rights. The license rights must allow the modified or incorporated software to be distributed as open-source.
2. A discussion of the open-source license that the applicant plans to use for the software it intends to produce under the FOA, and how that choice furthers the goals of this FOA. The discussion must also address how the license conforms to the conditions listed below.
3. A method for depositing the software in a source code repository.
4. A method for sharing and disseminating the software and other information to team members or others when multiple parties will contribute to the development of the software or the FOA requires that the software or other information be shared or disseminated to others.

Open-source Definition: Open-source licenses must conform to all of the following conditions:

Free Redistribution

The license shall not restrict any party from selling or giving away the software as a component of an aggregate software distribution containing programs from several sources. The license shall not require a royalty or other fee for such sale. The rights attached to the software must apply to all to whom the software is redistributed without the need for execution of an additional license by those parties.

Source Code

The program must include source code and allow distribution in source code as well as compiled form. Where some form of a product is not distributed with source code, there must be a well-publicized means of obtaining the source code for no more than a reasonable reproduction cost preferably, i.e., downloading via the Internet without charge. The source code must be the preferred form in which a programmer would modify the program. Deliberately obfuscated source code and intermediate forms, such as the output of a preprocessor or translator, are not allowed.

Derived Works

The license must allow modifications and derived works, and permit the option of distributing the modifications and derived works under the same terms as the license of the original software.

Integrity of the Author's Source Code

The license may restrict source code from being distributed in modified form only if the license allows the distribution of "patch files" with the source code for the purpose of modifying the program at build time. The license must explicitly permit distribution of software built from modified source code. The license may require derived works to carry a different name or version number from the original software.

No Restriction Against Fields of Endeavor

The license must not restrict anyone from using the program in a specific field of endeavor. For example, it may not restrict the program from being used in a business or for genetic research.

License Must Not Be Specific to a Product or Technology

The rights attached to the program must not depend on the program's being part of a particular software distribution. If the program is extracted from that distribution and used or distributed within the terms of the program's license, all parties to whom the program is redistributed should have the same rights as those that are granted in conjunction with the original software distribution. No provision of the license may be predicated on any individual technology or style of interface.

License Must Not Restrict Other Software

The license must not place restrictions on other software that is distributed along with the licensed software. For example, the license must not insist that all other programs distributed on the same medium be open-source software.

Examples of Acceptable Licenses:

Apache License, 2.0

<http://www.apache.org/licenses>

The 2.0 version of the Apache License was approved by the Apache Software Foundation (ASF) in 2004. The goals of this license revision were to reduce the number of frequently asked questions, to allow the license to be reusable without modification by any project (including non-ASF projects), to allow the license to be included by reference instead of listed in every file, to clarify the license on submission of contributions, to require a patent license on contributions that necessarily infringe the contributor's own patents, and to move comments regarding Apache and other inherited attribution notices to a location outside the license terms

The result is a license that is compatible with other open-source licenses, while remaining true to and supportive of collaborative development across nonprofit and commercial organizations.

All packages produced by the ASF are implicitly licensed under the Apache License, Version 2.0, unless otherwise explicitly stated.

GNU General or Public License (GPLv3)

<http://www.gnu.org/licenses/gpl.html>

The GNU General Public License (GNU GPL or simply GPL) is the most widely used free software license, originally written by Richard Stallman for the GNU Project.

The GPL is the first copyleft license for general use, which means that derived works must be distributed under the same license terms. Under this philosophy, the GPL grants the recipients of a computer program the rights of the free software definition and uses copyleft to ensure the freedoms are preserved, even when the work is changed or additions are made. This aspect distinguishes the GPL from permissive free software licenses, including the BSD licenses. The license's copyright disallows modification of the license. Copying and distributing the license is allowed because the GPL requires recipients to get "a copy of this License along with the Program." According to the GPL FAQ, anyone can make a new license using a modified version of the GPL if they use a different name for the license, do not mention "GNU," and remove the preamble, though the preamble can be used in a modified license if permission to use it is obtained from the Free Software Foundation (FSF).

GNU Library or "Lesser" General Public License (LGPLv3)

<http://www.gnu.org/licenses/lgpl.html>

The GNU Lesser General Public License (or LGPL, formerly the GNU Library General Public License) is a free software license published by the Free Software Foundation (FSF). It was designed as a compromise between the strong-copyleft GNU General Public License or GPL and permissive licenses such as the BSD licenses and the MIT License. The GNU Library General Public License (as the LGPL was originally named) was published in 1991 and adopted the version number 2 for parity with GPL version 2. The LGPL was revised in minor ways in the 2.1 point release, published in 1999, when it was renamed the GNU Lesser General Public License to reflect the FSF's position that not all libraries should use it. Version 3 of the LGPL was published in 2007 as a list of additional permissions applied to GPL version 3.

The LGPL places copyleft restrictions on the program governed under it but does not apply these restrictions to other software that merely link with the program. There are, however, certain other restrictions on this software.

The LGPL is primarily used for software libraries, although it is also used by some stand-alone applications, most notably Mozilla and OpenOffice.org.

The MIT License

<http://opensource.org/licenses/MIT>

The MIT License is a free software license originating at the Massachusetts Institute of Technology. It is a permissive license, meaning that it permits reuse within proprietary software provided all copies of the licensed software include a copy of the MIT License terms. Such proprietary software retains its proprietary nature even though it incorporates software under the MIT License. The license is also GPL-compatible, meaning that the GPL permits combination

and redistribution with software that uses the MIT License.

Software packages that use one of the versions of the MIT License include Expat, PuTTY, the Mono development platform class libraries, Ruby on Rails, Lua (from version 5.0 onward), and the X Window System, for which the license was written.

Mozilla Public License 2.0 (MPL-2.0)

<http://www.mozilla.org/MPL/2.0/>

The Mozilla Public License (MPL) is a free and open-source software license. Version 1.0 was developed by Mitchell Baker when she worked as a lawyer at Netscape Communications Corporation and version 1.1 at the Mozilla Foundation. Version 2.0 was developed in the open, overseen by Baker and led by Louis Villa. The MPL is characterized as a hybridization of the modified BSD license and GNU General Public License.

The MPL is the license for the Mozilla Application Suite, Mozilla Firefox, Mozilla Thunderbird and other Mozilla software. The MPL has been adapted by others as a license for their software, most notably Sun Microsystems, as the Common Development and Distribution License for OpenSolaris, the open-source version of the Solaris 10 operating system, and by Adobe, as the license for its Flex product line.