

Financial Assistance Notice of Funding Opportunity Part 2



U.S. DEPARTMENT *of* ENERGY

The NOFO Part 2 is a companion document to the NOFO Part 1. The NOFO Part 1 describes DOE's program goals and evaluation criteria, eligibility, and other components specific to each funding opportunity.

Part 2 includes fixed DOE requirements that generally do not change from NOFO to NOFO. This document includes standard information for the application phase and describes expectations for award negotiations and post-award requirements for selected applications. You should review both the NOFO Part 1 and the NOFO Part 2 before applying.

Table of Contents

I. BASIC INFORMATION	5
II. ELIGIBILITY.....	5
A. Cost Sharing	5
1. Legal Responsibility	5
2. Cost-Share Allocation	5
3. Cost Share Types and Allowability	5
4. Cost Share Contributions by FFRDCs.....	6
5. Cost Share Verification	6
6. Cost Share Calculation Examples	6
B. Other Eligibility Information	8
1. Questions Regarding Eligibility	8
2. Entity of Concern Prohibition	8
3. Notice Regarding Eligible/Ineligible Activities	9
4. Artificial Intelligence (AI) Application Use.....	9
III. PROGRAM DESCRIPTION	10
A. Informational Webinar	10
B. Statement of Substantial Involvement.....	10
IV. APPLICATION CONTENT AND FORM	11
A. Use and Disclosure of Application Information	11
B. Application Format Summary	12
C. Application Content Requirements.....	14
1. Application for Federal Assistance (SF-424)	14
2. Letters of Commitment	15
3. Statement of Project Objectives (SOPO).....	15
4. Project Management Plan (PMP)	15
5. Budget Information—Non-Construction Programs (SF-424A)	15
6. Budget Justification Workbook.....	16
7. Subrecipient Budget Justification.....	16
8. Waiver for Foreign Entity Participation	16
9. Performance of Work in the United States (Foreign Work Waiver)	18
10. Digital Persistent Identifier (PID)	19
11. Research Security Training Requirement.....	19
12. Transparency of Foreign Connections.....	19
13. Potentially Duplicative Funding Notice	20
14. Locations of Work.....	20
15. Environmental Considerations Summary	20
16. Environmental Impact Volume	21
17. Environmental Questionnaire	21
18. Lobbying Activities.....	21
19. Summary for Public Release	22

20. Summary Slide	22
D. Reply to Reviewer Comments	23
1. Content and Form of Replies to Reviewer Comments	23
E. Additional Requirements	24
1. Allowable Costs	24
2. Pre-Award Costs	24
3. Performance of Work in the United States (Foreign Work Waiver) Requirement	25
4. Foreign Travel	25
5. Equipment and Supplies	26
6. Davis-Bacon Act Requirements	26
7. Prohibition on Using Funds for Activities Related to Federal Acquisition Security Council (FASC)- Prohibited Unmanned Aircraft Systems	28

V. SUBMISSION REQUIREMENTS AND DEADLINES28

A. Required Registrations	28
1. Unique Entity Identifier (UEI) and System for Award Management (SAM)	28
2. eXCHANGE	29
3. Grants.gov Registration	29
B. Application Package	29
1. eXCHANGE	29
C. Questions and Support	30
1. Questions	30
2. Support	30

VI. APPLICATION REVIEW INFORMATION30

A. Standard Evaluation and Selection Processes	30
1. Overview	30
2. Pre-Selection Interviews	30
3. Pre-Selection Clarification	31
4. Recipient Responsibility and Qualifications	31
5. Due Diligence Review for Research, Technology, and Economic Security	32
6. Evaluation and Administration by Non-Federal Personnel	32
7. Selection	33

VII. SELECTION AND AWARD NOTICES.....33

A. Selection Notices	33
1. Ineligible Submissions	33
2. Concept Paper Notifications	33
3. Application Notifications	33
4. Applicants Selected for Award Negotiations	33
5. Alternate Selections	34
6. Applicants Not Selected for Award Negotiations	34
B. Post-Selection Information Requests.....	34

1.	Example Information Requests	34
2.	Entity Risk Assessment	35
3.	Environmental Review Under the National Environmental Policy Act (NEPA)	35
4.	Trafficking in Persons	36
5.	Construction Workforce Continuity Plan	36
6.	Operations Workforce Continuity Plan	36
7.	Interim Conflict of Interest Policy for Financial Assistance	37
8.	Participants and Collaborating Organizations	37
9.	Current and Pending Support	37
10.	Transparency of Foreign Connections.....	38
11.	Prohibition Related to Malign Foreign Talent Recruitment Programs	38
12.	Foreign Collaboration Considerations.....	40
13.	Data Management and Sharing Plan	41

C.	Award Notices.....	41
1.	Register with FedConnect	41

VIII. AWARD ADMINISTRATION INFORMATION42

A.	Post-Award Requirements and Administration.....	42
1.	Real Property and Equipment Continued Use	42
2.	Go/No-Go Review.....	43
3.	Program Down-Select	44
4.	Energy Data eXchange (EDX) Requirements	44
5.	Invoice Review and Approval.....	45
6.	Cost Share Payment.....	46

IX. OTHER INFORMATION.....47

A.	Government Right to Reject or Negotiate.....	47
B.	Commitment of Public Funds.....	47
C.	Notice of Right to Conduct a Review of Financial Capability	47
D.	Requirement for Full and Complete Disclosure.....	47
E.	Retention of Submissions.....	47
F.	Intellectual Property (IP) Provisions.....	47
G.	Title to Subject Inventions.....	48
H.	Government Rights in Subject Inventions	48
I.	U.S. Manufacturing Commitments.....	49
J.	Subject Invention Utilization Reporting	49
K.	Copyright.....	50
L.	Personally Identifiable Information (PII)	50
M.	Annual Independent Audits	50
N.	Acronyms.....	51

I. Basic Information

Refer to the **NOFO Part 1, *Basic Information***, for Key Facts, Executive Summary, and Agency Contact Information.

II. Eligibility

NOFO Part 1, *Eligibility*, provides the eligibility criteria specific to your application. This section includes additional information to help you understand the standard eligibility requirements across all DOE NOFOs.

A. Cost Sharing

This section contains additional information to help you understand Federal cost sharing requirements. **NOFO Part 1, *Eligibility—Cost Sharing***, provides the cost-sharing criteria specific to your application.

1. Legal Responsibility

Although the cost-share requirement applies to the entire project, including work performed by members of the project team other than the recipient, the recipient is legally responsible for paying the entire cost share. The recipient's cost share obligation is expressed in the Assistance Agreement as a static amount in U.S. dollars (cost share amount) and as a percentage of the total project cost (cost share percentage). If the funding agreement is terminated before the end of the project period, the recipient must contribute at least the cost share percentage of total expenditures incurred through the date of termination.

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

2. 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.

3. Cost Share Types and Allowability

Cost share must meet requirements set forth in [2 C.F.R. § 200.306](#) and [910.130](#) and the cost principles set forth in [2 C.F.R. § 200.400-476](#) and [2 C.F.R. § 910.352](#). In addition, cost share must:

- Be verifiable when the application is submitted.
- Be cash, cash equivalents, or in-kind contributions.
- Come from nonfederal sources (unless otherwise allowed by law), such as project participants, state or local governments, or other third-party financing.

Cost share may be provided by the recipient, subrecipients, or third parties (entities that do not have a role in performing the scope of work). 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 the value of the contribution can be readily determined, verified, and justified but no actual cash is transacted to secure the good or service that makes up the contribution. For allowable types of cost share, refer to 2 C.F.R. § 910.130 for for-profit entities or 2 C.F.R. § 200.306 for all other entity types.

Project teams may use funding or property received from state or local governments to meet the cost share requirement as long as the Federal Government did not provide the funding to the state or local government. Cost share contributions must be:

- Specified in the project budget
- Verifiable from the recipient's records
- Necessary and reasonable for proper and efficient accomplishment of the project.

Because all sources of cost share are part of total project cost, DOE will review the cost share dollars according to the same Federal regulations as Federal dollars to the project. The DOE Grants Officer must review and approve every cost share contribution and incorporate them into the project budget before the expenditures are incurred.

4. Cost Share Contributions by FFRDCs

Because federally funded research and development centers (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 nonfederal source.

5. Cost Share Verification

You must provide written assurance of your proposed cost share contribution in your application. If selected for award negotiations, you must provide additional information and documentation on your cost share contributions. **NOFO Part 1, Eligibility—Cost Sharing**, provides specific requirements.

6. Cost Share Calculation Examples

Cost sharing is calculated as a percentage of the *total project cost*. If applicable, FFRDC costs must be included in total project costs. Cost share calculation should not go beyond 2 decimals (e.g., 79.25—not 79.24875).

Example 1. Standard Cost Share Calculation

A project with \$1 million in federal funds with a minimum 20% nonfederal 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 (\$) = nonfederal share (\$)
Example: \$1,250,000 minus \$1,000,000 = \$250,000
- Formula: nonfederal share (\$) divided by total project cost (\$) = nonfederal share (%)
Example: \$250,000 divided by \$1,250,000 = 20%

Example 2. Blended Cost Share Calculation

A project with \$2 million in Federal funds with four tasks requiring different nonfederal cost share percentages:

Task	Proposed Federal Share	Federal Share %	Recipient Share %
Task 1 (R&D)	\$1,000,000	80%	20%
Task 2 (R&D)	\$500,000	80%	20%
Task 3 (Demonstration)	\$400,000	50%	50%
Task 4 (Outreach)	\$100,000	100%	0%

Federal share (\$) divided by Federal share (%) = task cost

Each task must be calculated individually:

Task 1

- \$1,000,000 divided by 80% = \$1,250,000 (Task 1 Cost)
- Task 1 cost minus Federal share = nonfederal share
- \$1,250,000 - \$1,000,000 = \$250,000 (nonfederal share)

Task 2

- \$500,000 divided by 80% = \$625,000 (Task 2 cost)
- Task 2 cost minus Federal share = nonfederal share
- \$625,000 - \$500,000 = \$125,000 (nonfederal share)

Task 3

- \$400,000 divided by 50% = \$800,000 (Task 3 cost)
- Task 3 cost minus Federal share = nonfederal share
- \$800,000 - \$400,000 = \$400,000 (nonfederal share)

Task 4

- Federal share = \$100,000
- Nonfederal cost share is not required for outreach = \$0 (nonfederal share)

Complete the calculation as follows.

Tasks	\$ Federal Share	% Federal Share	\$ Nonfederal Share	% Nonfederal Share	Total Project Cost
Task 1	\$1,000,000	80%	\$250,000	20%	\$1,250,000
Task 2	\$500,000	80%	\$125,000	20%	\$625,000
Task 3	\$400,000	50%	\$400,000	50%	\$800,000
Task 4	\$100,000	100%	\$0	0%	\$100,000
Totals	\$2,000,000		\$775,000		\$2,775,000

Blended cost-share percentage

- Nonfederal share (\$775,000) divided by total project cost (\$2,775,000) = 27.9% (nonfederal)
- Federal share (\$2,000,000) divided by total project cost (\$2,775,000) = 72.1% (Federal)

B. Other Eligibility Information

NOFO Part 1, Eligibility—Eligible Applicants, provides NOFO-specific eligibility information. The following information is standard for all DOE NOFOs.

1. Questions Regarding Eligibility

We will not determine eligibility before the application due date in *NOFO Part 1, Key Facts*.

2. Entity of Concern Prohibition

Prohibition

No Entity of Concern (as defined in [section 10114 of Public Law 117-167 \[42 U.S.C 18912\]](#)) may receive any grant, contract, cooperative agreement, or loan of \$10 million or more in Department of Energy funds, including funds made available by the Consolidated Appropriations Act, 2024 ([Public Law 118-42](#)).

In addition, for all awards involving Department activities authorized under [Public Law 117-167](#), no Entity of Concern (including an individual that owns or controls, is owned or controlled by, or is under common ownership or control with an Entity of Concern) may receive DOE funds or perform work under any award, subject to certain penalties. ([section 10114 of Public Law 117-167 \[42 U.S.C 18912\]](#)) and [Division D, Title III, section 310 of Division D of the Consolidated Appropriations Act of 2024 \[Pub. L. No. 118-42\]](#)). By applying to this NOFO, you certify that neither the applicant nor any of the project participants qualify as Entities of Concern.

Definitions

Entity of Concern is (section 10114 of Public Law 117-167 [42 U.S.C. 18912], also known as the CHIPS and Science Act) “any entity, including a national, that is—

(A) identified under section 1237(b) of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 (50 U.S.C. 1701 note; Public Law 105–261);

(B) identified under [section 1260H](#) of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (10 U.S.C. 113 note; Public Law 116–283);

(C) on the [Entity List maintained by the Bureau of Industry and Security of the Department of Commerce](#) and set forth in Supplement No. 4 to part 744 of title 15, Code of Federal Regulations;

(D) included in the list required by section 9(b)(3) of the Uyghur Human Rights Policy Act of 2020 (Public Law 116–145; 134 Stat. 656); or

(E) identified by the Secretary, in coordination with the Director of the Office of Intelligence and Counterintelligence and the applicable office that would provide, or is providing, covered support, as posing an unmanageable threat—

(i) to the national security of the United States; or

(ii) of theft or loss of United States intellectual property.”

3. Notice Regarding Eligible/Ineligible Activities

Eligible activities include those that describe and promote the understanding of scientific and technical aspects of specific energy technologies and exclude those that encourage or support political activities, such as collecting and disseminating information related to potential, planned, or pending legislation.

4. Artificial Intelligence (AI) Application Use

You must indicate in the project summary the extent to which, if any, you used generative artificial intelligence (AI) technology and how you used it to develop your application or proposal.

All submissions to DOE are subject to information and disclosure statutes and regulations, including the Freedom of Information Act, Privacy Act, and 10 C.F.R. § 1004.11. You are responsible for the accuracy, authenticity, and authorship represented in your proposal submission for merit review, including content developed with the help of generative AI tools. You must ensure you are fully capable of performing the work described in the application and that the submission of the application does not and will not infringe or violate any rights of any third party or entity.

Applicants should be aware that using generative AI may introduce significant risks, including, but not limited to, research misconduct resulting from fabrication, falsification, or plagiarism when proposing, performing, or reviewing research, or in reporting research results. Federal regulations governing procedures for handling research misconduct allegations concerning research supported by DOE grants, cooperative agreements, and management and operations (M&O) contracts, are specified in 10 C.F.R. § 733. Specific provisions governing research misconduct procedures for financial assistance recipients (under grants and cooperative agreements) are specified in 2 C.F.R. § 910.132.

III. Program Description

NOFO Part 1, *Program Description*, provides all information (goals, objectives, and topic areas) related to the NOFO you are applying to.

A. Informational Webinar

NOFO Part 1, *Basic Information—Key Dates*, includes information on whether we will conduct an informational webinar while the NOFO is open.

For some NOFOs, we conduct an informational webinar during the NOFO process. We typically hold it after the initial NOFO release but before the due date for concept papers or the application, if concept papers are not required.

Attendance is not mandatory and will not positively or negatively impact the overall review of any submissions. The webinar is open to all potential applicants who wish to participate. Please refrain from asking questions or communicating information that would reveal confidential or proprietary information about your project.

B. Statement of Substantial Involvement

If cooperative agreements will be made under this NOFO as indicated in **NOFO Part 1, *Key Facts***. DOE will include a statement of DOE's *substantial involvement* in the work performed under the resulting awards. For cooperative agreements, we do not limit our involvement to the administrative requirements of the award. Instead, we have substantial involvement in directing and redirecting the technical aspects of the project. Our substantial involvement in resulting awards may include the statements below and additional program-specific statements:

- Sharing responsibility with the recipient for the management, control, direction, and project performance
- Intervening in the conduct or performance of work under this award for programmatic reasons, which includes interrupting or modifying the conduct or performance of project activities
- Redirecting or stopping funding based on our evaluation at the Go/No-Go decision points

- Participating in major project decision-making processes
- Performing independent technical reviews and assessments

Independent Technical Reviews and Assessments

As part of substantial involvement, DOE may, with prior notification, conduct independent validation and verification assessments of an award. DOE may use federal and/or contractor personnel to conduct these assessments. You shall cooperate with the performance of these assessments by providing DOE, and its federal and contractor personnel access to all facilities, and delivery of all data and information that are required to successfully complete these assessments. DOE shall ensure that all contractor personnel are subject to confidentiality requirements prior to receiving recipient and subrecipient data and information. You are responsible for providing all federal and contractor personnel with required training for site and/or system access. DOE, and its federal and contractor personnel, shall be responsible for completing all required training.

IV. Application Content and Form

This section contains supplemental information to help you understand the application content and form requirements outlined in the NOFO, including detailed information on the content and naming conventions of the application content. **NOFO Part 1, *Application Content and Form***, provides the application contents and form specific to the NOFO you are applying to.

Some of the required application elements below have separate requirements for Research and Development (R&D) versus non-R&D NOFOs. **NOFO Part 1, *Application Content Requirements***, provides specific instructions.

A. Use and Disclosure of Application Information

Applicants should not include trade secrets or business-sensitive, proprietary, or otherwise confidential information (Proprietary Information) in their application unless you need that information to explain the proposed project or to comply with a requirement in the NOFO.

All application information is subject to public release under the Freedom of Information Act (FOIA) except information that qualifies under a FOIA exemption. One of the exemptions is for trade secrets or commercial or financial information that is confidential or privileged. Accordingly, if you include Proprietary Information with your application, you must mark it with the Notice below and follow the marking requirements below to protect it from disclosure under FOIA or otherwise. Note that the protective markings alone do not automatically make the information exempt under FOIA but help the DOE's designated FOIA Officer determine if the information qualifies for a FOIA exemption. You can find more information on how DOE process FOIA requests at 10 C.F.R. Part 1004.

Notice of Restriction on Use and Disclosure of Information:

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 can be used or disclosed only for evaluation purposes or in accordance with a financial assistance agreement between the submitter and the Government, with the restriction that the information must be retained in confidence and not be further disclosed. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source. [End of Notice]

In addition:

- The header and footer of every page that contains Proprietary Information must say: “CONTAINS TRADE SECRETS, BUSINESS-SENSITIVE, PROPRIETARY, OR OTHERWISE CONFIDENTIAL INFORMATION EXEMPT FROM PUBLIC DISCLOSURE”
- Every line or paragraph containing Proprietary Information must be clearly marked with double brackets or highlighting

Properly marked Proprietary Information will be used or disclosed only for evaluation purposes, or as otherwise stated in this NOFO. For example, DOE may disclose such information to determine whether to select the project for funding under this NOFO or other Government programs, 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.

The Federal Government is not liable for disclosing or using unmarked information, and it may use or disclose unmarked information for any purpose.

Use of Application Information with Artificial Intelligence Technology

Notwithstanding the above, DOE may use, review and evaluate application information, including Proprietary Information, using artificial intelligence (“AI”) technology, including for training and developing AI tools. By submitting an application or providing information related thereto, the Applicant is providing express consent to DOE’s use of application information with AI technology. DOE will retain in confidence and maintain the protection of Proprietary Information used with AI technology.

B. Application Format Summary

All submissions must conform to the form and content requirements described below. *NOFO Part 1, Application Content and Form*, provides the page limits.

Format Requirements	
Parameter	Requirement
File Format	Portable Document Format (PDF) unless stated otherwise
Language	English

Paper Size	8.5" x 11"
Margins	Not less than 1" (≥ 1 ") on every side
Font	• Times New Roman • Black font color • Size 12-point or larger (except in figures or tables, which may be 10-point font). • You can use a symbol font to insert Greek letters or special characters, but the font size requirement still applies.
References	References: • Must be footnotes or endnotes • Must be font size of 10 or larger. • Are counted toward the maximum page requirement
Control Number	A control number (i.e., a unique application identifier) will be issued when you begin the eXCHANGE application process. The control number . must be prominently displayed on the upper right corner of the header of every page in the application and included in the file name (i.e., <i>Control Number_Applicant Name_Application</i>).
Page Numbers	Page numbers must be in the footer of every page.
Page Count Limitations	If you exceed the maximum page limit, we will review only the authorized number of pages and disregard any additional pages. The specified maximum page limit includes the cover page, charts, graphs, maps, and photographs when printed using the formatting requirements set forth above and single spaced.

The following information addresses eXCHANGE issues typically encountered during the application process. [NOFO Part 1, Submission Requirements and Deadlines—Application Package](#), provides the eXCHANGE site location and support for technical assistance information.

Additional eXCHANGE Information	
Deadlines for Submission	eXCHANGE enforces the deadlines for NOFOs. The “Apply” and “Submit” buttons automatically disable at the defined submission deadlines.
Submission Difficulties	Applicants who experience technical difficulties with submission prior to the NOFO deadline should contact the eXCHANGE helpdesk for your NOFO (provided in NOFO Part 1, Key Facts).

Application Forms	To access application forms and instructions available on eXCHANGE, select the appropriate funding opportunity number on the Funding Opportunity page.
Size Limitations	The maximum file size you can upload to the eXCHANGE is 50MB. If your file is larger than 50MB but still within the maximum page limit, you can break it into parts. For example: "TechnicalVolume_Part_1" and "TechnicalVolume_Part_2" We do not accept late submissions that result from technical difficulties uploading files that exceed 50MB.

C. Application Content Requirements

NOFO Part 1, *Application Content Requirements*, identifies which of the following application documents are required, including the program-specific requirements, such as the technical volume and page limits. Each application must be limited to a single concept and must not exceed the stated page limits. DOE reserves the right not to proceed with merit reviews of incomplete applications.

1. Application for Federal Assistance (SF-424)

You must complete the Standard Form (SF)-424, *Application for Federal Assistance*, which is available in eXCHANGE. Complete all required fields according to the instructions on the form.

When accessing the link to the SF-424 in eXCHANGE, you will be directed to the Grants.gov website, where you will see a notice stating that the forms are for sample purposes only and cannot be submitted with the application package. **DOE applicants should disregard this notice.** The SF-424 accessed through the link in eXCHANGE is the official form for this NOFO. You must download, complete, and upload the required form as part of your application package.

Be sure the dates (Block 17) and dollar amounts (Block 18) on the SF-424 reflect the complete project period and not just the first project year, first phase, or another subset of the project period.

The System for Award Management (SAM) is the central repository for common Government-wide certifications and representations required to be eligible for a Federal award. You must update your registration annually. Federal agencies use SAM information to comply with award requirements and avoid increased burden and costs of separate requests for such information, unless you fail to meet a Federal award requirement or your SAM registration must be updated for other reasons.

2. Letters of Commitment

You must submit letters of commitment from all subrecipients. You must also submit letters of commitment from all third-party cost-share providers. 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. We do not accept letters of support or endorsement for the project from entities that do not have a substantive role in the project. Each third party contributing to cost sharing should be identified with the following information:

Letters of Commitment Content	
Organization Name	Phone, email, and address
Proposed Dollar Amount to be Provided	Value of the contribution
Cost Sharing Type	Cash or in-kind contribution (or both)

Each letter must not exceed one page and must be signed by an authorized representative of the third-party entity.

3. Statement of Project Objectives (SOPO)

NOFO Part 1, Technical Volume, provides specific requirements to each NOFO. If required, you must submit a SOPO. A SOPO template is available in eXCHANGE. We strongly encourage you to use the template to complete your SOPO, but you are not required to do so. If you do not use the template, be sure you address all the elements described in **NOFO Part 1, Technical Volume**, and as outlined in the SOPO template.

4. Project Management Plan (PMP)

NOFO Part 1, Technical Volume, provides specific requirements to each NOFO. If required, you must submit a PMP. A PMP template is available in eXCHANGE. We strongly encourage you to use the template to complete your PMP, but you are not required to do so. If you do not use the template, be sure you address all the elements described in **NOFO Part 1, Technical Volume**, and as outlined in the template.

5. Budget Information—Non-Construction Programs (SF-424A)

You must provide a separate budget for each year of support requested and a cumulative budget for the total project performance period. Use Standard Form (SF)-424A Excel, *Budget Information—Non-Construction Programs* on the DOE Financial Assistance Forms Page at [Financial Assistance Forms and Information For Applicants and Recipients](#). If you elect to use the budget justification workbook in eXCHANGE, you do not need to submit a separate SF-424A.

You may request funds under any of the Object Class Categories as long as:

- The item and amount are necessary to perform the proposed work
- The request meets all the criteria for allowability under the applicable Federal cost principles

- The request is not prohibited by the [Additional Requirements](#) described below or any program-specific requirements in the **NOFO Part 1, *Application Content and Form—Additional Requirements***.

6. Budget Justification Workbook

We strongly encourage you to use the Budget Justification Workbook template in eXCHANGE. If you choose not to use the suggested template, you must also submit a Standard Form (SF)-424A, *Budget Information—Non-Construction Programs*, (available on [grants.gov](https://www.grants.gov)) and include a breakdown of all costs by budget category, as outlined in the SF-424A and the Budget Justification template, including all work to be performed by the recipient and its subrecipients and contractors. The SF-424A budget justification form must be saved as a PDF file labeled, “Control Number_LeadOrganization_424A.”

In addition to project-specific costs, you should include costs associated with:

- Oversight
- Required annual audits and incurred cost proposals (these costs may be reimbursed as a direct or indirect cost)
- Implementing award-specific requirements such as Buy America requirements and Davis-Bacon Act requirements
- Reporting

The Instructions and Summary and SF-424A tabs in the Budget Justification Workbook template will auto-populate as you enter information into the workbook. **Be sure to carefully read the Instructions and Summary tab in the Budget Justification Workbook.**

7. Subrecipient Budget Justification

You must provide a separate budget justification for each subrecipient expected to perform work estimated to be more than \$500,000 of the total proposed budget. The budget justification must include the same justification information described in the [Budget Justification Workbook](#) section above.

8. Waiver for Foreign Entity Participation

NOFO Part 1, section II.A.2, *Domestic Entities*, explains the qualifications of domestic entity eligibility and **NOFO Part 1, section II.A.3, *Foreign Entity Participation***, explains how to request a foreign entity waiver. If the prime applicant or subrecipient do not meet the qualifications for a domestic entity, the applicant must submit an explicit waiver request in the application.

Waiver Criteria

A foreign entity seeking to participate in a project funded under this NOFO must demonstrate to the satisfaction of DOE that:

- Its participation is in the best interest of United States industry and economic development

- The project team has appropriate measures in place to control sensitive information and protect against unauthorized transfer of scientific and technical information
- Adequate protocols exist between the United States subsidiary and its foreign parent organization to comply with export control laws and any obligations to protect proprietary information from the foreign parent organization
- The work is conducted within the United States, and the entity acknowledges and demonstrates that it has the intent and ability to comply with the U.S. Competitiveness Provision (see [Post-Award Requirements--U.S. Manufacturing Commitments](#) below)
- It satisfies other conditions DOE may deem necessary to protect U.S. Government interests

Content for Waiver Request

A foreign entity waiver request must include:

- Information about the entities involved in the proposed work to be conducted outside the United States (i.e., the entity seeking a waiver and the entities that will conduct the work):
 - Name
 - Point of contact
 - Proposed type of involvement in the project
- Country of incorporation
- The extent of the ownership or level of control by foreign entities
- Whether the entity is state owned or controlled
- A summary of the ownership breakdown of the foreign entity
- The percentage of ownership or control by foreign entities, foreign shareholders, foreign states, or foreign individuals
- The rationale for proposing a foreign entity participant (must address criteria above)
- A description of the project's anticipated contributions to the United States economy
 - How the project will benefit United States R&D and manufacturing, including contributions to employment in the United States and growth in new markets and jobs in the United States
 - How the project will promote domestic American manufacturing of products or services
- A description of how the foreign entity's participation is essential to the project
- A description of the likelihood of IP being created from the work and the treatment of any such IP
- A list of countries where the work will be performed (If any work is proposed to be conducted outside the United States, you must also complete a separate request for a foreign work waiver)

We may also require a risk assessment of IP and data protection protocols that includes the:

- Export control risk based on the data protection protocols
- Technology being developed
- The foreign entity and country.

The project lead can prepare these submissions (if not the recipient), but the recipient must represent to DOE whether it believes the data protection protocols are adequate and represent the risk assessment—high, medium, or low—of data leakage to a foreign entity.

We may request additional language to any agreement or subagreement to protect IP, mitigate risk, or other related purposes and any other additional information we need to consider the waiver request.

You cannot appeal DOE's decision on a waiver request.

9. Performance of Work in the United States (Foreign Work Waiver)

All work for the projects selected under this NOFO must be performed in the United States, unless you have a written waiver from DOE and prior approval by the DOE Grants Officer. To request a waiver of this requirement, you must submit an explicit waiver request in the application for each entity proposing performance of work outside of the United States.

Overall, a waiver request must demonstrate to the satisfaction of DOE that it:

- Would further the purposes of this NOFO
- Is otherwise in the best interest of the DOE program objectives
- Is in the economic and energy security interests of the United States
- Does not pose an undue RTES risk (see Due Diligence Review for Research Technology and Economic Security below)
- Is otherwise in the best interest of DOE program goals and agency priorities.

A request for a foreign work waiver must include:

- The rationale for performing the work outside the United States (foreign work)
- A description of the work proposed to be performed outside the United States
- An explanation of how the foreign work is essential to the project
- A description of the anticipated benefits to be realized by the proposed foreign work and the anticipated contributions to the U.S. economy
- The associated benefits to be realized and the contribution to the project from the foreign work
- How the foreign work will benefit the United States, including manufacturing, contributions to employment in the United States, and growth in new markets and jobs in the United States
- How the foreign work will promote manufacturing of products and services in the United States
- A description of the likelihood that Intellectual Property (IP) will be created from the foreign work and the treatment of any such IP

- The total estimated cost (DOE and recipient cost share) of the proposed foreign work
- The countries where the foreign work is proposed to be performed
- The name of the entity that would perform the foreign work

We may require additional information before considering the waiver request. You cannot appeal DOE's decision on a waiver request.

10. Digital Persistent Identifier (PID)

For all Research and Development (R&D) NOFOs, if you are required to submit a Biographical Sketch or Current and Pending (Other) Support disclosures, you must provide a digital persistent identifier (PID) in these disclosures as part of the application. These PIDs must meet the common/core standards specified in the NSPM-33 Implementation Guidance or successor guidance (e.g., an [ORCID iD](#)). The PID is a digital identifier that is globally unique, persistent, machine resolvable and processable and has an associated metadata schema. Consistent with NSPM-33, PIDs for individuals are used to identify an individual person.

Every covered individual must have a PID with their Current and Pending Support submission as described above and in *NOFO Part 1, Application Content Requirements—Covered Individual Definition, Designation, and Responsibility*.

11. Research Security Training Requirement

The research security training requirement applies to R&D applications. Covered individuals listed on applications under this NOFO must certify that they have taken research security training consistent with section 10634 of the CHIPS and Science Act of 2022. In addition, if you receive an award, you must maintain sufficient records of your compliance with this requirement for covered individuals at your organization and for all subrecipients. You must retain these records for the time period noted in [2 C.F.R. § 200.334](#) and make them available to DOE on request.

Include this information for each covered individual with the Current and Pending Support submission as described above and in *NOFO Part 1, Application Content Requirements—Covered Individual Definition, Designation, and Responsibility*.

12. Transparency of Foreign Connections

You must provide a Transparency of Foreign Connections disclosure and certification as it relates to the proposed recipient and subrecipients. Include a separate disclosure for the applicant and each proposed subrecipient.

Disclosure Format

For the convenience of the entity providing the disclosure and certification, a template is available at [Transparency of Foreign Connections](#); however, you are not required to use this format. If you use another format, the signatory must include the same substantive information, a signature, the date, and the certification statement provided at [Transparency of Foreign Connections](#).

Disclosure exceptions by entity type

- U.S. national laboratories and domestic government entities are not required to provide the Transparency of Foreign Connections disclosure
- Institutions of higher education are only required to respond to items with an asterisk (*)
- The disclosure requirements are determined by the entity type. Even if the applicant is exempt, the subrecipients must provide these disclosures unless the subrecipient is also exempt

Applicants, regardless of entity type, must provide complete responses for project team members that are not U.S. national laboratories, domestic government entities, or institutions of higher education.

Questions

Contact rtesinfo@hq.doe.gov

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

13. Potentially Duplicative Funding Notice

If you or a project team member has other active Federal awards, you must determine whether the activities of those awards potentially overlap with the activities in your application to this NOFO. If the projects overlap, you must notify DOE in writing of the potential overlap and state how you will ensure that project funds (i.e., recipient cost share and federal funds) will not be used for identical cost items under multiple awards.

14. Locations of Work

If required in *NOFO Part 1, Application Content and Form—Application Content Requirements*, you must provide a list of locations where the recipient and subrecipients will perform project work, including the information identified in the Locations of Work (LOW) template for each location. The Locations of Work template is available on eXCHANGE (*NOFO Part 1, Application Content and Form—Application Content Requirements*, provides the file format and name instructions). We strongly encourage you to use the template. If you decide not to use the template, your submission must include all elements outlined in the template.

15. Environmental Considerations Summary

Refer to *NOFO Part 1, Application Content and Form—Application Content Requirements*, to determine if the Environmental Considerations Summary is required. If required, you can find the template in eXCHANGE.

16. Environmental Impact Volume

Refer to **NOFO Part 1, *Application Content and Form—Application Content Requirements***, to determine if the Environmental Impact Volume (EIV) is required. If required, you can find the template will in eXCHANGE.

The Environmental Impact Volume should describe the proposed action, its alternatives, and the existing environment.

17. Environmental Questionnaire

Refer to **NOFO Part 1, *Application Content and Form—Application Content Requirements***, to determine if the Environmental Questionnaire is required. If required, you can find the template in eXCHANGE.

The Environmental Questionnaire must include the scope of work for the entire project. You must submit a separate Environmental Questionnaire for each proposed subrecipient performing work at every location. If selected for award and you didn't know a subrecipient's work location at the time of application, you must submit another Environmental Questionnaire before you perform any work at that location.

When the Environmental Questionnaire is required, our decision if and how to distribute federal funds under this NOFO is subject to the National Environmental Policy Act (42 U.S.C. 4321, et seq.).

18. Lobbying Activities

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

Applicants and proposed subrecipients that have lobbying activities to disclose

Complete and submit the Disclosure of Lobbying Activities (SF-LLL) available at https://apply07.grants.gov/apply/forms/sample/SFLLL_2_0-V2.0.pdf to certify you have not and will not pay any nonfederal funds to any person for influencing or attempting to influence any of the following in connection with this 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

Recipients and subrecipients that have no lobbying activities to disclose

Complete and submit the Certification Regarding Lobbying form (OMB 4040-0013) available at https://apply07.grants.gov/apply/forms/sample/GG_LobbyingForm-V1.1.pdf.

19. Summary for Public Release

You must submit a one-page summary of your project that we can disseminate to the public.

Summary of Public Release Content	
Applicant Name	Provide the legal name of the applicant.
Major Participant Names	List all significant project participants and their roles.
Lead Project Manager/Principal Investigators	Provide names and titles.
Project Title	Provide the title for the planned project.
Project Locations	Provide the locations of work for the proposed project.
Project Objectives	Identify the overarching project objectives aligned with requirements set forth in the NOFO.
Project Description	The description must include methods to be employed, the potential impact of the project (e.g., benefits, outcomes), and the project's goals.
Publicly Releasable (Unlimited Rights)	This document must not include any proprietary or business-sensitive information because we may make it available to the public after selections are made.
Page Limit Clarification	The summary must not exceed the stated page limit found in the NOFO Part 1, Application Content and Form—Application Content Requirements when printed, using standard 8.5" x 11" paper with 1" margins (top, bottom, left, and right) and font not smaller than 12-point.

20. Summary Slide

You must provide one slide summarizing the proposed project. The Summary Slide requirements and instructions are in **NOFO Part 1, Application Content and Form—Application Content Requirements**, and the suggested Summary Slide template is available on eXCHANGE.

Summary Slide Content	
Project Title	Provide the title for the planned project.
Applicant	Provide the legal name of the applicant.

Project Locations	Provide the locations of work for the proposed project.
PI/LPM and Key Personnel Information	Provide names and titles.
Requested DOE Funds	Identify Federal funds requested for the project.
Proposed Cost Share	Provide the amount of cost share contribution.
Technology Summary	Describe the technology to be developed.
Technology Impact	Describe the impact of the proposed technology if the project is successful.
Project Goals	Identify the overarching project goals.
Key Graphics	Provide illustrations, charts, or tables if they add to your description.
Key Idea / Takeaway	Describe the key takeaway for DOE.

D. Reply to Reviewer Comments

1. Content and Form of Replies to Reviewer Comments

Refer to *NOFO Part 1, Application Content and Form—Summary*, to determine if the Reply to Reviewer Comments Submission Phase applies.

If so, we will provide applicants with reviewer comments following our evaluation of all eligible applications. You will have a brief opportunity to prepare a short Reply to Reviewer Comments (Reply). The Reply must not exceed three pages. If a Reply is more than three pages, we will read only the first three pages. You may use the Reply to respond to one or more comments or to supplement your application. The Reply may include text, graphs, charts, or data.

We will post the reviewer comments in eXCHANGE. The expected submission deadline is on the cover page of *NOFO Part 1, Key Dates*; however, you must monitor eXCHANGE to ensure the expected due date has not changed. We will not extend the deadline if you do not submit your reply on time because you did not check eXCHANGE for updates. You should expect to have about three business days to prepare and submit a reply.

You are not required to submit a Reply to Reviewer Comments. We will review and consider each eligible application, even if we do not receive a reply or we find it to be ineligible.

E. Additional Requirements

1. Allowable Costs

All expenditures must be allowable, allocable, and reasonable under the applicable Federal cost principles. According to 2 C.F.R. § 910.352, the cost principles in the Federal Acquisition Regulations (48 C.F.R. § 31.2) apply to for-profit entities. The cost principles in 2 C.F.R. Part 200, Subpart E, apply to all entities other than for-profits.

2. Pre-Award Costs

If selected for award negotiations (selectees), you must request prior written approval to charge pre-award costs. Pre-award costs are those incurred before the effective date of the negotiated Federal award where such costs are necessary for efficient and timely performance of the scope of work.

These costs are allowable only to the extent that they would have been allowable if you incurred after the effective date of the Federal award and only with the written approval of the Federal awarding agency through the Grants Officer.

You cannot incur pre-award costs before the Selection Official signs the Selection Statement and Analysis.

Pre-award expenditures are made at your own risk. DOE is not obligated to reimburse costs:

- In the absence of appropriations
- If an award is not made
- If an award is made for a less than you anticipated

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

DOE's decision if and how to distribute Federal funds under this NOFO is subject to NEPA. Carefully consider and 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 before we complete the NEPA review.

We do not guarantee or assume any obligation to reimburse pre-award costs you incur before receiving written authorization from the Grants Officer. If you elect to engage in activities that DOE determines may have an adverse effect on the environment or limit the choice of reasonable alternatives before receiving authorization, you do so at risk of not receiving Federal funding for your project and such costs may not be recognized as allowable cost share.

Nothing in the pre-award cost reimbursement regulations or any pre-award costs approval letter from the Grants Officer overrides the requirement to obtain the written

authorization from the Grants Officer before taking any action that may have an adverse effect on the environment or limit the choice of reasonable alternatives.

3. Performance of Work in the United States (Foreign Work Waiver) Requirement

Requirement

All work performed under awards issued under this NOFO must be performed in the United States, unless you have a written waiver from DOE and prior approval by the Grants Office. The recipient must flow down this requirement to its subrecipients.

Failure to Comply

If you fail to comply with the Performance of Work in the United States requirement, we may deny reimbursement for the work conducted outside the United States and such costs may not be recognized as allowable recipient cost share. You are responsible if any work under this award be performed outside the United States, absent a waiver, regardless of whether the work is performed by the recipient, subrecipients, contractors, or other project partners.

Foreign Work Waiver

To request a foreign work waiver, you must submit a written waiver request to DOE. The [Performance of Work in the United States \(Foreign Work Waiver\)](#) lists the information you must include in these requests.

4. Foreign Travel

Refer to *NOFO Part 1, Application Content and Form—Additional Requirements*, to see if foreign travel is allowable under this NOFO.

If allowable and if international travel is proposed for your project, **foreign travel costs are allowable only with the prior written approval of the Grants Officer.** If your proposal is selected for negotiations, you must inform the DOE project team of any planned international travel that may occur. All planned international travel must be essential to the successful completion of a task outlined in your proposal.

In addition to the Grant Officer's approval, a foreign work waiver is also required when:

- Travel to any country in connection with the scope of the project where the travel is not a conference, scholarly workshop, or symposium
- Travel to a [foreign country of concern](#), even if the travel is to a conference, scholarly workshop, or symposium
 - Includes:
 - People's Republic of China
 - The Democratic People's Republic of Korea
 - The Russian Federation
 - The Islamic Republic of Iran
 - Countries of concern designated by the Secretary of State per section 10638(2) of P.L. 117-167

- Countries of risk designated by the Department of Energy

The *Performance of Work in the United States (Foreign Work Waiver)* section provides additional details.

The law and regulations require air transport supported under this award of people or property to, from, between, or within a country other than the United States to be performed by or under a cost-sharing arrangement with a United States flag carrier, if service is available. All international travel must comply with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. § 40118), commonly referred to as the “Fly America Act,” and implementing regulations at 41 C.F.R. § 301-10.131 through 301-10.143.

5. Equipment and Supplies

All equipment and products purchased with funds made available under this NOFO should be American made to the greatest extent practicable. This requirement does not apply to used or leased equipment. This requirement does not supersede any other statutory requirement in the NOFO.

6. Davis-Bacon Act Requirements

Refer to *NOFO Part 1, Application Content and Form—Additional Requirements*, to determine if the Davis-Bacon Act requirements apply. If “Davis-Bacon Act Requirements” is not listed in the *Additional Requirements* table, they are not required.

For projects awarded under NOFOs funded under Division D of the Infrastructure Investment and Jobs Act (IIJA), per section 41101 of that law, all laborers and mechanics employed by the recipient, subrecipients, contractors, or subcontractors for construction, alteration, or repair work funded in whole or in part under the NOFO Part 1 must be paid wages at least equal to the prevailing wage for 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).

You must provide written assurance acknowledging the DBA requirements above and confirming that the laborers and mechanics performing construction, alteration, or repair work on this project will be paid according to the DBA.

You acknowledge you will comply with all DBA requirements, including but not limited to:

- Ensuring that wage determinations and appropriate DBA clauses and requirements flowed down to and incorporated into any applicable subrecipient and contract awards
- Ensuring that if wage determinations and appropriate DBA clauses and requirements are improperly omitted from subrecipient or contract awards, the appropriate wages and clauses are applied retroactively to the start of performance
- Being responsible for all subrecipient or contractor compliance with DBA labor standards

- Receiving and reviewing certified weekly payrolls submitted by all subrecipients or contractors for accuracy and identifying potential compliance issues
- Maintaining original certified weekly payrolls for three years after project completion and making those payrolls available to DOE or the U.S. Department of Labor (DOL) on request, as required by 29 C.F.R. § 5.6(a)(2)
- Conducting payroll and job-site reviews for construction work, including interviews with employees, as frequently as necessary to ensure subrecipients' or contractors' compliance, and as requested or directed by DOE
- 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
- Posting in a prominent and accessible place the wage determinations and DOL Publication: WH-1321, *Notice to Employees Working on Federal or Federally Assisted Construction Projects*
- Notifying the Grants Officer of all labor standards issues, including:
 - All complaints about incorrect payment of prevailing wages or fringe benefits received from you, a subrecipient, contractor, or subcontractor employees
 - Significant labor standards violations, as defined in 29 C.F.R. § 5.7
 - Disputes about labor standards under 29 C.F.R. Parts 4, 6, and 8 and as defined in FAR 52.222-14
 - Disputed labor standards determinations
 - DOL investigations
 - Legal or judicial proceedings related to the labor standards under this award, subrecipient award, contract, or subcontract
- Preparing and submitting the Office of Management and Budget Control Number 1910-5165, *Davis-Bacon Semi-Annual Labor Compliance Report*, to the Grants Officer by April 21 and October 21 of each year.

You will also be required to undergo DBA compliance training and maintain competency in DBA compliance. The Grants Officer will notify you of any DOE-sponsored DBA compliance training. 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>.

You can find additional guidance on how to comply with DBA provisions and clauses at <https://www.dol.gov/agencies/whd/government-contracts/construction> and <https://www.dol.gov/agencies/whd/government-contracts/protections-for-workers-in-construction>.

You must submit weekly certified payrolls on time as part of your compliance with the DBA.

DOE has contracted with [LCPtracker](#), a third-party DBA electronic payroll compliance software application. You are required to use LCPtracker unless you have a DOE-approved waiver. We may grant a waiver from using LCPtracker if you are unable

to or limited in your ability to use or access the system. LCPtracker allows certified payroll reports and workforce data to be uploaded electronically at any time and partners with several commercially available payroll systems. If you use a different payroll system, LCPtracker provides a free spreadsheet template to map out your payroll file, which allows you to upload employee and payroll data into the system.

The LCPtracker validation system checks payrolls for Federal DBA wage requirements by flagging mathematical errors or omission discrepancies for you to review. Examples include base hourly rate, total hourly rate, overtime, double time, apprentice approval, and fringe benefit contributions.

In addition, LCPtracker uses industry standard eSignature technology, which allows you to electronically sign payroll reports. Individual program offices will coordinate with recipients on access and training.

For more information, visit [Davis-Bacon Act Requirements for Recipients of Infrastructure Investment and Jobs Act Funding](#).

7. Prohibition on Using Funds for Activities Related to Federal Acquisition Security Council (FASC)-Prohibited Unmanned Aircraft Systems

Both the recipient and subrecipients are prohibited from using Federal funds provided through this award, on or after December 22, 2025, to purchase or operate a FASC-prohibited unmanned aircraft system (section 1825 of the American Security Drone Act of 2023 [[Public Law 118-31](#)]). The terms "FASC-prohibited unmanned aircraft system" and "unmanned aircraft system" are defined in [48 C.F.R. § 40.201](#) or successor regulation.

V. Submission Requirements and Deadlines

A. Required Registrations

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

You must have an active account with SAM.gov which includes having a Unique Entity Identifier (UEI). [SAM.gov registration](#) can take several weeks. The [Entity Registration Checklist](#) provides all the information you need to register.

Every applicant for an award must:

- Be registered in SAM.gov before submitting an application
- Provide a valid Unique Entity Identifier in the NOFO application
- Maintain an active, up-to-date registration in SAM.gov while you have an active Federal award or an application or plan under consideration by a Federal agency

DOE cannot award Federal funding to you until you comply with all applicable UEI and SAM requirements. If you have not fully complied by the time we are ready to make a Federal award, you will be disqualified to receive a Federal award, and we will select another applicant.

2. eXCHANGE

Register and create an account in DOE's eXCHANGE site identified in the [Key Facts](#) section of this NOFO. You can use this account to apply to open NOFOs offered by this DOE office. You may need to register in more than one eXCHANGE site to view opportunities and submit applications for opportunities managed by other 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 as part of this NOFO.

3. Grants.gov Registration

You must have an active [Grants.gov](#) registration to receive automatic updates when modifications to this NOFO are posted. You must have a Login.gov registration to register for Grants.gov. Step-by step instructions are available at [How to Apply for Grants](#).

B. Application Package

1. eXCHANGE

The application package requirements are outlined in the [Application Content and Form](#) section above. Several templates for application requirements are included in eXCHANGE. To access these materials, select the appropriate NOFO on the Funding Opportunity page of eXCHANGE.

The maximum file size you can upload to the eXCHANGE site is 50MB. If a file is larger than 50MB but is within the page limit specified in the NOFO, you can break it into parts and label the parts to that effect. For example:

- TechnicalVolume_Part_1
- TechnicalVolume_Part_2

We will not accept late submissions that resulted from technical difficulties uploading files that exceed 50MB.

Electronic Authorization of Applications and Award Documents

Submitting an application and supplemental information under this NOFO through DOE electronic systems, including eXCHANGE, constitutes the authorized representative's approval and electronic signature.

C. Questions and Support

1. Questions

Once a NOFO is issued, DOE personnel cannot communicate (in writing or otherwise) with applicants about the NOFO except through the established question and answer process described below. You can send questions about this NOFO to the NOFO email listed in the [Key Facts](#) no later than 3 business days before the application due date and time. We cannot provide feedback on individual concepts through Q&A.

We will post all questions and answers related to this NOFO on the eXCHANGE site listed in the [Key Facts](#) section. **You must first select this NOFO Number to view the questions and answers about this NOFO.** We will attempt to respond to questions within 3 business days, unless we have already posted a similar question and answer on the website.

Send your questions related to the registration process and the eXCHANGE 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. Retain your ticket number.

[SAM.gov](#)

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

VI. Application Review Information

Refer to *NOFO Part 1, Application Review Information – Review Criteria*, for specific compliance and technical criteria. The following describes the DOE evaluation and selection process for all NOFOs.

A. Standard Evaluation and Selection Processes

1. Overview

The evaluation process is several phases; each phase includes an initial eligibility review and a thorough technical review. Subject matter experts conduct rigorous technical reviews of eligible submissions. Ultimately, the Selection Official considers the reviewers' recommendations, along with other considerations, such as program policy factors and risk reviews, to determine which applications to select.

2. Pre-Selection Interviews

As part of the evaluation and selection process, we may invite one or more applicants to participate in pre-selection interviews. Pre-selection interviews are distinct from and more formal than the pre-selection clarifications described below. Invited

applicants meet with DOE representatives to clarify the content of their applications and to give DOE an opportunity to ask questions about the proposed project. The information you provide in pre-selection interviews contributes to our selection decisions.

We will arrange to meet with you in person at DOE's offices or a mutually agreed location. If we can't meet in person, we may invite you to participate in a one-on-one conference with us via webinar, video conference, or conference call. We may also arrange site visits.

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

Participation in pre-selection interviews with DOE does not mean you have been selected for award negotiations.

3. Pre-Selection Clarification

We may determine that we need pre-selection clarifications from one or more applicants. Pre-selection clarifications are distinct from and less formal than pre-selection interviews. Pre-selection clarifications are solely for clarifying the application. The pre-selection clarifications may occur before, during, or after the merit review evaluation process. We will not review or consider any information you provide not directly related to the pre-selection clarification question. Typically, we conduct a pre-selection clarification in writing or by video or conference calls.

The information you provide to DOE through pre-selection clarifications becomes part of your application and contributes to the merit review evaluation and our selection decisions. If we contact you for pre-selection clarification, it does not mean that you have been selected for award negotiation or that you are among the top-ranked applications.

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

4. Recipient Responsibility and Qualifications

Before making a Federal award with a total amount of Federal share greater than the simplified acquisition threshold, DOE is required to review and consider any responsibility and qualification information about the applicant in the entity information domain in [SAM.gov](https://sam.gov) (see 41 U.S.C. § 2313).

You have the option to review information in the entity information domain in [SAM.gov](https://sam.gov) and comment on any of your current information that a Federal awarding agency entered.

We will consider your written comments, in addition to the other information in the entity information domain in [SAM.gov](https://sam.gov), when we consider your integrity, business

ethics, and record of performance under Federal awards. These considerations are part of the *Review of Risk Posed by Applicants*, as described in 2 C.F.R. § 200.206.

5. Due Diligence Review for Research, Technology, and Economic Security

All applications submitted to DOE are subject to a due diligence review. As DOE invests in critical infrastructure and in critical and emerging technology areas,¹ DOE considers possible threats to United States research, technology, and economic security from undue foreign government influence when evaluating risk. As part of the *Research, Technology, and Economic Security* (RTES) risk review, we may contact you or the proposed project team members for additional information. This risk review is separate from the technical merit review.

All project participants are subject to RTES due diligence reviews. The due diligence review of covered individuals includes, but is not limited to, reviewing resumes and biosketches, disclosures, and certifications. DOE reserves the right to require resumes or biosketches, disclosures, and certifications for project participants not defined as covered individuals. You do not need to submit any additional information on non-covered individuals unless we request it. The volume and type of information we collect depends on various factors associated with the award.

This review is separate and distinct from DOE Order 142.3B “Unclassified Foreign National Access Program.”

If we identify an RTES risk, we may require risk mitigation measures, including but not limited to requiring that an individual or entity not participate in the award. If we identify significant risks that cannot be sufficiently mitigated, we may decide not to fund the project.

We may share information about the risks identified as part of the RTES due diligence review process or monitoring with other Federal agencies (section 4(e) of the Presidential Memorandum on United States Government-Supported Research and Development National Security Policy-33 [NSPM-33]).

You cannot appeal DOE’s decision on a due diligence review.

6. Evaluation and Administration by Non-Federal Personnel

In evaluating applications and subsequent awards, the Government may ask the advice of qualified nonfederal personnel as reviewers. The Government may also use nonfederal personnel, including DOE contractors, to conduct routine, nondiscretionary administrative activities. By submitting your application, you consent to nonfederal reviewers or administrators. Nonfederal reviewers must sign conflict of interest (COI) and non-disclosure acknowledgements (NDA) prior to reviewing an application. Nonfederal personnel conducting administrative activities must also sign an NDA.

¹ See [Critical and Emerging Technologies List Update \(whitehouse.gov\)](https://www.whitehouse.gov/critical-emerging-technologies/).

7. Selection

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

VII. Selection and Award Notices

We anticipate notifying applicants selected for award negotiation by the dates provided on the **NOFO Part 1, *Basic Information—Key Dates***.

A. Selection Notices

1. Ineligible Submissions

Ineligible concept papers or applications will not be further reviewed or considered for award. The Grants Officer will email a notification letter to the technical and administrative points of contact you designated in eXCHANGE. The notification letter will state why the concept paper or the application is ineligible.

2. Concept Paper Notifications

Refer to **NOFO Part 1, *Application Content and Form***, to determine if concept papers are required.

If concept papers are required, we will either encourage or discourage you to submit an application. We post these notifications to eXCHANGE. We may include general comments from reviewers in the encourage/discourage notifications.

You can submit an application even if we discourage you from doing so. When we discourage an application, we are conveying our lack of programmatic interest in the proposed project. These assessments do not necessarily reflect judgments on the merits of the proposed project. The concept paper can save applicants the considerable time and expense of preparing an application that we are unlikely to select for award negotiations.

Encouraging you to submit an application does not authorize you to begin performance of the project.

3. Application Notifications

We will email a notification letter to the technical and administrative points of contact you designated in eXCHANGE. The notification letter will inform you if we selected your application or not for award negotiations. We may also notify you that we delayed our selection, subject to the availability of funds or other factors.

4. Applicants Selected for Award Negotiations

We may stagger our selection determinations. So, some applicants may receive a notification letter before others. If you are selected for award negotiations, your written notification will include estimated award negotiation dates. A notification letter selecting

an application for award negotiations does not authorize you to begin performance of the project. A selection for award negotiations is not a commitment by DOE to issue an award, nor is it a guarantee of Federal Government funding. You will not receive an award until award negotiations are complete and the Grants Officer executes the financial assistance award, which the recipient can access in FedConnect.

The award negotiation process takes at least 60 days, and may be longer, depending on the complexity of the project and your responsiveness, among other factors. You must designate a primary and a backup point-of-contact in eXCHANGE that will communicate with DOE about award negotiations.

You must be responsive during award negotiations by responding timely to requests for documentation, including post-selection documentation, and meeting negotiation deadlines. If you fails to do so or if award negotiations are otherwise unsuccessful, we will cancel the award negotiations and rescind the selection. DOE reserves the right to terminate award negotiations at any time for any reason.

You can find guidance on pre-award costs in the [Pre-Award Costs](#) section.

5. Alternate Selections

In some cases, DOE will select alternates. As an alternate, DOE may consider the application for Federal funding in the future. A notification letter stating you are an alternate does not authorize you to begin performance of the project. We may ultimately determine to select or not select the application for award negotiations.

6. Applicants Not Selected for Award Negotiations

DOE must promptly notify in writing each applicant who was not selected for award negotiation or whose application cannot be funded because appropriated funds are not available.

B. Post-Selection Information Requests

To reduce burden in the application process, DOE instituted Post-Selection Information Requests and Submissions procedures. These procedures allow you to submit certain elements of an application once the application is under consideration for funding.

We will notify you (primarily by email) if we need post-selection information. This notification is not a Notice of Award. You should only submit this information when requested. We will explain what documents and materials to submit, the format required, and where and when to submit.

1. Example Information Requests

Some examples of information we may require to complete award negotiations include:

- Participants and collaborating organizations

- Current and pending support
- Other budget information
- Indirect cost information
- Letters of commitment from subrecipients and third parties contributing to cost share
- Name and phone number of the Designated Responsible Employee for complying with national policies prohibiting discrimination (See 10 C.F.R. § 1040.5)
- Information for the DOE Office of Civil Rights for assurance reviews under 10 C.F.R. § 1040
- Environmental Questionnaire
- Representation of Limited Rights Data and Restricted Software
- Cybersecurity Plan (specific to certain IJIA-funded projects)
- For construction projects: information related to Davis-Bacon Act requirements, Construction Workforce Continuity Plan, and Operations Workforce Continuity Plan

2. Entity Risk Assessment

In addition to the other reviews outlined in the NOFO, we may also conduct a review of the risk posed by applications, according to 2 C.F.R. § 200.206. This risk assessment may consider:

- Financial stability
- Quality of management systems and ability to meet the management standards in 2 C.F.R. Part 200 as adopted and supplemented by 2 C.F.R. Part 910
- History of performance
- Audit reports and findings
- Your ability to effectively implement statutory, regulatory, or other requirements imposed on recipients or subrecipients

We may use other publicly available information and the history of your performance under DOE or other Federal agency awards. Depending on the severity of the findings and whether the findings were resolved, we may elect not to fund you.

In addition to this review, DOE must comply with provisions that 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 (2 C.F.R. Part 180). These restrictions apply to both recipients and subrecipients.

3. Environmental Review Under the National Environmental Policy Act (NEPA)

Our decision on if and how to distribute Federal funds under this NOFO 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. You can find additional background on NEPA at <https://www.energy.gov/nepa>.

Although 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 must assist in the timely and effective completion of the NEPA process. If we determine certain documents must be prepared to complete the NEPA review process, you may be required to prepare the documents, and the costs to prepare the necessary documents may be included as part of the project costs. We 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) before deciding if or how to distribute Federal funds. Section 106 requires DOE to identify and consider adverse effects to historic properties listed in or eligible for listing in the National Register of Historic Places. We may perform an NHPA review under the umbrella of our NEPA review and will require you to assist in this review and consider impacts to historic, Tribal, and cultural resources.

4. Trafficking in Persons

Awards under this NOFO are subject to the requirements at [2 C.F.R. Part 175, Award Term for Trafficking in Persons](#), including the compliance plan and certification requirements if the estimated value of services required to be performed under the grant or cooperative agreement outside the United States exceeds \$500,000.

5. Construction Workforce Continuity Plan

You must submit a Construction Workforce Continuity Plan within 30 days of your notification for award that includes any construction project with total construction costs greater than \$35M and where DOE is contributing 10% or more of the project amount, or as otherwise selected by DOE. We encourage you to use our [Workforce Continuity Plan template](#) to help reduce the administrative burden by using common formats.

6. Operations Workforce Continuity Plan

You must submit an Operations Workforce Continuity Plan within 30 days of your award notification for projects that will have more than 100 employees in operation, including contract workers who are not W2 employees, and where DOE is contributing 10% or more of the total project cost, or as otherwise selected by DOE. We encourage you to use our [Workforce Continuity Plan template](#) to help reduce the administrative burden by using common formats.

7. Interim Conflict of Interest Policy for Financial Assistance

The DOE interim Conflict of Interest Policy for Financial Assistance (COI Policy)² applies to:

- All recipients or subrecipients applying for or that receive DOE funding as a financial assistance award (e.g., a grant or cooperative agreement)
- 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.
 - *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

For DOE funded projects, you must include all financial conflicts of interest (FCOI) (i.e., managed and unmanaged/unmanageable) in its initial and ongoing FCOI reports.

We understand that recipients or subrecipients receiving DOE financial assistance awards will need time to fully comply with DOE's interim COI Policy. To provide some flexibility, we have a staggered implementation. Specifically, before the 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
- Provide DOE with an initial FCOI report that includes all FCOIs (i.e., managed and unmanaged/unmanageable)

You will have 180 days from the date of the award to fully comply with the other requirements in DOE's interim COI Policy. Before the award, you must certify that you are, or will be within 180 days of the award, compliant with all requirements in the COI Policy.

8. Participants and Collaborating Organizations

If selected for award negotiations, before the award, you must submit a list of personnel who are proposed to work on the project, both recipients and subrecipients, and a list of proposed collaborating organizations. You have an ongoing responsibility to notify us of changes to personnel and collaborating organizations and to submit updated information during the life of the award.

9. Current and Pending Support

If selected for award negotiations, you must submit, if applicable:

² You can find DOE's interim COI Policy at <https://www.energy.gov/management/departments-energy-interim-conflict-interest-policy-requirements-financial-assistance>.

- Current and pending support disclosure statements and resumes for new covered individuals
- Updated disclosures if anything changed in the Current and Pending Support you submitted.

You can find more information in the Current and Pending Support section in *NOFO Part 1, Application Content and Form—Application Content Requirements*.

10. Transparency of Foreign Connections

If selected for award negotiations, you must provide updates, if applicable, to a Transparency of Foreign Connections disclosure and certification as it relates to the proposed recipient and subrecipients. You can find more information in the [Transparency of Foreign Connections](#) information in the *Application Content Requirements* section above.

11. Prohibition Related to Malign Foreign Talent Recruitment Programs

Prohibition

Individuals participating in a Malign Foreign Talent Recruitment Program are prohibited from participating in projects selected for Federal funding under this NOFO.

Should an award result from this NOFO, you must exercise ongoing due diligence to reasonably ensure that no individuals participating on the DOE-funded project are participating in a Malign Foreign Talent Recruitment Program. Consequences for violating this prohibition will be determined according to applicable law, regulations, and policy.

Further, you must notify DOE within 5 business days upon learning that an individual on the project team is or is believed to be participating in a Malign Foreign Talent Recruitment Program. DOE may modify and add requirements related to this prohibition to the extent required by law.

Required Certifications

- Each covered individual must certify that they are not party to a Malign Foreign Talent Recruitment Program.
- The applicant and the subrecipients must certify that the covered individuals in their respective employment have been made aware of the Malign Foreign Talent Recruitment Program prohibition and have complied with the certification responsibilities stated above.

Non-Discrimination

We will ensure the Malign Foreign Talent Recruitment Program Prohibition does not target, stigmatize, or discriminate against individuals on the basis of race, ethnicity, or national origin, consistent with title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.).

Definitions

Malign Foreign Talent Recruitment Program. as defined in P.L. 117-167, section 10638(4):

- A. any program, position, or activity that includes compensation in the form of cash, in-kind compensation, including research funding, promised future compensation, complimentary foreign travel, things of non de minimis value, honorific titles, career advancement opportunities, or other types of remuneration or consideration directly provided by a foreign country at any level (national, provincial, or local) or their designee, or an entity based in, funded by, or affiliated with a foreign country, whether or not directly sponsored by the foreign country, to the targeted individual, whether directly or indirectly stated in the arrangement, contract, or other documentation at issue, in exchange for the individual—
 - i. engaging in the unauthorized transfer of intellectual property, materials, data products, or other nonpublic information owned by a United States entity or developed with a federal research and development award to the government of a foreign country or an entity based in, funded by, or affiliated with a foreign country regardless of whether that government or entity provided support for the development of the intellectual property, materials, or data products;
 - ii. being required to recruit trainees or researchers to enroll in such program, position, or activity;
 - iii. establishing a laboratory or company, accepting a faculty position, or undertaking any other employment or appointment in a foreign country or with an entity based in, funded by, or affiliated with a foreign country if such activities are in violation of the standard terms and conditions of a federal research and development award;
 - iv. being unable to terminate the foreign talent recruitment program contract or agreement except in extraordinary circumstances;
 - v. through funding or effort related to the foreign talent recruitment program, being limited in the capacity to carry out a research and development award or required to engage in work that would result in substantial overlap or duplication with a federal research and development award;
 - vi. being required to apply for and successfully receive funding from the sponsoring foreign government's funding agencies with the sponsoring foreign organization as the recipient;
 - vii. being required to omit acknowledgment of the recipient institution with which the individual is affiliated, or the federal research agency sponsoring the research and development award, contrary to the institutional policies or standard terms and conditions of the federal research and development award;
 - viii. being required to not disclose to the federal research agency or employing institution the participation of such individual in such program, position, or activity; or
 - ix. having a conflict of interest or conflict of commitment contrary to the standard terms and conditions of the federal research and development award; and

- B. a program that is sponsored by—
- i. a foreign country of concern or an entity based in a foreign country of concern, whether or not directly sponsored by the foreign country of concern;
 - ii. an academic institution on the list developed under section 1286(c)(8) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (10 U.S.C. 2358 note; Public Law 115–232); or
 - iii. a foreign talent recruitment program on the list developed under section 1286(c)(9) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (10 U.S.C. 2358 note; Public Law 115–232).

Consistent with applicable law (42 U.S.C. 19232), this provision does not prohibit, unless such activities are funded, organized, or managed by an academic institution or a foreign talent recruitment program on the lists developed under paragraphs (8) and (9) of section 1286(c) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (10 U.S.C. 4001 note; Public Law 115–232)—

- A. making scholarly presentations and publishing written materials regarding scientific information not otherwise controlled under current law;
- B. participation in international conferences or other international exchanges, research projects or programs that involve open and reciprocal exchange of scientific information, and which are aimed at advancing international scientific understanding and not otherwise controlled under current law;
- C. advising a foreign student enrolled at an institution of higher education or writing a recommendation for such a student, at such student's request; and
- D. other international activities determined appropriate by the federal research agency head or designee.

12.Foreign Collaboration Considerations

For **new** collaborations with foreign entities, organizations, and governments, you must provide DOE with advanced written notification of any potential collaboration with foreign entities, organizations, or governments in connection with your DOE-funded award scope. You must wait for further guidance from DOE before contacting the proposed foreign entity, organization, or government about the potential collaboration or negotiating the terms of any potential agreement.

For **existing** collaborations with foreign entities, organizations, and governments, you must provide DOE with a written list of all existing foreign collaborations you have entered into in connection with your DOE-funded award scope.

Description of collaborations you must report:

- A *thing of value* provided to or from the recipient

- A thing of value includes, but not be limited to, all resources made available to or from the recipient in support of or related to the DOE award, regardless of monetary value.
- In-kind contributions (e.g., office or laboratory space, data, equipment, supplies, employees, or students)
- In-kind contributions not intended for direct use on the DOE award but result in providing a thing of value from or to the DOE award

Collaborations do not include:

- Routine workshops or conferences
- Foreign investors using the recipient's services and facilities resulting from its standard published process for evaluating requests for access
- Routine use of foreign facilities by awardee staff under the recipient's standard policies and procedures

13.Data Management and Sharing Plan

A Data Management and Sharing Plan (DMSP) is required for all R&D projects following DOE and DOE-sponsoring-office guidelines. *NOFO Part 1, Application Content and Form—Application Content Requirements*, and *NOFO Part 1, Applicable Post-Award Requirements and Administration*, tables explain if and when a DMSP is required.

The DMSP must provide a plan consistent with the DOE Requirements and Guidance for Digital Research Data Management located at <https://www.energy.gov/datamanagement/doe-requirements-and-guidance-digital-research-data-management>.

The purpose of the DMSP is different from the [Intellectual Property Provisions](#) included in the award. The IP Provisions govern rights provided to the Government regarding IP, such as the Government-purpose license, march-in rights, and certain U.S. manufacturing requirements that may be implemented.

C. Award Notices

Once award negotiations are successfully completed, the Grants Officer will approve the financial assistance award, and you will receive notification of the award in the FedConnect system. You must be registered in FedConnect to receive the final award package.

1. Register with FedConnect

[FedConnect®](#) is how recipients receive their legally executed award package. To create a company account, you must be a designated point of contact in SAM.gov, and you must have a SAM Unique Entity Identifier Number (UEI).

Before you get started, review the FedConnect [Ready, Set, Go! Guide](#). The registration process can take up to three days to complete. If you have questions on completing your registration, you can contact [FedConnect Support](#).

Electronic Authorization of Applications and Award Documents

When you submit an application and supplemental information under the NOFO Part 1 through electronic systems used by DOE, including eXCHANGE and FedConnect, it constitutes the authorized representative's approval and electronic signature.

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
- Risk-Based Review of Project Participants
- Performance of Work in the United States
- Infrastructure Investment and Jobs Act-specific requirements
- Fraud, waste, and abuse requirements
- Safety, security, and regulatory requirements
- Environmental review under National Environmental Policy Act requirements

Recipients of an award made under DOE NOFOs must comply with all applicable:

- Federal, state, and local laws and regulations
- DOE policy and guidance
- Instructions in Part 1 and Part 2 of this NOFO
- The award terms and conditions

You must require your subrecipients to comply with all applicable requirements. Reporting requirements are identified on the Federal Assistance Reporting Checklist attached to the award agreement.

Please review the [Standard Award Terms and Conditions](#), the [sample Federal Assistance Reporting Checklist](#), and standard [Intellectual Property \(IP\) Provisions](#) to better understand post-award requirements and administration.

1. Real Property and Equipment Continued Use

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

910.360 (for-profit entities). Consult the table in **NOFO Part 1, *Post-Award Requirements and Administration***, to determine if this provision is applicable to awards made under this NOFO.

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. An estimated useful life or depreciation schedule for equipment; 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 C.F.R. 910.360. Property disposition requirements for other non-federal entities are set forth in 2 C.F.R. 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. Go/No-Go Review

Consult the table in **NOFO Part 1, *Post-Award Requirements and Administration***, to determine if this provision is applicable to awards made under this NOFO. If selected, each project will be subject to a periodic project evaluation referred to as a Go/No-Go Review.

A Go/No-Go 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 valued, prior to beginning the execution of future phases. At the Go/No-Go 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 Go/No-Go decision point (continuation funding) is contingent upon

- Availability of federal funds appropriated by Congress for the purpose of this program
- Availability of future-year budget authority
- Recipient's technical progress compared to the Milestone Summary Table included in the award

- Recipient's submittal of required reports
- Recipient's compliance with the terms and conditions of the award
- DOE's assessment of potential research, technology, and economic security (RTES) risks
- DOE's Go/No-Go decision
- Recipient's submission of a continuation application
- Written approval of the continuation application by the Grants Officer

As a result of the Go/No-Go Review, we may, at our discretion, authorize the following actions:

- 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
- Recommend redirection of work under the project
- Place a hold on Federal funding for the project, pending further supporting data or funding
- Discontinue funding the project because of insufficient progress, change in strategic direction, or lack of funding

The Go/No-Go decision is distinct from a non-compliance determination. If you fail to comply with the requirements of an award, we may take appropriate action, including but not limited to, redirecting, suspending, or terminating the award.

3. Program Down-Select

Consult the table in *NOFO Part 1, Post-Award Requirements and Administration*, to determine if this provision is applicable to awards made under this NOFO. Each project selected under this NOFO will be subject to a competitive project review referred to as a *down-select process*.

Once you complete a pre-determined decision point (e.g., end of a phase or end of a budget period), we will conduct a competitive project review (down-select process). You must present your project to DOE individually (not to other recipients). Subject matter experts from academia, national laboratories, and industry may serve as reviewers, subject to conflict of interest and non-disclosure considerations.

Once the competitive project review (down-select process) is completed, we will select which projects will receive Federal funding beyond that decision point. Due to the funding availability and program considerations, only a portion of the recipients will be selected to continue to receive funding for their projects. Some projects may not receive Federal funding beyond the specified decision point even if the project is meeting the predefined metrics.

4. Energy Data eXchange (EDX) Requirements

Consult the table in *NOFO Part 1, Post-Award Requirements and Administration*, to determine if this provision is applicable to awards made under this NOFO. The Energy Data eXchange (EDX) is a data laboratory developed and maintained by DOE's

National Energy Technology Laboratory (NETL) to find, connect, curate, use, and re-use data to advance fossil energy and environmental research and development (R&D). This site should not be confused with the eXCHANGE sites where we announce funding opportunities.

You must submit data products generated under the resulting award through the EDX at <https://edx.netl.doe.gov/>. Data products include, but are not limited to:

- Software code
- Tools
- Applications
- Web pages
- Portfolios
- Images
- Videos
- Datasets.

EDX uses federation and web services to increase awareness of publicly approved assets in the system, including connections with DOE's Office of Scientific and Technical Information (OSTI) systems, Data.gov, and Re3Data. This approach ensures projects are complying with Federal requirements while raising visibility for researchers' published data products to promote discoverability and reuse.

EDX supports a wide variety of file types and formats, including:

- Data
- Metadata
- Software and related tools
- Articles (provided an accompanying Government-use license is active).

EDX is flexible and accepts all file formats.

Information provided to EDX will be made public unless authorized under the resulting award. Additional information on EDX is available at <https://edx.netl.doe.gov/about>.

When you submit data products to EDX, you must register it with a digital object identifier (DOI) through OSTI to ensure more visibility in other search repositories (i.e., osti.gov, data.gov, Google Scholar, etc.). You can establish the OSTI DOI through an application programming interface (API) by completing just a few additional fields.

You must coordinate with the Project Manager annually to determine if you have data you must submit to EDX and to identify the proper file formats before submitting. You must submit all final data products to EDX before project completion.

5. Invoice Review and Approval

Consult the table in **NOFO Part 1, *Post-Award Requirements and Administration***, to determine if this provision is applicable to awards made under this NOFO. We use a

risk-based approach to determine how much supporting documentation we need to approve invoice payments. You may be required to provide some or all of the following items with requests for reimbursement:

- Summary of costs by cost categories
- Timesheets or personnel hours report
- Proof of compliance with the Davis-Bacon Act, if applicable, and electronic submittals of certified payroll reports
- Invoices or receipts for all travel, equipment, supplies, contractual, and other costs
- Uniform Commercial Code 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

6. Cost Share Payment

Consult the table in *NOFO Part 1, Post-Award Requirements and Administration*, to determine if this provision is applicable to awards made under this NOFO. We require recipients to contribute the cost share amount incrementally over the life of the award. The terms and conditions of the award will specify your cost share interval, such as by invoice period or by budget period. Your cost share for each interval must always reflect the overall cost share ratio negotiated by the parties (e.g., 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). When DOE provides FFRDC funding directly to the FFRDCs, you must provide project cost share at a percentage equal to 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 Grants Officer may approve a request to meet your cost share requirements on a less frequent basis than required by the terms and conditions of the award. Regardless of the interval you request, you must be up to date on cost share at each interval. You must send these requests to the grants officer during award negotiations and include:

- A detailed justification for the request
- A proposed schedule of payments, including amounts and dates
- A written commitment to meet that schedule
- Evidence that you complied with your cost share obligations to date

The grants officer must approve all such requests before they go into effect.

IX. Other Information

A. Government Right to Reject or Negotiate

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

B. Commitment of Public Funds

The Grants 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 Grants Officer, either expressed or implied, is invalid.

C. 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 award negotiation (including personal credit information of principals of a small business if we do not have enough information to determine the financial capability of the organization).

D. Requirement for Full and Complete Disclosure

You must fully and completely disclose all information requested. If you fail to do so, we may:

- Cancel award negotiations
- Modify, suspend, or cancel the funding agreement
- Initiate debarment proceedings or debarment
- Declare you ineligible to receive federal contracts, subcontracts, or financial assistance and benefits
- Apply civil or criminal penalties

E. Retention of Submissions

DOE retains copies of all applications and other submissions. By applying to DOE for funding, you consent to DOE retaining your submissions.

F. Intellectual Property (IP) Provisions

The standard DOE financial assistance intellectual property provisions that apply to the various recipient types discussed in the Title to Subject Inventions section below are located at <http://energy.gov/gc/standard-intellectual-property-ip-provisions-financial-assistance-awards>.

G. Title to Subject Inventions

A *subject invention* is any invention conceived or first actually reduced to practice in performance of work under a Federal award. An invention is any invention or discovery that is or may be patentable. Ownership of subject inventions is governed according to the authorities listed below:

- a. **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 nonprofit organizations³ may elect to retain title to their subject inventions and will be subject to certain [IP provisions](#).
- b. **Domestic Large Businesses:** DOE has issued a class patent waiver that applies to this NOFO. Under this class patent 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. To be eligible for the class patent waiver, a domestic large business must agree to class patent waiver [IP provisions](#), including that any products embodying or produced through the use of a subject invention will be substantially manufactured in the United States (See the U.S. Manufacturing Commitments section).
- c. **All other parties:** The U.S. Government obtains title to subject inventions unless a patent waiver is granted. Applicants not covered under (a) or (b) above may request in advance a patent waiver either before or within 30 days after the effective date of the award that will cover subject inventions made under the award (Federal Non-Nuclear Energy Act of 1974, 42 U.S.C. § 5908). Even if you do not request an advance waiver or the request is denied, you will have a continuing right under the award to request a patent waiver for identified inventions, i.e., individual subject inventions 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 [IP provisions](#).

H. Government Rights in Subject Inventions

Where 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 recipient or subrecipient who has elected to retain title to a subject invention (or their assignees or exclusive licensees) to grant a license to use the invention to a third party in certain

³ See 35 U.S.C. § 201 for definitions.

circumstances. In addition, the Government may grant licenses to use the subject invention when a recipient, subrecipient, or their assignees and exclusive licensees refuse to do so.

To date, DOE has never exercised its march-in rights.

I. U.S. Manufacturing Commitments

Refer to **NOFO Part 1, *Award Administration Information—Post-Award Requirements***, to determine if U.S. Manufacturing Commitments apply. If “U.S. Manufacturing Commitments” is not listed in the ***Applicable Post-Award Requirements and Administration*** table, it is not required.

One 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. In exchange for receiving taxpayer dollars to support a project, any products embodying any subject invention or produced through the use of any subject invention must be manufactured substantially in the United States unless the impacted entity can show to the satisfaction of DOE that it is not commercially feasible. Award terms, including the specific U.S. Competitiveness Provision that applies to the various types of recipients and projects, are available at <https://www.energy.gov/gc/standard-intellectual-property-ip-provisions-financial-assistance-awards>.

If you cannot meet the requirements of the U.S. Competitiveness Provision, you can request a modification or waiver.

More information and guidance on the U.S. Manufacturing Commitments and the waiver and modification request process, including the right to appeal, 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 according to a Determination of Exceptional Circumstances (DEC) under the Bayh-Dole Act and DOE Patent Waivers.

J. Subject Invention Utilization Reporting

To ensure recipients, subrecipients, and contractors holding title to subject inventions are taking the appropriate steps to commercialize subject inventions, DOE requires each recipient, subrecipient, and contractor holding title to a subject invention to submit annual reports on the use of the subject invention and efforts made by the recipient or its licensees or assignees to stimulate such use. The reports must include information on the:

- Status of development
- Date of first commercial sale or use
- Gross royalties received by the recipient
- Such other data and information as DOE may specify

K. Copyright

The recipient, subrecipients, and contractors 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 the work
- Prepare derivative works
- Distribute copies to the public
- Perform publicly and display publicly the copyrighted work

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

L. Personally Identifiable Information (PII)

All information you provide must, to the greatest extent possible, exclude personally identifiable information (PII). PII is information someone can use to distinguish or trace an individual's identity, such as the name, Social Security number, or biometric records alone or combined with other personal or identifying information linked to a specific individual, such as date and place of birth or mother's maiden name.

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

M. Annual Independent Audits

If a for-profit entity is a recipient and expends \$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, refer to 2 C.F.R. § 910.501 and Subpart F.

If an educational institution, nonprofit organization, or state or local government is a recipient or subrecipient and expends \$1,000,000 or more of Federal awards during the nonfederal entity's fiscal year, a Single or Program-Specific Audit is required. For additional information, refer to 2 C.F.R. § 200.501 and Subpart F.

Applicants and subrecipients 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 cost-share ratio.

N. Acronyms

Acronym	Spelled Out	Acronym	Spelled Out
AI	Artificial Intelligence	NEPA	National Environmental Policy Act
ANC	Alaska Native Corporation	NETL	National Energy Technology Laboratory
BABA	Build America, Buy America Act	NHPA	National Historic Preservation Act
CESER	Office of Cybersecurity, Energy Security, and Emergency Response	NOFO	Notice of Funding Opportunity
C.F.R.	Code of Federal Regulations	NSF	National Science Foundation
COI	Conflict of Interest	NSPM	National Security Policy Memorandum
CRADA	Cooperative Research and Development Agreement	OFCCP	Office of Federal Contractor Compliance Programs
DBA	Davis-Bacon Act	OIG	Office of Inspector General
DEC	Determination of Exceptional Circumstances	OMB	Office of Management and Budget
DMSP	Data Management and Sharing Plan	OTA	Other Transactions Authority
DOE	United States Department of Energy	PII	Personally Identifiable Information
DOI	Digital Object Identifier	PID	Digital Persistent Identifier
DOL	United States Department of Labor	PDF	Portable Document Format
EO	Executive Order	PRL	Physical Review Letters
EIV	Environmental Impact Volume	R&D	Research and Development
FCOI	Financial Conflicts of Interest	RD&D	Research, Development, and Demonstration
FEMP	Federal Energy Management Program	RTES	Research, Technology, and Economic Security
FFATA	Federal Funding and Transparency Act of 2006	SAM	System for Award Management
FFRDC	Federally Funded Research and Development Center	SCEP	Office of State and Community Energy Programs
IIJA	Infrastructure Investment and Jobs Act	SciENCv	Science Experts Network Curriculum Vita

IP	Intellectual Property	SMART	Specific, Measurable, Achievable, Relevant, and Timely
IRA	Inflation Reduction Act	SOPO	Statement of Project Objectives
LOW	Locations of Work	SSN	Social Security Number
M&O	Management and Operations	STEM	Science, Technology, Engineering, and Mathematics
NDA	Non-Disclosure Acknowledgement	UCC	Uniform Commercial Code
NEPA	National Environmental Policy Act	UEI	Unique Entity Identifier
NETL	National Energy Technology Laboratory	WP	Work Proposal