

Financial Assistance Notice of Funding Opportunity Part 1



**U.S. Department of Energy (DOE)
Office of Nuclear Energy – Idaho Operations Office
High-Assay Low-Enriched Uranium (HALEU) Transportation
Package, Inflation Reduction Act (IRA)
Notice of Funding Opportunity Number: DE-FOA-0002967**

NOFO Type: Initial - November 13, 2024

Amendment 001: December 02, 2024

Amendment 002: December 11, 2024

Application due: January 31, 2025, at 5:00 PM Eastern Time

Modifications to this NOFO will be posted on Grants.gov. Grants.gov will automatically notify applicants when a NOFO modification is processed. Applicants must be registered to this NOFO in Grants.gov to receive email notifications. See Registration Requirements in Part 2 of this NOFO.

Changes:

Amendment 001: This amendment

- 1.) Edits and corrects section II.B Limitation on Number of Applications Eligible for Review (pages 10-11) to reflect the original intent for the number of applications that would be accepted within each topic area.

Amendment 002: This amendment

- 1.) Change the due date for proposals from Tuesday January 21st, 2025 to Friday January 31, 2025 at 5:00pm Eastern Standard Time (EST). Page 5
- 2.) Add instructions regarding when a foreign entity participation waiver can be submitted to DOE. (Page 9 on NOFO part I)
- 3.) Provide responses to official questions regarding the HALEU Transportation NOFO.

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Before You Begin

Navigating the Notice of Funding Opportunity

The [OMB Memorandum M-24-11](#) directs federal agencies to reduce the burden on applicants in the Notice of Funding Opportunity (NOFO) process and limit the length of the NOFO information requests. With Fiscal Year (FY) 2025 NOFOs, DOE has separated the NOFO into two parts.

NOFO Part 1 describes the specific DOE programmatic goals and evaluation criteria, eligibility, and other components that are specific to each funding opportunity. NOFO Part 2 includes the fixed DOE requirements that generally do not change from NOFO to NOFO, including standard information for the application phase, expectations for award negotiations, and post-award requirements. Applicants must review both the NOFO Part 1 and the NOFO Part 2 prior to applying. To facilitate navigation, you will find links throughout this document to additional information found in Part 2.

There are several required one-time actions applicants must take before applying to this NOFO. Some of these actions may take several weeks, so it is vital applicants build in enough time to complete them. Failure to complete these actions could interfere with application or negotiation deadlines or the ability to receive an award if selected. If you have previously completed the necessary registrations, make sure your registration is active and up to date. All registrations are free. Please refer to [NOFO Part 2, Get Registered](#), for additional information.

This announcement is published in conjunction with NOFO Part 2, version 1.0.

I. Basic Information

A. Key Facts

| | |
|---|---|
| Issuing Agency | Department of Energy, Office of Nuclear Energy – Idaho Operations Office |
| Funding Opportunity Title | High-Assay Low-Enriched Uranium (HALEU) Transportation Package |
| Announcement Type | Initial Notice of Funding Opportunity |
| Funding Opportunity Number | DE-FOA-0002967 |
| Funding Instrument | Cooperative Agreement |
| Assistance Listing Number | 81.121 |
| Funding Opportunity Description | DOE is interested in developing long-term economical solutions for the transportation of HALEU through the development and Nuclear Regulatory Commission (NRC) certification of new transportation packages or the modification of existing Transportation packages. |
| Program Goals & Objective(s) | <p>The objective of this NOFO is to research, develop, and acquire NRC certification for HALEU transportation packages focused on front-end transportation packaging needs to support a sustainable supply chain. Industry’s front-end HALEU transportation needs include:</p> <ol style="list-style-type: none"> 1. Transport of enriched, up to HALEU is UF6 enriched up to 19.75% 2. Transport of tails/de-converted material, 3. Transport of fresh finished fuel. <p>To address the most immediate needs in this funding opportunity, DOE is considering the following transportation packages:</p> <ol style="list-style-type: none"> 1. Oxide transportation packages. 2. Metal transportation packages. 3. UF6 transportation packages. 4. Packages capable of supporting combinations of the above. |

KEY DATES

Notice of Funding Opportunity Issue Date:
November 19, 2024

Application Deadline: *January 31, 2025, by 5:00 PM Eastern Standard Time*

Anticipated Award Dates:
Approximately June 2025

| | |
|----------------------------|---|
| Topic Areas | <p>To support package concepts based on existing package designs or in development and support fundamentally new package designs, DOE has identified two Option Topics for application. Award size for each topic is defined in Section II of this announcement.</p> <ul style="list-style-type: none"> • Topic Area 1: Applications for NRC certification of new package design concepts. DOE intends this topic for concepts that will likely require sufficient award duration and funding to achieve competitive, economically viable transportation packages. • Topic Area 2: Applications for NRC certification of modification to existing design packages. DOE intends this topic for concepts that are further along in their development and require less time and costs associated with achieving NRC certificate of compliance (CoC). |
| Eligible Applicants | <ul style="list-style-type: none"> • Domestic Entities (Institutes of higher education; for-profit entities; non-profit entities; state and local government entities and Indian Tribes) • DOE FFRDC's and non-DOE FFRDCs and Federal Research Agencies may not be Prime recipients, but may be subrecipient(s) |
| Grants.gov | <ul style="list-style-type: none"> • Registration Link: https://grants.gov • HELP: Grants.gov provides 24/7 support. You can call 1-800-518-4776 or email support@grants.gov. It is advised you retain your ticket number. |

1. Funding Details

Multiple Topic Areas

DOE expects to make available up to \$16,000,000 of federal funding over a project period of up to three years for awards under this NOFO. DOE intends to initially fully fund its share of each award. However, DOE reserves the right in its sole discretion to add additional funding to an award or make additional awards to applications submitted under this NOFO.

Topic Area 1: Applications for NRC certification of new package design concepts.

Approximate total available funding: \$12,000,000

Approximate number of awards: Up to 4 awards

Approximate dollar amount of individual awards: Up to \$6,000,000 in total project cost with DOE paying up to \$3,000,000

Minimum cost share required: 50% of the total project cost

Approximate award project period: Up to three years

Anticipated length of individual budget periods: 12 months

Topic Area 2: Applications for NRC certification of modification to existing design packages

Approximate total available funding: \$4,000,000

Approximate number of awards: Up to 4 awards

Approximate dollar amount of individual awards: Up to \$2,000,000 in total project cost with DOE paying up to \$1,000,000

Minimum cost share required: 50% of the total project cost

Approximate award project period: Up to two years

Anticipated length of individual budget periods: 12 months

2. Period of Performance

DOE anticipates making awards, comprised of multiple budget periods. DOE anticipates making one or more awards for Topic Area 1 with a period of performance up to three years, and one or more for Topic Area 2 with a period of performance up to two years. Once the period of performance ends (which includes any no-cost extension that DOE has the discretion to grant), there could be a re-competition or a new NOFO based on the program needs at that time. If applicable, project continuation will be contingent upon DOE's Go/No-Go decision. For a complete list and more information on the Go/No-Go review, see the [NOFO Part 2, Award Administration Information](#). Future funding for all budget periods, including the initial budget period, is not guaranteed.

B. Executive Summary

DOE is interested in developing long-term economical solutions for the transportation of HALEU through the development and Nuclear Regulatory Commission (NRC) certification of new transportation packages or the modification of existing packages. Applications will address the objectives to research, develop, and acquire NRC certification for HALEU Transportation packages focused on front-end transportation packaging needs to support a sustainable supply chain.

C. Agency Contact Information

Office of Nuclear Energy - Idaho Operations Office
U.S. Department of Energy
1955 N. Fremont Avenue
Idaho Falls, ID 83415

For questions relating to this specific NOFO, please send emails to Jeff Rigby, rigbyja@id.doe.gov and Mark Payne, paynemb@id.doe.gov,

subject title: NOFO DE-FOA-0002967: HALEU Transportation Package

DISCLAIMER: Applicants are discouraged from submitting information considered proprietary unless it is deemed essential for proper evaluation of the application. If the application contains information that the applicant organization considers to be trade secrets, information that is commercial or financial, or information that is privileged or confidential, the pages containing that information must be identified as specified in the application instructions. When such information is included in the application, it will be withheld from public disclosure to the extent permitted by law, including the Freedom of Information Act, with the understanding that the information will be used or disclosed only for evaluation of the

application. The information contained in the application will be protected by DOE from unauthorized disclosure, consistent with the need for merit review of applications of financial assistance awards to assure the integrity of the competitive process and the accuracy and completeness of the information. If a federal financial assistance award is made as a result of or in connection with an application, the federal government has the right to use or disclose the information to the extent authorized by law. This restriction does not limit the federal government's right to use the information if it is obtained without restriction from another source.

II. Eligibility

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 and ineligible for any award. DOE will not make eligibility determinations for potential applicants prior to the date on which applications to this NOFO must be submitted. The decision whether to apply in response to this NOFO lies solely with the applicant. The information included here is specific to eligibility requirements for this NOFO. For eligibility requirements applicable to all NOFOs, please consult [NOFO Part 2, Eligibility](#).

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.

1. Restricted Eligibility

In accordance with 2 CFR 910.126, Competition, eligibility for this NOFO is restricted because federally funded research & development centers (FFRDC) are not permitted to be the prime/lead role on applications for this project, as they are not allowed to compete with industry. DOE is restricting eligibility to the entities identified below.

2. Domestic Entities

Domestic entities are eligible to apply as recipients or subrecipients. The following types of domestic entities are eligible to participate as a recipient or subrecipient of this NOFO:

- Institutions of higher education;
- For-profit organization;
- Nonprofit organization;
- State and local governmental entities; and
- Indian Tribes, as defined in section 4 of the Indian Self-Determination and Education Assistance Act, 25 U.S.C. § 5304¹

¹ "Indian Tribe," for the purposes of this NOFO and as defined in in section 4 of the Indian Self-Determination and Education Assistance Act ([25 U.S.C. § 5304](#)), 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

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.

3. Foreign Entity Participation

In general, foreign entities are not eligible to apply as either a recipient or subrecipient. In limited circumstances, DOE may approve a waiver to allow a foreign entity to participate as a recipient or subrecipient.

A foreign entity may submit an application as the prime recipient to this NOFO, but the application must be accompanied by an explicit written waiver request. Likewise, if the applicant seeks to include a foreign entity as a subrecipient, the applicant must submit a separate explicit written waiver request in the application for each proposed foreign subrecipient. Please see *NOFO Part 2, Application Content Requirements (page 18)* for the requirements for submission of a foreign entity waiver request. Waivers may be submitted any time before the application due date or wait and submit the waiver request(s) with the application package submission. If a waiver is submitted before an application due date, the applicant must document, on the waiver, which application package the waiver is associated with. Applicants do not have the right to appeal DOE's decision concerning a waiver request.

Prime recipients and subrecipients must be legally formed in the United States, have majority domestic ownership and control, and have a physical location for business operations in the United States.

Entities that are organized, chartered, or incorporated (or otherwise formed) under the laws of the United States or a particular state or territory of the United States and have a physical location for business operations in the United States are eligible to apply for funding as a recipient or subrecipient.

Foreign Entity Participation

A foreign entity is eligible to apply for funding as a recipient if it designates in the application a subsidiary or affiliate incorporated (or otherwise formed) under the laws of a state or territory of the United States to be the recipient. The application must state the nature of the corporate relationship between the foreign entity and domestic subsidiary or affiliate.

Foreign entities may request a waiver of the requirement to designate a subsidiary in the United States as the recipient in the application (i.e., a foreign entity may request that it be the recipient). To do so, the applicant must submit an explicit written waiver request in the application.

NOFO Part 2, Application Content Requirements lists the information that must be included in a request to waive this requirement. The applicant does not have the right to appeal DOE's decision concerning a waiver request.

Participant Limitations

Participation of the following entities is limited as follows.

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 NOFO per https://www.whitehouse.gov/wp-content/uploads/2023/01/M-23-09_Signed_CEQ_CPO.pdf.

- DOE FFRDCs² are eligible to apply for funding as a subrecipient but are not eligible to apply as a prime recipient.
- Non-DOE FFRDCs are eligible to participate as a subrecipient but are not eligible to apply as a recipient.
- Federal agencies and instrumentalities (other than DOE) are eligible to participate as a subrecipient but are typically not eligible to apply as a recipient.

Performance of Work in the United States

All work for the awards under this NOFO must be performed in the United States. To request a waiver of this requirement, the applicant must submit an explicit waiver request in the application. Absent an approved waiver, such costs will not be allowable under the award. *NOFO Part 2, Application Content Requirements* lists the requirements for submission of a foreign work waiver request.

Ineligible Participants

The following entities are ineligible for participation in this NOFO as a recipient, subrecipient, or subcontractor.

- In accordance with 2 CFR 200.214, 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.
- Entities identified on Department of the Treasury Office of Foreign Assets Control Treasury's Sanctions Program Specially Designated Nationals list are prohibited from doing business with the United States government and are not eligible. See [OFAC - Sanctions List Service \(treas.gov\)](https://www.treas.gov/sanctions).
- 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.

Entity of Concern Prohibition

Entities of Concern are prohibited from participating in projects selected under this NOFO (see *NOFO Part 2, Eligibility, Other Eligibility Information, Entity of Concern Prohibition* section for details and definitions).

B. Limitation on Number of Applications Eligible for Review

To support package concepts based on existing package designs or in development and support fundamentally new package designs, DOE has identified two Topic Areas for application. Applicants may submit up to one application per Topic Area.

Topic Area 1: Applications for NRC certification of new package design concepts. DOE intends this topic for concepts that will likely require sufficient award duration and funding to achieve cost-competitive, economically viable transportation packages.

A Transportation Package is used to transport one of the three types that include oxide transportation packages, metal transportation packages, UF6 transportation packages, or packages capable of supporting combinations of the three.

² 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/>.

- Applicants are permitted to submit one application for one of the respective HALEU Fuel Forms (oxide, metal, UF₆, or combination) under Topic Area 1.

Topic Area 2: Applications for NRC certification of modification to existing design packages. DOE intends this pathway for concepts that are further along in the development and require less time and costs associated with achieving NRC certificate of compliance (CoC).

A Transportation Package is used to transport one of the three types that include oxide transportation packages, metal transportation packages, UF₆ transportation packages, or packages capable of supporting combinations of the three.

- Applicants are permitted to submit one application for one of the respective HALEU Fuel Forms (oxide, metal, UF₆, or combination) under Topic Area 2.

C. Cost Sharing

Applicants are expected to follow through on the estimated cost share commitments proposed in their applications if selected for award negotiations. Please refer to the [NOFO Part 2, Eligibility](#) for more information on Cost Sharing.

1. Cost Share Requirements

The cost share must be at least 50% of the total project costs³ for Demonstration projects.⁴

Applications that do not meet the minimum required cost share will be deemed ineligible during the initial compliance review and will not be further reviewed. The cost share must come from non-federal sources unless otherwise allowed by law.

The cost share percentage is calculated by dividing the cost share by the total allowable project costs for the award where the total allowable project costs include government share (including FFRDC costs if applicable) and cost share. To help applicants calculate proper cost share amounts, DOE has included a cost share information sheet and sample cost share calculation in the [NOFO Part 2, Eligibility—Cost Sharing, Cost Share Calculation Examples](#).

2. Anticipated Maximum Federal Cost Share (Over the Life of the Award)

³ Total project costs are the sum of the government share, including FFRDC costs if applicable, and the recipient share of project costs.

⁴ Energy Policy Act of 2005, Pub. L. 109-58, sec. 988. Also see 2 CFR 200.306 and 2 CFR 910.130 for additional cost sharing requirements.

| | Topic Areas | Federal Cost Share |
|---|---|--------------------|
| 1 | NRC Licensing of New Transportation Packages | Up to \$3,000,000 |
| 2 | NRC Licensing of Modification to Existing or Uncertified Transport Packages | Up to \$1,000,000 |

3. Unallowable Cost Share Sources, NOFO Specific

The unallowable cost share sources identified here are specific to this announcement. Refer to **NOFO Part 2, Eligibility-Cost Sharing, Unallowable Cost Share Sources** for unallowable cost share sources applicable to all NOFOs.

D. FFRDC Eligibility Criteria

1. DOE and Non-DOE FFRDCs as a Subrecipient

If there is no conflict, DOE and non-DOE FFRDCs may be proposed as subrecipients on another entity's application subject to the following guidelines:

Authorization for non-DOE 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 an FFRDC must be consistent with its authority under its award.

Authorization for DOE 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.

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 FFRDCs participating as a subrecipient on a project will be funded directly through the DOE Work Authorization process in accordance with DOE O 412.1A. Non-DOE 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.

All DOE FFRDCs are required to enter into a Cooperative Research and Development Agreement⁵ (CRADA) or, if the role of the DOE FFRDC is limited to technical assistance and intellectual property is not anticipated to be generated from the DOE FFRDC's work, a Technical Assistance Agreement (TAA), with at least the recipient. A fully executed CRADA or TAA must be in place or be compliant with a Master Scope of Work process prior to the FFRDC starting work directly allocable to the FA award.

A CRADA is used to ensure accountability for project work and provide the appropriate management of IP, e.g., data protection and background IP. The Data Management Plan is not suited for this purpose.

III. Program Description

A. Program Purpose

The mission of the Office of Fuel Supply Technology (FST) is to ensure that enriched uranium is available to domestic nuclear energy producers and advanced reactor developers at both LEU (<5% U-235) and HALEU (19.75% U-235) enrichment levels. FST also oversees an R&D program that addresses key technical issues related to HALEU utilization by advanced reactor vendors. Cultivating a secure and resilient domestic fuel supply for the nuclear energy industry ensures that Americans will continue to have access to clean, reliable, and efficient nuclear power generation sources.

FST is responding to multiple legislative directives intended to strengthen the domestic LEU supply market and to establish domestic HALEU supply and address knowledge gaps related to HALEU utilization. Section 2001 of the Energy Act of 2020 ([P.L. 116-260](#)) directs the Secretary of Energy to establish and carry out, through the Department of Energy's Office of Nuclear Energy (NE), the HALEU Availability Program to support the availability of HALEU for civilian domestic research, development, demonstration, and commercial use. [P.L. 116-260](#) includes directions to conduct research, development, and provide financial assistance to assist commercial entities in the design and license of transportation packages for HALEU, shall conduct research and development, and provide financial assistance to assist commercial entities, to design and license transportation packages for HA-LEU, including canisters for metal, gas, and other HA-LEU compositions.

In the traditional light water reactor (LWR) fuel cycle, LEU is shipped in large volume containers (e.g., the 30-B container, which holds over 2,000 kg of UF₆) from enrichment facilities to fuel fabrication facilities. HALEU does not have an NRC certification method of transportation outside of using existing Highly Enriched Uranium (HEU) casks. Due to the transportation cask's capability for higher enrichment levels, HALEU is not able to be transported in large shipments, drastically increasing the cost.

DOE is interested in developing long-term economical solutions for the transportation of HALEU through the development and Nuclear Regulatory Commission (NRC) certification of new transportation packages or the modification of existing packages.

⁵ 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>

B. Program Goals and Objectives

This NOFO seeks applications for research, development, and acquisition of NRC certification for HALEU transportation packages focused on front-end transportation packaging needs to support a sustainable supply chain. Industry's front-end HALEU transportation needs include:

1. Transport of enriched, up to 19.75% HALEU, UF_6
2. Transport of tails/de-converted material,
3. Transport of fresh finished fuel.

To address the most immediate needs in this funding opportunity, DOE is considering:

1. Oxide transportation packages.
2. Metal transportation packages.
3. UF_6 transportation packages.
4. Packages capable of supporting combinations of the above.

Applications will:

1. Demonstrate commercial capability, preferably through a reasonable business model. Include understanding of transportation package recipients' requirements under their Part 70/50/52/etc. license; and
2. Identify any obstacles, including design, materials sourcing, and licensing, that must be overcome to acquire NRC certification

Detailed technical descriptions of the specific Topic Areas are provided in the sections that follow.

C. Expected Performance Goals

Depending on the award topic and funded scope some or all of the following goals will be achieved by awarded projects:

1. Detailed design packages and descriptions for new or modified transportation packaging.
2. Application to NRC for certification of new packaging.
3. Application to NRC for certification of modified packaging.
4. Evaluation of economic use case for new or modified packaging.
5. Conceptual framework for commercial adoption of new or modified packaging.

D. Topic Areas

To support package concepts based on existing package designs or in development and support fundamentally new package designs, DOE has identified 2 Option Topics for application. Award size for each topic is defined in Section II of this announcement.

Topic Area 1: Applications for NRC certification of new package design concepts. DOE intends this topic for concepts that will likely require sufficient award duration and funding to achieve competitive, economically viable transportation packages.

Topic Area 2: Applications for NRC certification of modification to existing design packages. DOE intends this topic for concepts that are further along in the development and require less time and costs associated with achieving NRC certificate of compliance (CoC).

E. Applications Specifically Not of Interest

The following types of applications will be deemed non-responsive and will not be reviewed or considered (Please also refer to the [Responsiveness Review](#) section below):

- Applications that fall outside the technical parameters specified in [Background and Context](#) above and the [Topic Areas](#) section above.
- Applications for proposed technologies that are not based on sound scientific principles (e.g., violates the laws of thermodynamics).

F. Statement of Substantial Involvement

DOE anticipates awarding Cooperative Agreements under this NOFO which require substantial involvement by the government in their execution. DOE has substantial involvement in the direction and redirection of technical aspects of the project. DOE may provide technical assistance, advice, intervention, integration with other awardees performing related activities, and technical transfer activities. To further summarize:

- 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.

Responsibilities for DOE and Recipients are listed below:

a. Recipient Responsibilities:

- 1) Performing the activities delineated in this cooperative agreement in accordance with the Project Management Plan, including providing the required personnel, facilities, equipment, supplies and services.
- 2) Defining and revising technical and managerial approaches and plans, submitting the plans to DOE for review, and incorporating DOE's comments. Note: certain revisions require prior written Contracting Officer approval; the recipient has the responsibility to submit requests for such project revisions and other activities which require DOE prior approval in a timely manner.
- 3) Managing and conducting Project activities in accordance with established processes and procedures to ensure tasks and subtasks are completed within the schedule and budget constraints defined by the Project Management Plan and the cooperative agreement.

- 4) Coordinating Project activities with external organizations, including vendors, consultants and DOE M&O contractors (when applicable), to support effective integration of all work elements.
 - 5) Supporting and attending DOE quarterly program review meetings and reporting Project status.
 - 6) Notifying DOE of all planned, in-person meetings (including closed/non-public meetings) associated with the Project.
 - 7) To meet DOE's programmatic needs, and without imposing undue burdens on the Project, providing DOE with information on an as-needed basis to assist with responses to internal and external inquiries regarding Project performance and status. DOE will protect information in accordance with applicable regulations and as set forth in the cooperative agreement.
 - 8) Submitting reports as provided in the Federal Assistance Reporting Checklist and addressing DOE's comments that may result from its review of these reports.
 - 9) Presenting the Project results at appropriate conferences or meetings as requested by the DOE Federal Manager.
- b. DOE Responsibilities. DOE's involvement in the Project will consist of the following normal Federal stewardship responsibilities (see Section 1) below, as well as Substantial Involvement activities (see Section 2 below).
- 1) Normal Federal Stewardship Activities:
 - a) Approving recipient plans prior to award.
 - b) Providing technical assistance prior to the start of the activity, if requested by the recipient and agreed to by DOE.
 - c) Providing technical assistance to support the correction of deficiencies in Project or financial performance when reports or monitoring indicate the existence of a deficiency.
 - d) Reviewing financial, performance, and audit reports.
 - e) Reviewing performance to ensure that the objectives, terms, and conditions of the award are accomplished.
 - f) Providing general administrative requirements, such as prior approvals required by the financial assistance regulations and/or OMB Circulars.
 - g) Reviewing performance after completion.
 - 2) Substantial Involvement Activities:
 - a) Reviewing Project plans and making recommendations for alternate approaches if the plans do not address critical programmatic issues.
 - b) Conducting quarterly meetings to discuss performance (including a summary analysis of project variance), milestones, accomplishments, issues/challenges, and mitigations.
 - c) Collaboration with the Awardee regarding technical progress and recommending alternate approaches or shifting work emphasis, if needed, to adequately address critical Project and/or programmatic issues. The DOE

Federal Manager shall have the authority to issue written technical advice shifting the emphasis among different tasks or directing specific lines of inquiry likely to assist in accomplishing programmatic objectives.

- d) Promoting and facilitating awareness activities, including disseminating, in consultation with the Awardees, project results through presentations and publications.
- e) Serving as scientific / technical liaison between awardees and other project or industry staff.
- f) The power to immediately halt funding an activity if detailed performance specifications are not met.
- g) Participating in Project management planning activities, including risk analysis, to ensure DOE's programmatic requirements or limitations are considered in performance of the work elements.

There are limitations on recipient and DOE responsibilities and authorities in the performance of the project objectives. Performance of the project objectives must be within the scope of the Statement of Objectives, the terms and conditions of the cooperative agreement, and the funding and schedule constraints.

G. Statutory Authority

The programmatic authorizing statute is from the Atomic Energy Act of 1954, as amended, and section 646 of the Department of Energy Organization Act.

In support of the HALEU Program, in section 50173 of Inflation Reduction Act of 2022 (IRA), Congress appropriated additional funding to carry out the HALEU Program elements of section 2001 of Energy Act of 2020 (P.L. 116-260).

Awards made under this announcement will fall under the purview of 2 CFR Part 200 as adopted and supplemented by 2 CFR Part 910.

Helpful websites pertaining to statutory authority for this NOFO:

Energy Act of 2020, Sec. 2001 (a)(2) sections B-C Transportation-

https://www.directives.doe.gov/ipt_members_area/doe-o-436-1-departmental-sustainability-ipt/background-documents/energy-act-of-2020/@@download/file

Inflation Reduction Act, Sec. 50173. Availability of High-Assay Low-Enriched Uranium-

<https://www.congress.gov/bill/117th-congress/house-bill/5376/text>

H. Research & Development (R&D) Community Benefits Plan

DOE is committed to investing in research and development (R&D) of innovations that deliver benefits to the American public and lead to commercialization of technologies and products that foster sustainable, resilient, and equitable access to clean energy. Further, DOE is committed to supporting the development of more diverse, equitable, inclusive, and accessible workplaces to help maintain the nation's leadership in science and technology.

To support the goal of building a clean and equitable energy economy, projects funded under this IRA

NOFO are expected to (1) advance diversity, equity, inclusion, and accessibility (DEIA); (2) contribute to the Justice40 Initiative⁶ and (3) invest in quality jobs. To ensure these objectives are met, applications must include a Research and Development Community Benefits Plan (R&D Community Benefits Plan) that addresses the three objectives stated above. See [NOFO Part 2, Application Content and Form—Application Content Requirements](#) for more information on the R&D Community Benefits Plan content requirements.

IV. Application Content and Form

This section includes application information specific to this NOFO Part 1. Refer to the [NOFO Part 2, Application Content and Form](#) for standard information that applies to all DOE NOFOs such as formatting and content requirements, and funding restrictions.

A. Summary

| Application Submission Phase | Eligibility for Submission |
|------------------------------|---|
| Application | Must be submitted by the specified due date and time to be eligible for comprehensive merit review. |
| Replies to Reviewer Comments | Required to be submitted by the specified due date and time |

B. 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. Please refer to the [NOFO Part 2, Application Content and Form](#) for a complete list of application requirements. Detailed guidance on the content and form of NOFO-specific requirements is provided following the [Summary of Application Requirements](#) table below.

1. Covered Individual Definition, Designation, and Responsibility

Several of the Application Content Requirements listed below and in the NOFO Part 2 are required of covered individuals.

Covered Individual means an individual who (a) contributes in a substantive, meaningful way to the development or execution of the scope of work of a project proposed for funding by DOE, and (b) is designated as a covered individual by DOE.

⁶ 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 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 designates as covered individuals any principal investigator (PI); project director (PD); co-principal investigator (Co-PI); co-project director (Co-PD); project manager; and any individual regardless of title that is functionally performing as a PI, PD, Co-PI, Co-PD, or project manager. Status as a consultant, graduate (master's or PhD) student, or postdoctoral associate does not automatically disqualify a person from being designated as a "covered individual" if they meet the definition in (a) above.

The applicant is responsible for assessing the applicability of (a) above, against each person listed on the application (i.e. whether the person contributes in a substantive, meaningful way to the development or execution of the scope of work). Further, the applicant is responsible for identifying any such individual to DOE for designation as a covered individual, if not already designated by DOE as described above.

The applicant's submission of a current and pending support disclosure and/or biosketch/resume for a particular person serves as an acknowledgement that DOE designates that person as a covered individual.

DOE may further designate covered individuals during award negotiations or the award period of performance.

2. Summary of Application Requirements

The applicant must ensure that cost information and business models demonstrate the potential for industrial use cases are provided for each package type. New, or modified packaging developed under this award shall comply with NRC requirements for the transport of radioactive material, Transportation of Radioactive Material, and relevant U.S. Department of Transportation (DOT) regulations to support the upcoming HALEU enrichment levels up to 19.75%. All applications shall define the overall approach in a Project Management Plan as described in Section IV below.

Applicants should also clearly address technical barriers or limits for transport, NRC licensing strategy, the economic benefits of the applicant's approach, and any safety or consensus standards associated with the design. Economic benefits for the proposed transportation package will demonstrate an applicant's understanding of the costs associated with the nuclear fuel cycle and how the proposed transportation package will provide an economically feasible solution for the transportation of HALEU materials in the US nuclear fuel-supply chain. Any testing, mockups, or other hardware demonstrations necessary for NRC licensing should be described. The application should also demonstrate how the proposed transportation system will provide benefits to potential future users, such as reactor vendors or fuel fabricators, and describe any planned industry collaborations.

3. Required Application Documents

| Component (NOFO Pt. 1 & 2) | File Format | Page Limit | File Name |
|---|-------------|------------|---------------------------|
| Application for Federal Assistance (SF-424) **(NOFO Pt. 2, pg. 16) | PDF | n/a | PrimeApplicantName_SF-424 |

| | | | |
|--|----------|----------|--|
| Technical Volume ** (NOFO Pt.1, pg. 21) | PDF | 50 | PrimeApplicantName_Technical Volume |
| Impacted Indian Tribes Documentation ** (NOFO Pt. 2, pg. 16) | PDF | 5 | PrimeApplicantName_ImpactedTribes |
| *Statement of Project Objectives ** (NOFO Pt. 2, pg. 17) | MS Word | 5 | PrimeApplicantName_SOPO |
| *Project Management Plan ** (NOFO Pt. 2, pg. 17) | PDF | 20 | PrimeApplicantName_PMP |
| Data Management Plan ** (NOFO Pt. 2, pg. 30) | PDF | n/a | PrimApplicantName_DMP |
| *Research and Related Budget – Section A-B Form ** (NOFO Pt. 2, pg. 17) | MS Excel | n/a | PrimeApplicantName_BudgetInformation |
| *Budget Justification- Applicant ** (NOFO Pt. 2, pg. 18) | PDF | n/a | PrimeApplicantName_BudgetJustification |
| *Subrecipient Research and Related Budget – Section A-B Form ** (NOFO Pt. 2, pg. 18) | MS Excel | n/a | SubrecipientName_Budget |
| *Budget Justification-Subrecipient ** (NOFO Pt. 2, pg. 17) | PDF | n/a | SubrecipientName_BudgetJustification |
| Field Work Proposal for FFRDC, (see DOE O 412.1A) ** (NOFO Pt. 2, pg. 18) | PDF | n/a | FFRDCName_FieldWorkProposal |
| Authorization for Non-DOE or DOE FFRDCs ** (NOFO Pt. 2, pg. 18) | PDF | n/a | FFRDCName_WorkAuthorization |
| Waiver for Foreign Entity Participation (If applicable) ** (NOFO Pt. 2, pg. 18) | PDF | n/a | PrimeApplicantName_FEW |
| Performance of Work in the United States (Foreign Work Waiver) (If applicable) ** (NOFO Pt. 2, pg. 19) | PDF | n/a | PrimeApplicantName_FWW |
| *Community Benefits Plan for Research and Development (R&D) ** (NOFO Pt. 2, pg. 20) ** (NOFO Pt. 1, pg. 30) | PDF | 5 | PrimeApplicantName_CBP |
| Resumes (Research and Development (R&D) (Including Subrecipients and Consultants) ** (NOFO Pt. 2, pg. 22) | PDF | 3 page s | PrimeApplicantName_Resume_Individual sName |

| | | | |
|--|----------------|--------------|---|
| | | each | |
| Resumes (Non-Research and Development (R&D) (Including Subrecipients and Consultants) ** (NOFO Pt. 2, pg. 23) | PDF | 3 pages each | PrimeApplicantName_Resume_IndividualsName |
| *Current and Pending Support (for each covered individual) ** (NOFO Pt. 2, pg. 24) | PDF | n/a | PrimeApplicantName_CPS_IndividualsName |
| Digital Persistent Identifier (for each covered individual) ** (NOFO Pt. 2, pg. 27) | N/A | N/A | Include in Current & Pending Support |
| Research Security Training Requirement (for each covered individual) ** (NOFO Pt. 2, pg. 27) | N/A | N/A | Include in Current & Pending Support |
| Transparency of Foreign Connections ** (NOFO Pt. 2, pg. 28) | PDF | n/a | BusinessSensitive_PrimeApplicantName_TFC |
| Potentially Duplicative Funding Notice ** (NOFO Pt. 2, pg. 30) | PDF | n/a | PrimeApplicantName_PDFN |
| *Location(s) of Work ** (NOFO Pt. 2, pg. 31) | Excel | n/a | PrimeApplicantName_LOW |
| *Offeror Environmental Report ** (NOFO Pt. 2, pg. 32) | PDF | n/a | PrimeApplicantName_EnvQuestionnaire |
| *Disclosure of Lobbying Activities, if applicable (SF-LLL) – (two forms) ** (NOFO Pt. 2, pg. 32) | PDF | n/a | PrimeApplicantName_SF-LLL |
| *Summary for Public Release ** (NOFO Pt. 2, pg. 33) | PDF | 1 | PrimeApplicantName_Summary |
| Summary Slide ** (NOFO Pt. 2, pg. 34) | MS Power Point | 1 | PrimeApplicantName_Slide |
| <p>*DOE forms are provided as part of the NOFO solicitation package under <i>Attachments on Grants.gov</i></p> <p>** These references explain where further information can be found within NOFO Parts 1 or Parts 2 concerning the application topic</p> | | | |

4. Technical Volume

The Technical Volume must conform to the following content and form requirements. This volume must address the technical review criteria as discussed in [Technical Review Criteria](#).

Applicants must provide sufficient citations and references to the primary research literature to justify the claims and approaches made in the Technical Volume. However, DOE and reviewers are under no obligation to review cited sources.

The Technical Volume to the application may not be more than 50 pages, including the cover page, table of contents, and all citations, charts, graphs, maps, photos, or other graphics, and must include all

information below. The applicant should consider the weight of each of the technical review criteria (see [Technical Review Criteria](#)) when preparing the Technical Volume.

| Technical Volume Content Requirements Overview | |
|--|---|
| Section | Approximate Percent Content of the Technical Volume |
| Cover Page | N/A |
| Project Overview | 10% |
| Technical Merit and Potential Impact | 30% |
| Workplan in Statement of Project Objectives | 40% |
| Technical Qualifications and Resources | 20% |

Cover Page:

The cover page must include all of the following:

- The project title
- Specific NOFO topic areas (if applicable)
- Technical and business POCs
- The project team, including recipient name, entity type and names of all team member organizations
- The project location(s)
- The proposed federal funding level, cost share and period of performance
- Senior/key personnel and other covered individuals
- Statements regarding confidentiality

Project Overview (Approximately 10% of the Technical Volume)

The Project Overview should contain the following information:

- **Background:** The applicant should discuss the background of its organization, including the history, successes, and current research and development status (i.e., the technical baseline) relevant to the technical topic being addressed in the application.
- **Project Goal:** The applicant should explicitly identify the targeted improvements to the baseline technology and the critical success factors in achieving that goal.
- **DOE Impact:** The applicant should discuss the impact that DOE funding would have on the proposed project. Applicants should specifically explain how DOE funding, relative to prior, current, or anticipated funding from other public and private sources, is necessary to achieve the project objectives.

Technical Merit and Potential Impact (Approximately 30% of the Technical Volume)

The Technical Description should contain the following information:

- **Relevance and Outcomes:** The applicant should provide a detailed description of the technology or focus area, including the scientific and other principles and objectives that will be pursued during the project. This section should describe the relevance of the proposed project to the goals and objectives of the NOFO, including the potential to meet specific DOE technical targets or other relevant performance targets. The applicant should clearly specify the expected

outcomes of the project.

- **Feasibility:** The applicant should demonstrate the technical feasibility of the proposed technology and capability of achieving the anticipated performance targets, including a description of previous work done and prior results. This section should also address the project's access to necessary infrastructure (e.g., transportation, water, electricity transmission), including any use of existing infrastructure, as well as to a skilled workforce.
- **Innovation and Impacts:** The applicant should describe the current state-of-the-art in the applicable field, the specific innovation of the proposed technology or focus area, the advantages of proposed technology over current and emerging technologies, and the overall impact on advancing the state-of-the-art/technical baseline if the project is successful.

Workplan (Approximately 40% of the Technical Volume)

The Workplan should include a summary of the Project Objectives, Technical Scope, Work Breakdown Structure (WBS), Project Tasks, Milestones, Go/No-Go decision points, and project schedule. A detailed statement of project objectives (SOPO) is separately requested as part of the application. The Workplan should contain the following information:

- **Project Objectives:** The applicant should provide a clear and concise (high-level) statement of the goals and objectives of the project as well as the expected outcomes.
- **Technical Scope Summary:** The applicant should provide a summary description of the overall work scope and approach to achieve the objective(s). The overall work scope is to be divided by performance periods that are separated by discrete, approximately annual decision points (see below for more information on Go/No-Go decision points). The applicant should describe the specific expected end result of each performance period, including milestones in the Community Benefits Plan.
- **WBS and Task Description Summary:** The Workplan should describe the work to be accomplished and how the applicant will achieve the milestones, will accomplish the final project goal(s), and will produce all deliverables. The Workplan is to be structured with a hierarchy of performance period (approximately annual), task and subtasks, which is typical of a standard WBS for any project. The Workplan shall contain a concise description of the specific activities to be conducted over the life of the project. The description shall be a full explanation and disclosure of the project being proposed (i.e., a statement such as "we will then complete a proprietary process" is unacceptable). It is the applicant's responsibility to prepare an adequately detailed task plan to describe the proposed project and the plan for addressing the objectives of this NOFO. The summary provided should be consistent with the SOPO. The SOPO will contain a more detailed description of the WBS and tasks.
- **Milestone Summary:** The SOPO should provide a summary of appropriate milestones throughout the project to demonstrate progress and success. A milestone may be either a progress measure (which can be activity based) or a SMART technical milestone. SMART milestones should be Specific, Measurable, Achievable, Relevant, and Timely, and must demonstrate a technical achievement rather than simply completing a task. Unless otherwise specified in the NOFO, the minimum requirement is that each project must have at least one milestone per quarter for the duration of the project with at least one SMART technical milestone per year (depending on the project, more milestones may be necessary to comprehensively demonstrate progress). The applicant should also provide the means by which the milestone will be verified. The summary provided should be consistent with the Milestone Summary Table in the SOPO.
- **Go/No-Go Decision Points:** The applicant should provide a summary of project-wide Go/No-Go

decision points at appropriate points in the Workplan. At a minimum, each project must have at least one project-wide Go/No-Go decision point for each budget period (12 to 18-month period) of the project. See the [Key Facts](#) section above for Go/No-Go and budget period information. The applicant should also provide the specific technical and Community Benefits Plan criteria to be used to evaluate the project at the Go/No-Go decision point. The summary provided should be consistent with the SOPO. Go/No-Go decision points are considered “SMART” and can fulfill the requirement for an annual SMART milestone.

- **End of Project Goal:** The Workplan should include a summary of the end of project goal(s). At a minimum, each project must have one SMART end of project goal. The summary provided should be consistent with the SOPO.
- **Project Schedule (Gantt Chart or similar):** The applicant should provide a schedule for the entire project, including task and subtask durations, any milestones, and any Go/No-Go decision points.
- **Build America Buy America (BABA) Requirements for Infrastructure Projects:** Within the first two pages of the Workplan, include a short statement on whether the project will involve the construction, alteration, maintenance and/or repair of public infrastructure in the United States. See [Build America, Buy America | Department of Energy and 2 CFR 184](#) for applicable definitions and other information regarding Infrastructure Projects and the Buy America Requirement.
- **Project Management:** The applicant should discuss the team’s proposed management plan, including the following:
 - The overall approach to and organization for managing the work;
 - The roles of each project team member;
 - Any critical handoffs/interdependencies among project team members;
 - The technical and management aspects of the management plan, including systems and practices, such as financial and project management practices;
 - The approach to project risk management, including a plan for securing a qualified workforce and mitigating risks to project performance including but not limited to community or labor disputes or conflicts related to siting;
 - Approach to addressing permits and regulatory approvals, including compliance with any current permits, and any permits and natural or cultural resource issues that could require discretionary permits or approvals;
 - A description of how project changes will be handled;
 - If applicable, the approach to Quality Assurance/Control;
 - How communications will be maintained among project team members.
- **Market Transformation Plan (if applicable):** The applicant should provide a market transformation plan, including the following:
 - Identification of target market, competitors, and distribution channels for proposed technology along with known or perceived barriers to market penetration, including a mitigation plan.
 - Identification of a product development and/or service plan, commercialization timeline, financing, product marketing, legal/regulatory considerations including intellectual property, infrastructure requirements, data dissemination, and product distribution.
 - Identification of current industry interest, commitments for adoption if the project is successful, and impact of those commitments across the industry.

Technical Qualifications and Resources (Approximately 20% of the Technical Volume)

The Technical Qualifications and Resources section should contain the following information:

- A description of the project team’s unique qualifications and expertise, including those of key subrecipients;
- A description of the project team’s existing equipment and facilities, or equipment or facilities already in place on the proposed project site, that will facilitate the successful completion of the proposed project; include a justification of any new equipment or facilities requested as part of the project;
- Relevant, previous work efforts, demonstrated innovations, and how these enable the applicant to achieve the project objectives;
- The time commitment of the key team members to support the project;
- A description of the technical services to be provided by DOE FFRDCs, if applicable;
- The skills, certifications, or other credentials of the construction and ongoing operations workforce;
- For multi-organizational projects, describe succinctly:
 - The roles and the work to be performed by the project manager and Senior/Key Personnel at the recipient and sub levels;
 - Business agreements between the applicant and sub;
 - How the various efforts will be integrated and managed;
 - Process for making decisions on technical direction;
 - Publication arrangements;
- Strategy to address known resource, constraints or challenges, including those involving intellectual property and real property; and
- Communication plans.

C. Funding Restrictions

Program-specific funding restrictions applicable to awards funded under this NOFO are identified below. Standard funding restrictions are described in the [NOFO Part 2, Funding Restrictions](#) section.

| Applicable Funding Restrictions | | |
|---|-------------|--|
| Title | Location | Additional Information |
| Allowable Costs | NOFO Part 2 | Applicable to awards made under this NOFO |
| Pre-Award Costs | NOFO Part 2 | Applicable to awards made under this NOFO |
| Performance of Work in the United States (Foreign Work Waiver Requirement) | NOFO Part 2 | Applicable to awards made under this NOFO |
| Foreign Travel | NOFO Part 2 | Applicable to awards made under this NOFO |
| Lobbying Activities | NOFO Part 2 | Applicable to awards made under this NOFO |
| Equipment and Supplies | NOFO Part 2 | Purchasing American-made equipment and supplies is applicable to this award. |
| Davis-Bacon Act Requirements | NOFO Part 2 | Applicable to awards made under this NOFO |
| Construction Signage | NOFO Part 2 | Applicable to awards with construction activities made under this NOFO |

| | | |
|---|-------------|---|
| Build America Buy America Requirements for Infrastructure Projects | NOFO Part 1 | Applicable to awards made under this NOFO |
|---|-------------|---|

1. Build America Requirement for Infrastructure Projects

Awards funded through this NOFO that are for, or contain, construction, alteration, maintenance, or repair of public infrastructure in the United States undertaken by applicable recipient types, require that:

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

Please refer to the [NOFO Part 2, Buy America Requirements for Infrastructure Projects; Required Use of American Iron, Steel, Manufactured Products, and Construction Materials](#) and [2 CFR Part 184](#) to determine whether the Buy America Requirement applies and if they should consider the application of the Buy America Requirement in the proposed project's budget and/or schedule. (Note that the Buy America Requirement does not apply to prime recipients that are For-Profit Entities.)

V. Submission Requirements and Deadlines

There are several one-time actions applicants must take before applying to this NOFO. Some of these may take several weeks, so it is vital applicants build in enough time to complete them. Failure to complete these actions could interfere with application or negotiation deadlines or the ability to receive an award if selected. These requirements are outlined in detail in the [NOFO Part 2, Get Registered](#).

A. Required Registrations

1. Unique Entity Identifier (UEI) and System for Award Management (SAM)

You must have an active account with SAM.gov. This includes having a Unique Entity Identifier (UEI). SAM.gov registration can take several weeks. To register, go to SAM.gov Entity Registration and click Get Started. From the same page, you can also click on the Entity Registration Checklist for the information you will need to register.

Each applicant must:

1. Be registered in SAM.gov before submitting an application;
2. Provide a valid Unique Entity Identifier in the application; and
3. Continue to maintain an active registration in Sam.gov with current information during which you have an active federal award or an application or plan under consideration by a federal agency.

DOE may not make a federal award to an applicant until the applicant has complied with all applicable

UEI and SAM requirements and, if an applicant has not fully complied with the requirements by the time DOE is ready to make a federal award, the 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.

2. Grants.gov

Register and create an account on the Grants.gov site identified in the [Key Facts](#) section of the NOFO Part 1. This account can be used to apply to open NOFOs in Grants.gov. To view and submit applications to open opportunities under a specific DOE office(s), you must access the applicable instance of the system. You may need to be registered in more than one instance to submit applications for opportunities managed by different DOE offices.

Each organization or business unit, whether acting as a team or a single entity, should use only one account as the contact point for each submission. Applicants must also designate backup points of contact. **This step is required to apply to this NOFO.**

B. Application Package

1. Grants.gov

The application package is available at Grants.gov under NOFO number identified on the NOFO Cover Page. The Authorized Organizational Representative (AOR) must register at: <https://grants.gov/applicants/applicant-registration> and set up your Workspace. You cannot submit an application through Grants.gov unless you are registered. Please read the registration requirements carefully and start the process immediately.

For more detailed instructions about creating a profile on Grants.gov, refer to:
<https://grants.gov/applicants/workspace-overview/>

Note: The maximum file size that can be uploaded to the Grants.gov website is 10MB. Files in excess of 10MB cannot be uploaded, and hence cannot be submitted for review. If a file exceeds 10MB but is still within the maximum page limit specified in the NOFO, it must be broken into parts and denoted to that effect. For example:

Project Part 1
Project Part 2, etc.

DOE will not accept late submissions that resulted from technical difficulties due to uploading files that exceed 10MB.

Electronic Authorization of Applications and Award Documents

Submission of applications and supplemental information under this NOFO through electronic systems used by the DOE, including Grants.gov, constitutes the authorized representative's approval and electronic signature.

C. Submission Date and Times

All required submissions must be submitted to the Grants.gov site identified in the [Key Facts](#) section of NOFO Part 1 no later than 5 p.m. ET on the dates provided on [Key Facts](#) section.

Applicants are strongly encouraged to submit all required application documents at least 48 hours in advance of the submission deadline. Under normal conditions (i.e., at least 48 hours before the submission deadline), applicants should allow at least one hour to submit application documents. Once the application documents are submitted in the Grants.gov site identified in the NOFO Part 1, applicants may revise or update that submission until the expiration of the applicable deadline. If changes are made to any of these documents, the applicant must resubmit them before the applicable deadline. DOE will not extend the submission deadline for applicants that fail to submit required information by the applicable deadline due to server/connection congestion.

D. Intergovernmental Review

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

VI. Application Review Information

A. Standards for Application Evaluation

Applications that are determined to be eligible will be evaluated in accordance with this NOFO and 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>.

B. Responsiveness Review

Applications will be deemed nonresponsive and will not be reviewed or considered if they involve:

- Project concepts or approaches not based on established scientific principles.
- Project concepts or approaches identified specifically as NOT of interest (see the [Applications Specifically Not of Interest](#) section above).

C. Review Criteria

1. Compliance Criteria

All application submissions must:

- Comply with the applicable content and form requirements listed in Application Content Requirements and Submission Requirements and Deadlines of the NOFO Part 1 and 2;
- Include all required documents;
- Be uploaded successfully in Grants.gov site indicated in the [Key Facts](#) section above including clicking the “Submit” button; and

- Comply with the submission deadline stated in [Key Facts](#).

DOE will not review or consider submissions submitted through means other than the Grants.gov site indicated in [Key Facts](#), submissions submitted after the applicable deadline, or incomplete submissions.

Applicants are strongly encouraged to submit all required application documents at least 48 hours in advance of the submission deadline. Under normal conditions (i.e., at least 48 hours before the submission deadline), applicants should allow at least one hour to submit application documents. Once the application documents are submitted in the Grants.gov site identified in the [Key Facts](#) section, applicants may revise or update that submission until the expiration of the applicable deadline. If changes are made to any of these documents, the applicant must resubmit them before the applicable deadline. DOE will not extend the submission deadline for applicants that fail to submit required information by the applicable deadline due to server/connection congestion.

2. Technical Review Criteria

Applications

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

| Review Criterion Overview | |
|--|--------|
| Criterion | Weight |
| Technical Merit and Potential Impact | 40% |
| Project Management | 30% |
| Community Benefits Plan: R&D | 20% |
| Team Knowledge, Skills, Capabilities and Project Resources | 10% |

Criterion 1: Technical Merit and Innovation (40%)

This criterion involves consideration of the following factors:

Technical Merit and Innovation

1. Extent to which the proposed research and development is innovative and meets the goals to develop new technologies for the domestic enriched uranium supply chain;
2. Relevant technical information (chemical equations, process flowsheets, diagrams, measurements, fundamental principles, Quality Assurance, Hazard and Safety issues addressed etc.) supports the proposed approach;
3. Proposed approach is based on previous test(s) and proven concept(s); supporting information must be provided.
4. Technical Objective(s) clearly defined
5. Overall approach appropriate to meeting objectives

Criterion 2: Project Management (30%)

This criterion involves consideration of the following factors:

Project Management

1. Adequacy of proposed project management systems including the ability to track scope, cost, and schedule progress and changes;
2. Reasonableness of budget and spend plan as detailed in the budget justification workbook for proposed project and objectives;
3. Adequacy, reasonableness, and soundness of the project schedule, as well as periodic Go/No-Go decisions, interim milestones, and metrics to track progress;
4. Adequacy of the identification of risks, including labor and community opposition or disputes, and “timely” and appropriate strategies for mitigation and resolution;
5. Completeness, comprehensiveness, accuracy, and strength of the application deliverables, such that DOE and independent experts will be able to identify project risk.

Criterion 3: Community Benefits Plan: R&D (20%)

This criterion involves consideration of the following factors:

Diversity, Equity, Inclusion, and Accessibility

1. Clear articulation of the project’s goals related to diversity, equity, inclusion, and accessibility;
2. Quality of the project’s DEIA goals, as measured by the goals’ depth, breadth, likelihood of success, inclusion of appropriate and relevant SMART milestones, and overall project integration;
3. Degree of commitment and ability to track progress toward meeting each of the DEIA goals; and
4. Extent of engagement of organizations that represent disadvantaged communities or underrepresented populations as a core element of their mission, including Minority Serving Institutions (MSIs), underrepresented businesses, and Tribal, nonprofit, or community-based organizations.

The Justice 40 Initiative and other considerations linked with energy and environmental justice

1. Clear workplan tasks, staffing, research, and timeline for advancing energy justice and engaging communities with environmental justice stakeholders and/or evaluating the possible near- and long-term implications of the project for the benefit of the American public, including but not limited to public health and public prosperity benefits;
2. Approach, methodology, and expertise articulated in the plan for addressing energy and environmental justice questions or concerns associated with the technology innovation;
3. Description of how the project will advance the Justice40 Initiative’s goal of having 40% of the overall benefits of covered investments flow to disadvantaged communities; and
4. Likelihood that the plan will result in improved understanding of distributional public benefits and costs related to the innovation if successful.

Quality Jobs

1. Clear and comprehensive workplan tasks, staffing, research, and timeline for engaging workforce participants and/or evaluating the possible near- and long-term implications of the project for the U.S. workforce;
2. Approach to document the knowledge, skills, and abilities of the workforce required for successful commercial deployment of innovations resulting from this research; and
3. The likelihood that the plan will result in improved understanding of the workforce implications related to the innovation if successful.

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

This criterion involves consideration of the following factors:

1. 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;
2. Diversity of expertise and perspectives of the team and the inclusion of industry partners that will amplify impact;
3. Sufficiency of the facilities to support the work;
4. Level of participation by project participants as evidenced by letter(s) of commitment and how well they are integrated into the Workplan;

3. Criteria for Replies to Reviewer Comments

DOE has not established separate criteria to evaluate Replies to Reviewer Comments. Instead, Replies to Reviewer Comments are attached to the original application and will serve as clarifications, and will be evaluated as an extension of the application.

VII. Selection and Award Notices

Please see the [NOFO Part 2, Selection and Award Notices](#) for information on notifications for Applications, Award Negotiations, and Post-Selection Information Requests.

Applicants selected for awards are considered a conditional commitment by DOE until DOE has completed all appropriate reviews and negotiations. DOE reserves the right to terminate a conditional commitment at any time.

VIII. Award Administration Information

A. Post-Award Requirements and Administration

DOE requires all award recipients to follow and accept requirements governed by laws and policies – both federal government-wide and DOE or program specific. These post-award requirements include all National and Administrative Policy Requirements; financial assistance general Certifications and Representations; Build America, Buy America requirements; Davis-Bacon Act requirements; Bipartisan Infrastructure Law-Specific Requirements; Fraud, Waste and Abuse requirements; Safety, Security, and Regulatory requirements; and Environmental Review in Accordance with National Environmental Policy Act requirements.

Post-Award requirements and administration applicable to awards funded under this NOFO are identified below. Detailed descriptions of standard funding restrictions are provided in the [NOFO Part 2, Post-Award Requirements and Administration](#) section. Detailed descriptions of program specific funding restrictions are provided below the table.

| Applicable Post-Award Requirements and Administration | |
|---|-------------|
| Title | Location |
| Award Administrative Requirements | NOFO Part 2 |

| | |
|--|-------------|
| Subaward and Executive Reporting | NOFO Part 2 |
| National Policy Requirements | NOFO Part 2 |
| Applicant Representations and Certifications | NOFO Part 2 |
| Statement of Federal Stewardship | NOFO Part 2 |
| Uniform Commercial Code (UCC) Financing Statements | NOFO Part 2 |
| Interim Conflict of Interest Policy for Financial Assistance | NOFO Part 2 |
| Whistleblower Protections | NOFO Part 2 |
| Fraud, Waste, and Abuse | NOFO Part 2 |
| Participants and Collaborating Organizations | NOFO Part 2 |
| Current and Pending Support | NOFO Part 2 |
| Prohibition Related to Malign Foreign Talent Recruitment Programs | NOFO Part 2 |
| Foreign Collaboration Considerations | NOFO Part 2 |
| U.S. Manufacturing Commitments | NOFO Part 2 |
| Subject Invention Utilization Reporting | NOFO Part 2 |
| Intellectual Property Provisions | NOFO Part 2 |
| Go/No-Go Review | NOFO Part 2 |
| Conference Spending | NOFO Part 2 |
| Invoice Review and Approval | NOFO Part 2 |
| Cost-Share Payment | NOFO Part 2 |
| Notice of Bipartisan Infrastructure Law OR Inflation Reduction Act Specific Requirements | NOFO Part 2 |
| Implementation of Executive Order 13798, Promoting Free Speech and Religious Liberty | NOFO Part 2 |
| Affirmative Action and Pay Transparency Requirements | NOFO Part 2 |
| Construction Signage | NOFO Part 2 |
| Real Property and Equipment | NOFO Part 1 |
| Rights in Technical Data | NOFO Part 1 |

1. 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 resulting awards under this NOFO, 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 Grants 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.

2. 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 normally retains unlimited rights in technical data produced under government financial assistance awards, including the right to distribute to the public. However, pursuant to special statutory authority, certain categories of data generated under DOE awards under this NOFO may be protected from public disclosure for up to five years after the data is generated (“Protected Data”). For awards permitting Protected Data, the protected data must be marked as set forth in the award’s intellectual property terms and conditions and a listing of unlimited rights data (i.e., non-protected data) must be inserted into the data clause in the award. In addition, invention disclosures may be protected from public disclosure for a reasonable time in order to allow for filing a patent application.

3. Cost Share Payment

DOE requires recipients to contribute the cost share amount incrementally over the life of the award. Specifically, the 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).

B. Helpful Websites

[Office of Energy Efficiency & Renewable Energy | Department of Energy EERE Application Process](#)

[Clean Energy Infrastructure- Community Benefits Plans](#)

C. Questions and Support

1. Questions

Upon the issuance of a NOFO, DOE personnel are prohibited from communicating (in writing or otherwise) with applicants regarding the NOFO except through the established question and answer process described below. Questions regarding this NOFO must be submitted to Contract Specialist, Jeff Rigby at rigbyja@id.doe.gov no later than three (3) 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 NOFO will be posted on the Grants.gov site listed in the [Key Facts](#) section above. **You must first select the NOFO Number to view the questions and answers specific to this NOFO.** 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 Grants.gov site listed in the [Key Facts](#).

2. Support

[Grants.gov](#)

Grants.gov provides 24/7 support. You can call 1-800-518-4726 or email support@grants.gov. Hold on to your ticket number.

[SAM.gov](#)

If you need help, you can call 866-606-8220 or live chat with the [Federal Service Desk](#).

IX. Other Information

Please see NOFO [Part 2, Other Information](#) for additional information and requirements that apply to all DOE NOFOs.