Financial Assistance
Notice of Funding Opportunity
Part 1

U.S. DEPARTMENT *of* ENERGY

Department of Energy (DOE)
Office of Electricity (OE)

Infrastructure Investment and Jobs Act (IIJA) – Speed to Power through Accelerated Reconductoring and other Key Advanced Transmission Technology Upgrades (SPARK) – [Grid Resilience and Innovation Partnerships (GRIP) Round 3]

Notice of Funding Opportunity Number: DE-FOA-0003580

Application due: May 20, 2026, 5:00 p.m. ET

Modifications

All Modifications to the Notice of Funding Opportunity (NOFO) are highlighted in green, in the body of the NOFO.

Mod No.	Date	Description
1	4/2/2026	• Changed Informational Webinar posting date. • Modified Section II.A.2 - Participant Limitations to clarify that Tennessee Valley Authority is eligible to apply as a subrecipient under all Topic Areas. • Modified Section III.F. - Topic Area 1: Grid Resilience (IIJA Section 40101(c)) to clarify the wording around applications that are not of interest, in order to be fully consistent with wording in the IIJA statute. • Section IV.C - Concept Paper to delete the sentence: "Each concept paper must be limited to a single concept, technology, or project."

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Before You Begin

Navigating the Notice of Funding Opportunity

To reduce the burden on applicants in the Notice of Funding Opportunity (NOFO) process and limit the length of the NOFO information requests, DOE separated the NOFO into two parts.

This document, NOFO Part 1, describes the DOE program goals and evaluation criteria, eligibility, and other components for each funding opportunity. NOFO Part 2 includes the fixed DOE requirements that generally do not change from NOFO to NOFO, including standard information for the application phase, expectations for award negotiations, and post-award requirements. Applicants must review both parts before applying. To assist you in the process, you will find references throughout this document to additional information found in Part 2.

You must take several one-time actions before applying. Some of these actions may take several weeks, so be sure to allow yourself enough time to complete them. If you do not complete all required steps, it could interfere with application and negotiation deadlines or your ability to receive an award if selected. If you have already completed the one-time registrations, make sure they are active and up to date. All registrations are free. You can find additional information in NOFO Part 2, *Get Registered*.

This announcement is published with NOFO Part 2 Version 3.0.

I. Basic Information

A. Key Facts

Issuing Agency	Department of Energy, Office of Electricity (OE)
Funding Opportunity Title	Infrastructure Investment and Jobs Act (IIJA) — Speed to Power through Accelerated Reconductoring and other Key Advanced Transmission Technology Upgrades (SPARK) — [Grid Resilience and Innovation Partnerships (GRIP) Round 3]
Announcement Version	Initial
Funding Opportunity Number	DE-FOA-0003580
Funding Instrument	Cooperative Agreements
Expected Total Available Funding	DOE anticipates approximately $1.9 billion to be available under this Funding Opportunity
Assistance Listing Number and Name	81.254 Grid Infrastructure Deployment and Resilience
Announcement Type	Research, Development and Demonstration (Deployment)
Funding Opportunity Description	SPARK is an opportunity to meet load demand growth and resource adequacy, and to address critical national, interregional, and regional needs. OE achieves these goals by stimulating investment in power system infrastructure and building partnerships between states, local governments, tribes, and power system operators to enhance reliability and affordability of the electric grid. Projects submitted under this NOFO must demonstrate measurable improvements in electric grid capacity and system value (usefulness), combining physical capacity gains, which include solutions such as reconductoring or other infrastructure upgrades with operational efficiency and/or flexibility from other Advanced Transmission Technologies (ATTs). Applications must show how these complementary technologies expand transfer capability, strengthen reliability and resource

KEY DATES
All deadlines are 5:00 p.m. ET unless indicated otherwise

Notice of Funding Opportunity Issue Date: March 12, 2026

Informational Webinar: March 20, 2026

Concept Paper Deadline: April 2, 2026

Application Deadline: May 20, 2026

Anticipated Selection Notification Date: August 2026

Anticipated Award Date: October 2026 – January 2027

Estimated Period of Performance: Oct '26/Jan '27 – Oct '30/Jan '31

	adequacy, and reduce consumer cost impact while utilizing existing rights of way. DOE will prioritize projects that can be implemented quickly to deliver durable physical upgrades and dynamic operational gains that together increase the value, performance, security, resilience, affordability, and reliability of the nation's electric grid.
Program Goals & Objectives	• *Stabilize* —to address existing constraints on the system. • *Optimize*—to improve performance of existing infrastructure. • *Grow*—to access dispatchable resources needed to reliably serve forecasted power demand.
Topic Areas	• Topic Area 1: Grid Resilience (IIJA Section 40101[c]) • Topic Area 2: Smart Grid (IIJA Section 40107) • Topic Area 3: Grid Innovation Program (IIJA Section 40103[b])

Eligible Applicants	For all topic areas, eligibility is restricted to domestic entities.
	
	Topic Area 1: Grid Resilience (IIJA Section 40101[c])
	• electric grid operator
	• electricity storage operator
	• electricity generator
	• transmission owner or operator
	• distribution provider
	• fuel supplier
	• any other relevant entity, as determined by the Secretary.
	
	Topic Area 2: Smart Grid (IIJA Section 40107)
	• Domestic Entities
	  ○ institutes of higher education
	  ○ for-profit entities
	  ○ non-profit entities
	  ○ state and local government entities
	  ○ Indian tribes
	
	Topic Area 3: Grid Innovation Program (IIJA Section 40103[b])
	• state
	• combination of two or more states
	• Indian tribe
	• unit of local government
	• public utility commission.

eXCHANGE URL and Helpdesk	Infrastructure eXCHANGE: Funding Opportunities InfrastructureExchangeSupport@hq.doe.gov
NOFO Email	DE-FOA-0003580@netl.doe.gov

1. Funding Details

Multiple Topic Areas

DOE anticipates approximately $1.9 billion for FY2026.

Topic Area 1: Grid Resilience (IIJA Section 40101[c])

- Approximate total available funding: $427 million in FY2026
- Approximate number of awards: 5–10
- Approximate dollar amount of individual awards (DOE Share): $10,000,000–$100,000,000[1]
- Minimum cost share required: 50% of the total project costs[2]
    - Exception for small utilities: The minimum cost share required for an eligible small utility (sells no more than 4,000,000 megawatt hours (MWh) of electricity per year) is 25% of total project costs.[3]
    - Section II, Part C.1 provides additional information on Cost Sharing and the table below shows the conversion calculation of the cost match requirement to cost sharing.

Table 1: Cost Match to Cost Share conversion

Topic Area 1: Section 40101c The following shows how the statutory cost *match* percentage (which is based on a percentage of the federal share) is converted to a cost *share* percentage (which is based on total project costs), for purposes of this NOFO and resulting awards.						
Maximum Federal Share (S)	**Entity Type**	**Non-Federal Minimum Cost Match Required (%)**	**Calculated Non-Federal Minimum Cost Match (S)**	**Total Project Cost (S)**	**Calculated Federal Share of Total Project Costs (%)**	**Calculated Non-Federal Cost Share of Total Project Costs (%)**
$100,000,000	Eligible Entity (except for Small Utilities)	100%	$100,000,000	$200,000,000	50%	50%
$100,000,000	Small Utility	33.33%	$33,330,000	$133,330,000	75%	25%

[1] DOE cannot award a cooperative agreement to an eligible entity greater than "the total amount that the eligible entity has spent in the previous 3 years on efforts to reduce the likelihood and consequences of disruptive events". DOE will interpret "efforts to reduce the likelihood and consequences of disruptive events" as those activities, technologies, equipment, and hardening measures eligible for award under this provision.

[2] A 50% *cost share* requirement is equivalent to the 100% *cost match* required by the statute. Cost share is a percentage of total project costs, and cost match is a percentage of the DOE share. This NOFO uses *cost share* rather than *cost match* for calculations and to keep terminology consistent across all topic areas and projects.

[3] A 25% *cost share* is equivalent to a 1/3 *cost match* required by the statute. Cost share is a percentage of total project costs, and cost match is a percentage of the DOE share. This NOFO uses *cost share* rather than *cost match* for calculations and to keep terminology consistent across all topic areas and projects.

- Approximate award project period: up to 48 months
- As required by law, 30% of the total funding available for Topic Area 1 must be set aside for small utilities (entities that sell no more than 4,000,000 MWh of electricity per year.) (42 U.S.C. § 18711[c][5]). DOE anticipates approximately three to six awards will go to small utilities, provided they are an eligible applicant.

Topic Area 2: Smart Grid (IIJA Section 40107)

- Approximate total available funding: $614 million in FY2026
- Approximate number of awards: 25–40
- Approximate dollar amount of individual awards (DOE Share): $10,000,000–$50,000,000
- Minimum cost share required: 50% of the total project costs
  - Section II, Part C.1 provides additional information on cost sharing.
- Approximate award project period: up to 48 months

Topic Area 3: Grid Innovation Program (IIJA Section 40103[b])

- Approximate total available funding: $862 million in FY2026
- Approximate number of awards: 3–8
- Approximate dollar amount of individual awards (DOE Share): $100,000,000–$250,000,000
- Minimum cost share required: 50% of the total project costs
  - Section II, Part C.1 provides additional information on cost sharing.
- Approximate award project period: up to 48 months

2. Period of Performance

DOE anticipates making awards comprised of one budget period with Go/No-Go Decision Points. Project continuation will be contingent upon several elements, including satisfactory performance and DOE's Go/No-Go decision. You can find a complete list and more information on the Go/No-Go review in NOFO Part 2, *Award Administration Information*.

B. Executive Summary

Projects funded under this NOFO must demonstrate measurable improvements in electric grid capacity and system value (usefulness), combining physical capacity gains from reconductoring with operational efficiency and/or flexibility from other Advanced Transmission Technologies. Applications must show how these complementary technologies:

- Expand transfer capability
- Strengthen reliability and resource adequacy
- Reduce consumer cost impact while utilizing existing rights of way

DOE will prioritize projects that can be implemented quickly to deliver durable physical upgrades and dynamic operational gains that together increase the value, performance, security, resilience, affordability, and reliability of the nation's electric grid. Detailed technical descriptions of the topic areas are provided in the sections that follow.

C. Agency Contact Information

For questions relating to this NOFO, email us at DE-FOA-0003580@netl.doe.gov.

II. Eligibility

To be considered for substantive evaluation, an applicant's submission must meet the criteria set forth below. If the application does not meet these eligibility requirements, it will be considered ineligible and removed from further evaluation and ineligible for any award. DOE will not make eligibility determinations for potential applicants prior to the date on which applications to this NOFO must be submitted. The decision of whether to apply in response to this NOFO lies solely with the applicant. The information included here is specific to eligibility requirements for this NOFO. For eligibility requirements applicable to all NOFOs, please consult the NOFO Part 2, *Eligibility*.

A. Eligible Applicants

1. Restricted Eligibility

In accordance with 2 C.F.R. 910.126, Competition, DOE restricted eligibility for Topic Area 1 and Topic Area 3 to incorporate the eligibility requirements set forth in sections 40101[c] and 40103[b] of the Infrastructure Investment and Jobs Act, as codified at 42 U.S.C. § 18711 and 42 U.S.C. § 18712 [c], respectively.

2. Domestic Entities

Recipients:

The following domestic entities are eligible to participate as a recipient of this NOFO:

Topic Area 1: Grid Resilience (IIJA Section 40101[c])

- Electric grid operator
- Electricity storage operator
- Electricity generator
- Transmission owner or operator
- Distribution provider
- Fuel supplier
- Any other relevant entity, as determined by the Secretary

Topic Area 2: Smart Grid (IIJA Section 40107)

- Domestic Entities
    - Institutes of higher education (as defined in Title 20 U.S.C. § 1001)
    - For-profit organizations
    - Non-profit organizations
    - State and local government entities
    - Indian tribes (as defined in Section 4[e] of the Indian Self-Determination and Education Assistance Act, 25 U.S.C. § 5304)[4]

Topic Area 3: Grid Innovation Program (IIJA Section 40103[b])

[4] *Indian Tribe*, as defined in Section (e) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. § 5304), means any Indian Tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established under the Alaska Native Claims Settlement Act (85 Stat. 688) [43 U.S.C. § 1601, et

- State
- Combination of two or more states
- Indian tribes (as defined in Section 4[e] of the Indian Self-Determination and Education Assistance Act, 25 U.S.C.§ 5304)[5]
- Unit of local government
- Public utility commission

Subrecipients:

The following types of domestic entities are eligible to participate as a subrecipient of this NOFO:

- Institutions of higher education (See 20 U.S.C. § 1001 for the definition)
- For-profit organization
- Nonprofit organization
- State and local governmental entities
- Indian tribes (as defined in section 4[e] of the Indian Self-Determination and Education Assistance Act, 25 U.S.C. § 5304)[6]

To qualify as a domestic entity, the entity must:

- Be organized, chartered, or incorporated (or otherwise formed) under the laws of a state or territory of the United States or under the laws of the United States
- Have majority domestic ownership and control
- Have a physical place of business in the United States

Participant Limitations

Participation of the following entities is limited as follows:

- Federal agencies and instrumentalities (other than DOE) are eligible to participate as a subrecipient but are not eligible to apply as a recipient, except for the Tennessee Valley Authority, which is eligible to participate as a recipient ~~and as a subrecipient~~ under Topic Area 1.
- The National Energy Technology Laboratory (NETL) is not eligible for award under this announcement and may not be proposed as a subrecipient on another entity's application. An application that includes NETL as a recipient or subrecipient will be considered non-responsive.

3. Foreign Entity Participation

Foreign entities are those entities that do not meet the definition of domestic entity as stated in Section II.A.2, above. In general, foreign entities are not eligible to apply as either a recipient or

[5] *Indian Tribe*, as defined in Section 4(e) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. § 5304), means any Indian Tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established according to the Alaska Native Claims Settlement Act (85 Stat. 688) [43 U.S.C. § 1601, et seq.], is eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

[6] *Id.*

subrecipient. In limited circumstances, we may approve a waiver to allow a foreign entity to participate as a recipient or subrecipient.

A foreign entity may apply for this NOFO, but the application must be accompanied by an explicit written waiver request. Likewise, if you want to include a foreign entity as a subrecipient, you must submit a separate explicit written waiver request in your application for each proposed foreign subrecipient.

You can find the requirements for submitting a foreign entity waiver request in NOFO Part 2, *Application Content Requirements*. If we deny your waiver request, you cannot appeal our decision.

4. Performance of Work in the United States

All work for awards under this NOFO must be performed in the United States. To request a waiver of this requirement, you must submit an explicit waiver request in the application. Without an approved waiver, costs associated with any work performed outside of the United States will not be allowable under the award. NOFO Part 2, *Application Content Requirements* lists the requirements for submitting a foreign work waiver request.

5. Ineligible Participants

The following entities are ineligible for this NOFO as a recipient, subrecipient, or subcontractor:

- Entities banned from doing business with the U.S. government, such as entities debarred, suspended, or otherwise excluded from or ineligible for federal programs (2 C.F.R 200.214)
- Entities identified on the Department of the Treasury, Office of Foreign Assets Control's "Specially Designated Nationals List" ([OFAC - Sanctions List Service [treas.gov]])
- Nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995

Entity of Concern Prohibition

Entities of Concern are prohibited from participating in projects under this NOFO. You can find details and definitions in NOFO Part 2, *Eligibility, Other Eligibility Information, Entity of Concern Prohibition*.

B. Limitation on Number of Concept Papers and Applications Eligible for Review

An entity may submit only one concept paper and one associated application for each topic area of this NOFO. If an entity submits more than one, we will only review the last timely submission. Any other submissions listing the same entity as the applicant for the same topic area will not be eligible. This limitation does not prohibit an entity from collaborating on other applications (e.g., as a potential subrecipient or partner) so long as the entity is only listed as the applicant on one concept paper and one associated application for each topic area of this NOFO.

C. Cost Sharing

Applicants are expected to follow through on estimated cost share commitments proposed in their applications if selected for award negotiations. You can find more information on cost sharing in NOFO Part 2, *Eligibility*.

1. Cost Share Requirements

Topic Area	Topic Area Title	Cost Share Requirement
1	Grid Resilience (IIJA section 40101[c])	The cost share must be at least 50% of the total project costs and must come from nonfederal sources unless otherwise allowed by law.[7] Exception for small utilities: The cost share for an eligible small utility (sells no more than 4,000,000 MWh of electricity per year) is at least 25% of the total project costs and must come from nonfederal sources unless otherwise allowed by law.[8]
2	Smart Grid (IIJA section 40107)	The cost share must be at least 50% of the total project costs and must come from nonfederal sources unless otherwise allowed by law.
3	Grid Innovation Program (IIJA section 40103[b])	The cost share must be at least 50% of the total project costs and must come from non-federal sources unless otherwise allowed by law (section 988 of the Energy Policy Act of 2005 [42 U.S.C. 16352[c]).[9]

Total project costs are the sum of the government share, including costs from National Laboratories and Federal Funded Research and Development Centers (FFRDC) costs if applicable, and the recipient share of project costs.

Federal loans, considered non-appropriated funds, may be used as cost share as long as authorized under the loan terms. The same applies to nonfederal loans and debt financing.

[7] A 50% *cost share* requirement is equivalent to the 100% *cost match* required by the statute. Cost share is a percentage of total project costs, and cost match is a percentage of the DOE share. This NOFO uses *cost share* rather than *cost match* for calculations and to keep terminology consistent across all topic areas and projects.

[8] A 25% *cost share* is equivalent to a 1/3 *cost match* required by the statute. Cost share is a percentage of total project costs, and cost match is a percentage of the DOE share. This NOFO uses *cost share* rather than *cost match* for calculations and to keep terminology consistent across all topic areas and projects.

[9] Energy Policy Act of 2005, Pub. L. 109-58, Sec. 988. Also see 2 C.F.R. 200.306 and 2 C.F.R. 910.130 for additional cost sharing requirements.

2. Unallowable Cost Share Sources

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

- Cost share that does not meet:
  - Requirements set forth in 2 C.F.R. § 200.306 and 910.130;
  - Cost principles set forth in 2 C.F.R. § 200.400-476 and 2 C.F.R. § 910.352; or
  - For State Energy Programs, refer to 10 C.F.R. § 420.
- Cost share derived from the DOE loan program;
- Revenues or royalties from the prospective operation of an activity beyond the project period;
- Proceeds from the prospective sale of an asset of an activity;
- Federal funding or property (e.g., federal grants, equipment owned by the Federal Government);
- Expenditures that were reimbursed under a separate federal program;
- Cash or in-kind contributions used to meet cost share requirements for another federal project or program;
- Existing data as an in-kind contribution (e.g., data owned by an entity, that is not routinely sold commercially but is instead donated to the project and assigned a value);
- In general, deferred or avoided costs such as unrealized tax credits; or
- DOE Loan Guarantees

D. FFRDC Eligibility Criteria

National Laboratories and FFRDCs are not eligible to apply for funding as a prime recipient and may not be proposed as a subrecipient on another entity's application. This restriction applies to both DOE/NNSA and non-DOE/NNSA National Laboratories and FFRDCs.

III. Program Description

A. Background and Context

The Office of Electricity is issuing this NOFO. Awards made under this NOFO will be funded with appropriations under the Infrastructure Investment and Jobs Act (IIJA), P.L. 117 - 58. Coupled with the Secretary's orders to support the Administration's priorities to unleash American energy and address the nation's energy emergency, the IIJA provides a mechanism to:

- Protect "the United States' economic and national security and military preparedness by ensuring that an abundant supply of reliable energy is readily accessible in every State and territory of the Nation"
- Promote "the integrity and expansion of our Nation's energy infrastructure—from coast to coast" as an immediate and pressing priority for the protection of the United States' national and economic security
- Promote the use of "all available power generation resources, particularly those secure, redundant fuel supplies that are capable of extended operations" [10,11,12,13]

Additional DOE resources to inform applicants:

- DOE released a Resource Adequacy Report in July 2025 identifying regions most vulnerable to outages under various weather and retirement scenarios and offering capacity targets needed to restore acceptable reliability.[14]
- DOE launched the Speed to Power initiative in September 2025, a federal action to accelerate the speed of large-scale grid infrastructure project development for both transmission and generation.
- DOE funded ATT and High-Performance Conductors (HPC) research and deployment and planning technical studies at national labs and with U.S. industry and academia. These groups have studies you can cite as part of your application.
- Digital Assurance Technical Assistance: DOE provides educational resources, training, and technical assistance from its world-class experts and researchers at the national labs as part of the Program.
- DOE initiated a state technical assistance program and expanded technical assistance offerings for utilities and regional planners in long-term transmission planning.[15,16]

[10] Secretary Wright Acts to "Unleash Golden Era of American Energy Dominance" | Department of Energy.
[11] Executive Order 14156 (Declaring a National Energy Emergency).
[12] Unleashing American Energy – The White House.
[13] Strengthening the Reliability and Security of the United States Electric Grid – The White House.
[14] Department of Energy Releases Report on Evaluating U.S. Grid Reliability and Security | Department of Energy.
[15] State TA Program | Energy Markets & Policy.
[16] Grid Deployment Office Expands Utility-Specific Long-Term Transmission Planning Technical Assistance Offerings | Department of Energy.

- The Advanced Conductor Scan Report provides detailed information on the benefits of reconductoring and how advanced conductors will play an important role in solving challenges to the grid.

B. Program Purpose

The Office of Electricity leads the U.S. Department of Energy's Research, Development, Demonstration and Deployment (RDD&D) efforts to strengthen and modernize our nation's power grid and maintain reliable, affordable, and secure electricity delivery infrastructure.[17] OE is dedicated to pioneering innovations to advance a 21st-century grid and the tenets of Gold Standard Science, where applicable.[18]

The Grid Resilience and Innovation Partnerships (GRIP) Program provides up to $10.5 billion in competitive funding over five years to states, Indian tribes, electric utilities, and other eligible recipients to strengthen grid resilience and innovation (sections 40101[c], 40103[b], and 40107 of the IIJA). OE administers this program with NETL.[19]

The GRIP Program had two prior funding opportunities, covering fiscal years (FY)2022–2023 and FY2023–FY2024. To clarify the program's new emphasis, this funding opportunity has been renamed **S**peed to **P**ower through **A**ccelerated **R**econductoring and other **K**ey Advanced Transmission Technology Upgrades (SPARK). Training elements are not allowable costs for this NOFO, either as DOE Share or Cost Share, unless specific to the operation and management of the technology (EO 14236 [March 14, 2025]).[20]

SPARK is an opportunity to meet load demand growth and resource adequacy and to address critical national, interregional, and regional needs. OE achieves these goals by stimulating investment in power system infrastructure and building partnerships between states, local governments, tribes, and power system operators to enhance reliability and affordability of the electric grid. A comprehensive approach that considers all opportunities within the IIJA should include coordinated effort between stakeholders to guide investment strategies for improving resilience beyond what the IIJA can directly support.

C. Program Goals and Objectives

The Office of Electricity is looking for projects that will help lower electricity costs by expanding transfer capability, relieving congestion, and improving the efficiency and reliability of the grid. To ensure near-term additions of dispatchable capacity, projects that include non-dispatchable, intermittent generation, such as wind or solar, are not considered responsive to this

[17] https://www.energy.gov/oe/office-electricity.
[18] https://www.energy.gov/gold-standard-science.
[19] The GRIP program was administered through the Grid Deployment Office (GDO) until December 2025, when GDO merged under OE as part of a DOE re-alignment.
[20] EO 14236 revoked EO 14126, "Investing in America and Investing in American Workers" and EO14119, "Scaling and Expanding the Use of Registered Apprenticeships in Industries and the Federal Government and Promoting Labor-Management Forums" https://www.federalregister.gov/documents/2025/03/20/2025-04866/additional-rescissions-of-harmful-executive-orders-and-actions.

NOFO. Instead, DOE is prioritizing projects that can be implemented quickly to deliver durable physical upgrades and dynamic operational gains that increase the value, performance, security, affordability, and reliability of the nation's electric grid.

The kinds of projects OE is prioritizing include those such as:

- Reconductoring with advanced conductors
  - These projects could increase the power-carrying capability of existing transmission corridors, thereby allowing more electric energy to reach load centers and deferring the need for costly new infrastructure.
- Advanced Transmission Technologies that can increase the usable capacity of existing assets in real time
  - These projects could reduce congestion charges, thereby minimizing the need for costly curtailments and potentially deferring the need for larger transmission projects.
- Large-scale, cross-regional transmission upgrades and coordinated planning
  - These projects could further lower electricity costs by opening pathways for power to flow between regions, allowing the grid to support new and existing loads.

Collectively, this program seeks projects that would transform existing infrastructure into higher performing, more resilient, and more economically efficient systems, which translates to more affordable electricity. OE will collect data from the SPARK/GRIP projects and prior-year project data to evaluate key takeaways.

OE anticipates integrating any project data submitted under the performance of awards into DOE's Metrics and Benefits Program. This program uses submitted information to conduct comprehensive analyses. The primary objective is to quantify and evaluate the benefits and impacts of the selected projects from this NOFO, contributing to a broader understanding of its contributions to DOE's mission and objectives.

Projects selected under this NOFO will deploy a range of technical solutions at all levels of the electric system but will primarily focus on grid systems and components. Detailed technical descriptions of the specific topic areas are provided in the sections that follow.

D. Expected Performance Goals/Outcomes

Projects submitted under this NOFO must demonstrate measurable improvements in electric grid capacity and system value (usefulness) as well as physical capacity gains. Examples include solutions such as reconductoring or other infrastructure upgrades with operational efficiency or flexibility from other ATTs. Applications must show how their projects expand transfer capability, strengthen reliability and resource adequacy, and reduce consumer cost impact while using existing rights of way. DOE will prioritize projects that can be implemented quickly to deliver durable physical upgrades and dynamic operational gains that together increase the value, performance, security, affordability, and reliability of the nation's electric grid.

Applicants must propose projects that support one or more of the following benefits:

(a) Capacity Increase and Deliverability

- Demonstrated ≥ 50% increase in power-carrying or transfer capability for physical upgrades (e.g., reconductoring) or ≥ 25% increase in transfer capability for operational and digital upgrades (including, but not limited to topology optimization, dynamic line ratings (DLR), and dynamic protection schemes).
- Quantified increase in transfer capability to enable the deliverability of stranded or underused generation (megawatt (MW) enabled or MWh delivered).
- Demonstrated ability to enable new or high-growth load areas, that may include data centers, industrial clusters, and manufacturing corridors.

(b) Reliability and Resource Adequacy

- Measurable improvement in system reliability (e.g., reduction in contingency severity, damping or reductions in oscillations, outage duration and frequency, loss of load probability, planning reserve margin, or unserved energy).
- Documented reduction in transmission congestion, losses, or curtailment during high-risk hours.
- Avoided capital costs to meet resource adequacy requirements (e.g., planning reserve margins) in affected balancing area or planning region.
- Enhanced capability to share reserves or transfer across seams (if applicable) to strengthen regional reliability.

(c) Affordability and Consumer Benefit

- Verified production or capital cost savings.
- Demonstrated cost-effectiveness relative to a new transmission build.
- Avoided or deferred transmission facilities in transmission planning processes.
- Demonstrated mitigations and reductions to risk and uncertainty in operations.
- Demonstrated payback period ≤ 10 years.

(d) Replicability and Scale-Up Framework (if applicable)

- Documented approach for replication and permitting acceleration.
- Demonstrated integration of data, models, or cost-benefit methods that can inform other DOE, state, or regional planning processes.

In accordance with President Trump's Executive Order 14154, Unleashing American Energy, projects will be prioritized by their ability to deliver appreciable results quickly in light of our national energy emergency stressing the need for a reliable, affordable, and secure supply of energy to sustain the basics of modern life and military preparedness.

E. Topic Areas

Topic Area 1: Grid Resilience

Authority: IIJA section 40101(c)

1. Objectives

This topic area supports projects that strengthen grid reliability and resilience through reconductoring and deploying other ATTs. These projects must expand the transfer capability of existing transmission or sub-transmission, improve system flexibility, and reduce the likelihood and consequences of disruptive events.

Projects must replace or supplement existing hardening or reliability efforts and reduce the likelihood and consequences of disruptive events through reconductoring and other ATTs. Applications must demonstrate measurable capacity and resilience gains and deliver regional benefits consistent with the statutory intent of IIJA section 40101(c) and the Administration's Executive Orders on Unleashing American Energy and Strengthening the Reliability and Security of the U.S. Electric Grid.

DOE is looking for applications that:

- Replace existing conductors with advanced, high-capacity, low-sag conductors to increase the power-carrying capacity along existing rights-of-way.
- Deploy ATTs such as dynamic line rating, advanced power flow control, topology optimization, and flexible transformers to enhance transfer capability, reduce congestion, and improve situational awareness.

2. Technical Approaches of Interest

Applicants should propose transformational approaches to modernize infrastructure; mitigate hazards; and advance reliability, resilience, and energy security. Applications must focus on one or more of the following:

(a) Transmission System Expansion and Upgrades:

- Transmission Reconductoring: Reconductor existing transmission lines using conventional or advanced conductors to achieve at least a 50% increase in transfer capability.[21]
- Ancillary Hardening Upgrades: Incorporate reconductoring and system upgrades as part of hardening initiatives that enhance overall reliability and resilience.

(b) Advanced Transmission Technologies and Advanced Solutions:

- ATT Deployment: Use dynamic line rating, modular power flow control, flexible transformers, topology optimization, and software-controlled power flow devices to optimize the grid, increase operational efficiency, and improve resilience without new rights-of-way.

[21] Generally, advanced transmission conductors are technologies that can be used to increase the pace of transmission capacity growth at a lower cost and with less impact to communities than traditional conductors. For additional information on advanced conductors, see Applied Grid Solutions - Idaho National Laboratory.

- Projects that use advanced technologies or reconductoring to identify, minimize, or mitigate the risk of specific hazards (such as, but not limited to, wildfires), which includes but is not limited to projects that include reconductoring and ATTs that improve overall reliability and resilience.

Eligible activities can include:

- Replace, add, or modify terminal equipment, bus work, circuit breakers, and transformers needed to accommodate higher current, voltage, or thermal limits.
- Modernize protection and control systems to maintain coordination and system stability under new operating conditions.
- Integrate communication and control infrastructure that enables real-time operation of ATTs and advanced monitoring.
- Install measurement and validation equipment to verify performance metrics (transfer capability, reliability, etc.).

These activities are of interest only when they are necessary to realize or safely operate the reconductoring or ATT improvements. Standalone substation replacements or expansions not directly tied to such projects are not of interest under this Topic Area.

3. Requirements

- Projects must be supplemental to existing or planned reliability, resilience, and hardening efforts.
- Projects should not include construction of new generation or storage facilities, except where such facilities are directly integrated as control elements of ATT systems for resilience.
- Applicants must provide basic technical specifications of the currently operating and proposed systems, including conductor type, rating, line length, and connecting buses or substations.
- Applicants must demonstrate a quantifiable increase in transfer capability attributable to the proposed project. This demonstration shall include baseline transfer capability values and projected post-project transfer capability values, expressed in MW and as a percentage increase, supported by industry-standard engineering models, simulations, or validated performance data.
- Applicants must demonstrate a benefit to the grid, consumers, or national priorities by documenting how the proposed project contributes to one or more of the following areas:
  - Supporting load growth and reducing large-load interconnection costs
  - Alleviating congestion and reducing electricity consumer costs
  - Increasing power system reliability or resource adequacy.

Supporting documentation can include reports, studies, or supplemental analysis quantifying the expected benefit.

Topic Area 2: Smart Grid

Authority: IIJA Section 40107

1. Objectives

The Smart Grid Topic Area aims to support projects focused on deploying advanced grid technologies. This initiative is looking for innovative application of cutting-edge, market-ready technologies, which may include new devices, materials, engineering designs, or software tools. These projects are intended to strengthen grid reliability and resilience through reconductoring and deploying other Advanced Transmission Technologies. Projects will expand the transfer capability of existing transmission and sub-transmission lines, improve system flexibility, and reduce the likelihood and consequences of disruptive events. This topic supports projects that enhance the efficiency, reliability, and operational flexibility of the electric grid through smart grid technologies that enable real-time monitoring, control, and optimization of grid assets. DOE will focus primarily on projects that combine Advanced Transmission Technologies and reconductoring to achieve measurable increases in transfer capability and operational intelligence.

Projects must demonstrate how digitalization, automation, and data-driven technologies improve existing transmission and sub-transmission systems while delivering measurable affordability benefits to ratepayers through reduced congestion costs, deferred capital investment, and improved efficiency of existing assets. Projects should provide quantifiable improvements in grid performance, situational awareness, and resilience through modernization and smart control.

DOE seeks applications for smart grids, specifically those designed to support new load integration, that:

- Integrate ATTs or reconductoring in ways that enable dynamic operations and increase transfer capability on existing rights-of-way
- Deploy advanced conductors and smart grid technologies that improve operational flexibility, reliability, and affordability
- Enhance data visibility and control through communications, automation, and analytics that directly support improved reliability
- Provide replicable approaches for regional scale-up and commercialization of combined ATTs and reconductoring deployments
- Support integration of backup generation enabling solutions (e.g., controls, telemetry, coordination) tailored for large load integration with mechanisms for grid-support services

2. Technical Approaches of Interest

(a) Advanced Transmission Technologies

Deploy technologies in a smart grid that increase operational flexibility through smart, data-driven control. Approaches of Interest include:

- DLR and real-time thermal rating systems, such as ambient adjusted line ratings
- Topology optimization and advanced power flow control technologies that dynamically reroute power
- Flexible AC Transmission Systems (FACTS) or modular flow controllers
- Digital substation automation to integrate and control ATTs across multiple assets

(b) Reconductoring as a Smart Grid Enabler

Reconductoring is eligible under Section 40107 only when it directly supports smart grid functionality. DOE is looking for projects that:

- Replace existing conductors with advanced conductors compatible with other ATTs
- Integrate optical ground wire or embedded sensors to enable data collection and communications for grid monitoring
- Perform targeted reconductoring that unlocks the full potential of ATT deployments and allows digital controls to operate at scale
- Upgrade associated protection, communication, or substation equipment required to realize the benefits of digital operations and automated power flow control

Standalone reconductoring projects that do not include smart grid integration are not of interest under this Topic Area.

(c) Communications and Cybersecurity Integration

Projects should incorporate or use advanced communication systems, optical fiber, secure wireless or equivalent to enable real-time operation of the Smart Grid. Cybersecurity measures consistent with DOE and NIST Smart Grid Frameworks, as well as North American Electric Reliability Corporation Reliability Standards, are required.

3. Requirements

- Applicants must provide basic technical specifications of the currently operating and proposed systems, including conductor type, rating, line length, and connecting buses or substations.
- Applicants must demonstrate a quantifiable increase in transfer capability attributable to the proposed project. This demonstration must include baseline transfer capability values and projected post-project transfer capability values, expressed in MW and as a percentage increase, supported by industry-standard engineering models, simulations, or validated performance data.
- Applicants must demonstrate a benefit to the grid, consumers, or national priorities by documenting how the proposed project contributes to one or more of the following areas:
  - Supporting load growth and reducing large-load interconnection costs
  - Alleviating congestion and reducing electricity consumer costs
  - Increasing power system reliability or resource adequacy

Supporting documentation can include reports, studies, or supplemental analysis quantifying the expected benefit.

Topic Area 3: Grid Innovation

Authority: IIJA section 40103(b)

1. Objectives

The Grid Innovation Topic Area supports high-impact, innovative projects that enhance grid reliability and resilience, with a focus on transmission systems that facilitate development of new large loads. This topic prioritizes large-scale, multi-jurisdictional demonstrations aimed at expanding transfer capability between transmission-planning regions.

DOE will concentrate on projects that use reconductoring, other Advanced Transmission Technologies, and advanced coordination tools to alleviate system constraints and enable measurable, affordable expansion of transfer capability. Applications that offer novel technical, planning, or organizational approaches that are replicable and can be scaled to support the efficient integration of new large loads will take priority. Furthermore, successful applications must demonstrate replicable approaches that accelerate permitting and interconnection processes, thereby improving overall system reliability and affordability.

Required partnerships among states, tribes, utilities, Independent System Operators (ISOs) and Regional Transmission Organizations (RTOs), and regional planners are essential to ensure projects deliver cross-jurisdictional benefits and promote a robust, integrated grid capable of supporting substantial new electrical demand.

2. Technical Approaches of Interest

- Transmission Expansion and Upgrades: Substantially upgrade transmission lines and associated facilities to achieve at least a 50% increase in transfer capability, with an emphasis on supporting power delivery to new large loads and expanding transfer capability between planning regions.
- Advanced Transmission Technologies: dynamic line rating, advanced power flow control, and digital automation to optimize real-time transfer capability and manage operational complexities.
- Cross-Regional Coordination and Planning: Develop shared modeling, cost allocation mechanisms, and streamlined permitting frameworks across RTO/ISO boundaries to facilitate efficient planning, operation, and reconductoring of transmission infrastructure for new large loads.

3. Requirements

- Applicants must provide a cross-regional capacity and reliability assessment demonstrating modeled improvements.
- Applicants must provide basic technical specifications of the currently operating and proposed systems, including conductor type, rating, line length, and connecting buses or substations.
- Applicants must demonstrate a quantifiable increase in transfer capability attributable to the proposed project. This demonstration must include baseline transfer capability values and projected post-project transfer capability values, expressed in MW and as a percentage increase, supported by industry-standard engineering models, simulations, or validated performance data.

- Applicants must demonstrate a benefit to the grid, consumers, or national priorities by documenting how the proposed project contributes to one or more of the following areas:
    - Supporting load growth and reducing large-load interconnection costs
    - Alleviating congestion and reducing electricity consumer costs
    - Increasing power system reliability or resource adequacy

Supporting documentation can include reports, studies, or supplemental analysis quantifying the expected benefit.

F. Applications Specifically Not of Interest

The following types of applications will be deemed non-responsive and will not be reviewed or considered (please also refer to the Responsiveness Review section below). [22]

All Topic Areas:

- Projects that prioritize connection to intermittent generation sources that are not in line with the Administration's goals of energy dominance
- Applications that fall outside the technical parameters specified in Background and Context above and the Topic Areas section above
- Applications for proposed technologies that are not based on sound scientific principles (e.g., violate the laws of thermodynamics)
- Applications that dedicate a significant budget allocation toward funding customer rebate or incentive programs
- Applications that address system commissioning or systems operations (not deployment ready), i.e., applications that do not meet at least the minimum Technical Readiness Level (TRL) of 7 (of 9 scale) where full-scale, similar (prototypical) system was demonstrated in relevant environment [23]
- Applications that incorporate an ATT or HPC solution that do not have technology that meets a minimum of TRL 6—system/subsystem model or prototype demonstrated in a relevant environment; all other technical solutions must meet a minimum of TRL 7—actual system completed and qualified through test and demonstration[24]

Topic Area 1: Grid Resilience (IIJA Section 40101(c))

Consistent with IIJA section 40101(e)(2), as codified at 42 USC § 18711(e)(2), the following activities are NOT eligible for funding under Topic Area 1:

- Construction of a new electric generating facility
- Construction of a new large-scale battery-storage facility that is not used for enhancing system adaptive capacity during disruptive events
- Cybersecurity

Topic Area 2: Smart Grid (IIJA Section 40107)

Consistent with 42 U.S.C. § 17386(c), qualifying Smart Grid investments do not include any of the following:

- Investments or expenditures for Smart Grid technologies, devices, or equipment that use specific tax credits or deductions under the Internal Revenue Code, as amended
- Expenditures for electricity generation, transmission, or distribution infrastructure or equipment not directly related to enabling Smart Grid functions

[22] Improving Oversight of Federal Grantmaking – The White House.

[23] Table 4. DOE Technology Readiness Level Scale, https://www.directives.doe.gov/terms_definitions/technology-readiness-level.

[24] Table 7. Hardware TRL Definitions, Descriptions and Supporting Information, https://www.directives.doe.gov/terms_definitions/technology-readiness-level.

- After the final date for state consideration of the Smart Grid Information Standard under section 2621(d)(17) 1 of Title 16, an investment that is not in compliance with such standard
- After development and publication by the National Institute of Standards and Technology protocols and model standards for interoperability of smart grid devices and technologies, an investment that fails to incorporate any of such protocols or model standards
- Expenditures for physical interconnection of generators or other devices to the grid except those that are directly related to enabling Smart Grid functions
- Expenditures for ongoing salaries, benefits, or personnel costs not incurred in the initial installation, training, or startup of smart grid functions
- Expenditures for travel, lodging, meals, or other personal costs
- Ongoing or routine operation, billing, customer relations, security, and maintenance expenditures
- Such other expenditures the Secretary determines not to be Qualifying Smart Grid Investments because they lack the ability to perform Smart Grid functions or lack a direct relationship to Smart Grid functions

Topic Area 3: Grid Innovation Program (IIJA section 40103(b))

- For applications that contain a public-private sector partnership, an application that does not demonstrate a meaningful level of collaboration among the entities
- Applications for projects in which applicants propose to sub-allocate funding according to a schema that lacks sufficient detail for DOE to evaluate their potential impact or that are presented at the concept-level stage
- Applications that focus primarily on conducting paper studies and do not include meaningful complementary deployment
- Technical assistance studies that do not benefit a wider potential stakeholder beneficiary, i.e., regional technical studies with an RTO/Utility would be preferred

G. Statement of Substantial Involvement

DOE anticipates awarding cooperative agreements under this NOFO, which include a statement of DOE's "substantial involvement" in the work performed under the resulting awards. For cooperative agreements, DOE does not limit its involvement to the administrative requirements of the award. Instead, DOE has substantial involvement in the direction and redirection of the technical aspects of the project. DOE's substantial involvement in resulting awards may include the following:

A. DOE shares responsibility with the recipient for management, control, direction, and performance of the project.
B. DOE may intervene in the conduct or performance of work under this award for programmatic reasons. Intervention includes interrupting or modifying the conduct or performance of project activities.
C. DOE may redirect or discontinue funding the project based on DOE's evaluation of the project at the Go/No-Go decision points.
D. DOE participates in major project decision-making processes.

H. Statutory Authority

The programmatic authorizing statutes are as follows:

- Public Law (PL) 95-91, DOE Organization Act, as amended
- PL 117-58, Infrastructure Investment and Jobs Act, Section 40101(c) (codified at 42 U.S.C. § 18711[c]), and section 40103(b) (codified at 42 U.S.C. § 18712[b])
- PL 109-58, Energy Policy Act 2005, as amended
- PL 110-140 Energy Independence and Security Act of 2007, as amended, including by IIJA section 40107 (codified at 42 U.S.C. § 17386)

Awards made under this announcement are subject to the OMB Guidance for Federal Financial Assistance (e.g., 2 C.F.R. Part 200) as adopted and DOE's Financial Assistance Regulations, 2 C.F.R. Part 910.

IV. Application Content and Form

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

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 such information is necessary to convey an understanding of the proposed project or to comply with a requirement in the NOFO. Applicants are advised not to include any critically sensitive proprietary detail.

If an application includes Proprietary Information, it is furnished to the Federal Government in confidence with the understanding that the information shall be used or disclosed only for evaluation purposes. 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.

Applications and other submissions containing Proprietary Information must be marked as described below. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under the Freedom of Information Act or otherwise. The Federal Government is not liable for the disclosure or use of unmarked information and may use or disclose such information for any purpose.

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

In addition:

- The header and footer of every page that contains trade secrets or business-sensitive, proprietary, or otherwise confidential information must say: "CONTAINS TRADE SECRETS, BUSINESS-SENSITIVE, PROPRIETARY, OR OTHERWISE CONFIDENTIAL INFORMATION EXEMPT FROM PUBLIC DISCLOSURE."
- Every line or paragraph containing such information must be clearly marked with double brackets or highlighting.

All application information is subject to public release under FOIA, except information that qualifies under a FOIA exemption. One of the exemptions is trade secrets or commercial or

financial information that is confidential or privileged. The Notice of Restriction on Disclosure and individual page markings are essential to assist DOE in identifying the information that is exempt from public disclosure. However, these protective markings do not determine whether information is exempt under FOIA, only DOE's designated FOIA Officer may determine if the information qualifies for a FOIA exemption. See 10 CFR Part 1004 for more information on how DOE processes FOIA requests.

Presidential Memorandum Simplifying the Funding of Energy Infrastructure and Critical Mineral and Material Projects

To comply with the Presidential Memorandum Simplifying the Funding of Energy Infrastructure and Critical Mineral and Material Projects, DOE may share and use within the Government any application information provided by or on behalf of the applicant.[25] By submitting an application or agreeing to a financial assistance arrangement with DOE under this NOFO, the applicant consents to any properly marked trade secret, confidential, proprietary, privileged, or otherwise sensitive application information provided by or on behalf of the applicant to be disclosed to the Executive Office of the President and relevant agencies offering loans, grants, equity, guarantees or other federal funding, for the purposes of the Presidential Memorandum on Simplifying the Funding of Energy Infrastructure and Critical Mineral and Material Projects.

Program Evaluation

Notwithstanding the above, DOE may use, review, and analyze application information, including Proprietary Information, for evaluating program benefits and effectiveness. The use and disclosure obligations of this section regarding properly marked Proprietary Information being retained in confidence remain in effect.

Use of Application Information with Artificial Intelligence Technology

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, the Applicant is providing express consent to DOE's use of application information with AI tools. **DOE is not liable for the use and disclosure of unmarked application information and may use or disclose such information for any purpose.**

B. Summary

The application process includes the following submission phases: concept paper and application.

Application Submission Phase	Eligibility for Submission
Concept Paper	Must be submitted by the specified due date and time to be eligible to submit an application.
Application	Must be submitted by the specified due date and time to be eligible for comprehensive merit review.

[25] Simplifying the Funding of Energy Infrastructure and Critical Mineral and Material Projects – The White House

C. Concept Paper

Applicants must submit a concept paper by the specified due date and time to be eligible to submit a full application. Applicants who do not submit a concept paper cannot submit an application. An entity may submit only one concept paper and one associated application for each topic area of this NOFO. ~~Each concept paper must be limited to a single concept, technology, or project.~~ The concept paper must conform to the requirements listed below, including the stated page limits. Concept papers must not exceed 6 pages.

Section	Page Limit	Description
Cover Page	1 page maximum	The cover page should include: • The project title • The specific Topic Area • Both the technical and business points of contact (including the Administrative Officer, if applicable) • Names of all team member organizations • The project locations • Confidentiality statement, if applicable
Technology Description	4 pages maximum	Applicants must succinctly describe: • The proposed technology, including its basic operating principles and how it is unique and innovative • The proposed technology's target level of performance (applicants should provide technical data or other support to show how the proposed target could be met) • How the project will deliver near-term impact (for example, increase capacity, reliability, resource adequacy, resilience, affordability, and replicability) and the metrics to be used for measuring the projected impact • How the proposed technology will overcome the shortcomings, limitations, and specific problems the project addresses (i.e., challenges in the existing service territory/system) • The degree to which the performance targets for the project directly addresses the topic area requirements • The expansion of the transfer capability and system flexibility improvements • The ability of the project to improve the delivered power (MW) during critical hours by optimizing the existing infrastructure (if applicable) • The potential impact the proposed project would have on the existing service territory or system

Section	Page Limit	Description
		• How the proposed location of the proposed project will support technology development and long-term success • The key technical risks or issues associated with the proposed technology development plan • The impact that DOE funding would have on the proposed project • Any potential impacts on Indian Tribes, including potential impacts on Tribal resources not on Tribal lands, and how the applicant would engage with a potentially impacted Indian Tribe
Addendum	1 page maximum	Applicants must succinctly describe the qualifications, experience, and capabilities of the proposed project team, including: • Whether the Principal Investigator (PI) or Lead Project Manager (LPM) and project team have the skill and expertise needed to successfully execute the project plan • Whether the applicant has prior experience that demonstrates an ability to perform tasks of similar risk and complexity • Whether the applicant has worked together with its teaming partners on prior projects or programs • Whether the applicant has access to equipment and facilities necessary to accomplish the effort or clearly explain how it intends to obtain access • Applicants may provide graphs, charts, or other data to supplement their Technology Description

DOE independently assesses each concept paper based on the technical review criteria for Concept Papers described below. DOE will either encourage or discourage applicants from submitting an application based on these assessments. Please see NOFO Part 2, *Selection and Award Notices—Concept Paper Notifications*.

D. Application Content Requirements

Each application must be limited to a single concept and be generally consistent with what was proposed in the concept paper. Applications must conform to the following requirements and must not exceed the stated page limits. Please refer to the NOFO Part 2, *Application Content and Form* for a complete list of application requirements. Detailed guidance on the content and form of NOFO-specific requirements is provided following the Summary of Application Requirements table below.

1. Covered Individual Definition, Designation, and Responsibility

Several of the application content requirements listed below and in the NOFO Part 2 are required of Covered Individuals.

For this NOFO, a Covered Individual is an individual who:

a) contributes in a substantive, meaningful way to developing or executing the scope of work of a project proposed for funding by DOE
b) is designated as a Covered Individual by DOE.

Covered Individuals for this NOFO include any:

- Principal investigator (PI)
- Project director (PD)
- Co-principal investigator (Co-PI)
- Co-project director (Co-PD)
- Project manager
- Any individual regardless of title that is functionally performing as a PI, PD, Co-PI, Co-PD, or project manager.
- Technical staff (e.g., postdoctoral fellows or researchers and graduate students)

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

If selected, throughout the life of the award, the recipient has an ongoing responsibility to submit:

- Current and pending support disclosure statements and resumes or biosketches for any new Covered Individual
- Updated disclosures if the current and pending support disclosure statements or resume or biosketch previously submitted to DOE changes

2. Summary of Application Requirements

Component	File Format	Page Limit	File Name
Application for Federal Assistance (SF-424)	PDF	n/a	ControlNumber_LeadOrganization_424
Technical Volume	PDF	20	ControlNumber_LeadOrganization_TechnicalVolume
Letters of Commitment	PDF	1 page each	ControlNumber_LeadOrganization_LOCs
Impacted Indian Tribes Documentation	PDF	n/a	ControlNumber_LeadOrganization_ImpactedTribes
Statement of Project Objectives	MS Word	8	ControlNumber_LeadOrganization_SOPO
Budget Justification Workbook	MS Excel	n/a	ControlNumber_LeadOrganization_Budget_Justification

Component	File Format	Page Limit	File Name
Subrecipient Budget Justification	MS Excel	n/a	ControlNumber_LeadOrganization_Subrecipient_Budget_Justification
Waiver for Foreign Entity Participation	PDF	n/a	ControlNumber_LeadOrganization_FEW
Performance of Work in the United States (Foreign Work Waiver)	PDF	n/a	ControlNumber_LeadOrganization_FWW
Biosketch (for each Covered Individual)	PDF	n/a	ControlNumber_LeadOrganization_Resumes
Current and Pending Support (for each Covered Individual)	PDF	n/a	ControlNumber_LeadOrganization_CPS
Transparency of Foreign Connections	PDF	n/a	BusinessSensitive_ControlNumber_LeadOrganization_TFC
Potentially Duplicative Funding Notice	PDF	n/a	ControlNumber_LeadOrganization_PDFN
Locations of Work	Excel	n/a	ControlNumber_LeadOrganization_LOW
Environmental Questionnaire	PDF	n/a	ControlNumber_LeadOrganization_ENV
Disclosure of Lobbying Activities, if applicable (SF-LLL)	PDF	n/a	ControlNumber_LeadOrganization_SF-LLL
Certification Regarding Lobbying (OMB 4040-0013)	PDF	n/a	ControlNumber_LeadOrganization_Cert Lobbying
Summary for Public Release	PDF	1	ControlNumber_LeadOrganization_Summary
Summary Slides for Public Release	MS Power Point	2	ControlNumber_LeadOrganization_Slide
Project Description and Assurances Document (PDAD)	PDF	n/a	ControlNumber_LeadOrganization_PDAD
Report on Resilience Investments (Topic Area 1 only)	PDF	10	ControlNumber_LeadOrganization_Resilience_Investments
Energy Information Administration (EIA) 861 (Topic Area 1, small utilities only)	MS Excel	n/a	ControlNumber_LeadOrganization_EIA861

3. Impacted Indian Tribes Documentation

For any application that potentially impacts Indian Tribes, including when the potentially impacted Indian Tribe is the applicant, applicants are required to submit additional documentation: [26]

[26] Indian Tribe is as defined in 25 U.S.C. § 5304 and includes Alaska Native Villages and Alaska Native Corporations.

- For projects sited on Tribal land(s) or intersecting with Tribal subsurface rights: Applicants are required to submit documentation of support from the relevant Indian Tribes at the time of application submission. See below for Requirements for Documentation of Tribal Support. [27]
- For applications potentially impacting Indian Tribes' resources and reserved rights in other ways: Applicants are encouraged to submit documentation of Tribal support from relevant Indian Tribes. See below for helpful resources for evaluating potential impacts.

Applicants are encouraged to reach out to Indian Tribes as early as possible to give Indian Tribes ample time to evaluate and respond. Documentation will not be scored, however, an applicant's failure to submit documentation of an Indian Tribe's awareness, or a letter of support, when required as described above, may constitute grounds for determining an application ineligible, non-responsive to the NOFO, not subject to further review, and/or not otherwise subject to selection or award.

Documentation of Tribal Support	
Item	**Criteria**
Letter of Support from Tribal Leadership	The letter must be signed by an authorized representative of the Indian Tribe. [28] The signer(s) must be holding their position while the NOFO is open for applications or when subsequently submitted. Must express support for the project.
Tribal Council Resolution, Board resolution (including the Board of Directors of an Alaska Native Corporation (ANC)), or similar act passed by the legislative body of the Tribal government or Board of Directors of an ANC	Must express support for the project.

The following resources and guidance may be useful to help determine if a project may impact Indian Tribe(s) resources or reserved rights, and the appropriate contacts at Indian Tribes. These resources are not exhaustive, and many Indian Tribes have resources or reserved rights which extend beyond their Tribal lands, or are covered within treaties, statutes, or case-law. Applicants are encouraged to do additional research, while respecting Tribal privacy over sacred sites. Any outreach, assessment of impacts, and mitigation plans must be documented and made available to DOE upon request after award selection and/or during award negotiation. If the

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

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

applicant is an Indian Tribe, these resources and guidance are recommended to be used to ascertain impacts to Indian Tribes other than the applicant.

Resources for Evaluating a Project's Potential Impact on an Indian Tribe	
Item	**Location**
Map of Indian Lands	https://bia-geospatial-internal.geoplatform.gov/indianlands/
Tribal Directory Assessment Tool (TDAT)	https://egis.hud.gov/TDAT/
Tribal Treaties Database	https://treaties.okstate.edu/
Directory of Federally recognized Tribes and Tribal leaders	https://www.bia.gov/service/tribal-leaders-directory
Best Practices for Identifying and Protecting Tribal Treaty Rights, Reserved Rights, and Other Similar Rights in Federal Regulatory Actions	https://www.bia.gov/sites/default/files/dup/inline-files/best_practices_guide.pdf

Guidance on Assessing Potential Impacts to Indian Tribe Resource or Reserved Rights		
Type of Action	**Assessment**	**Mitigation**
Research and Development (R&D)	Identify any resources which will be quantified/modeled on or near Tribal land, traditional homelands, Tribal historic sites, sacred sites, or in areas where an Indian Tribe maintains rights to these resources. Identify which Indian Tribe(s) may be impacted. Explain any instances of uncertainty or need for confidentiality.	Explain any actions taken by the applicant to mitigate or address any potential impacts identified, including engaging with the potentially impacted Indian Tribe(s), in the application.
Surface Impacts	Identify any Indian Land (as defined in 25 U.S.C. § 3501), traditional homelands, or Tribal historic and sacred sites which will be crossed, or adjacent to the proposed infrastructure. Identify which Indian Tribe(s) might be impacted and explain any instances of uncertainty or confidentiality.	
Subsurface Resource Activities (e.g., carbon sequestration, oil & gas, geothermal, critical minerals, groundwater)	Identify any Tribal mineral rights, subsurface, or water rights at or near the proposed project location. Explain any relevant studies already performed, such as groundwater studies. Identify which Indian Tribe(s) might be impacted. Explain any instances of uncertainty and any potential for subsurface resource migration which has been considered.	

Hydropower, Offshore Wind, or other Water Related Projects	Identify any Tribal resources or reserved rights (e.g., water, fishing, or other treaty rights) which could be impacted by the proposed project. Identify any Tribal historic sites, sacred sites, or relevant vistas, which could be impacted by the project. Identify the potentially impacted Indian Tribe(s) and explain any sources of uncertainty or confidentiality.	
Other Actions Not Categorized Above	Identify any other proposed actions which may impact an Indian Tribe(s) resources or reserved rights. Tribal resources and reserved rights include, and are not limited to, an Indian reservation or land (as defined in 25 U.S.C.§ 3501) or intersecting Tribal sub-surface rights, historic homelands from which they were removed, cultural sites, sacred sites, water rights, mineral and other subsurface rights, fishing rights, and hunting rights. Identify the Tribe(s) potentially impacted and any sources of uncertainty or confidentiality.	

Any application that may potentially impact Indian Tribe(s) may be shared by DOE with the potentially impacted Indian Tribe(s) subject to any proper existing markings on the information. Accordingly, Applicants should include a Notice of Restriction on Use and Disclosure of Information identifying any business sensitive, trade secrets, proprietary, or otherwise confidential information (See Use and Disclosure of Applicant Information Section). After selection, applicants may be asked to include a Notice of Restriction on Disclosure and Use of Data marking identifying any business sensitive, trade secrets, proprietary, or otherwise confidential information. Such properly marked application information shall be used or disclosed only for evaluation purposes, where such evaluation includes a determination of whether the proposed project impacts an Indian Tribe(s) and will only be shared with a potentially impacted Tribe(s) under confidentiality terms.

Data delivered once under award that may potentially impact Indian Tribe(s) may be shared with the potentially impacted Indian Tribe(s), subject to any restrictions included on properly marked data per the award terms.

If the applicant or DOE determines an Indian Tribe(s) will be impacted, the applicant must provide information on the project location, potential impacts and how the applicant will engage with Indian Tribe(s) during the period of performance of the agreement, and, if necessary, after the end of the agreement. DOE will determine if formal government-to-government consultation could be appropriate, and DOE will conduct that consultation accordingly, in addition to any engagement by applicant.

4. Technical Volume

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

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

The Technical Volume to the application may not be more than 20 pages, including the cover page; table of contents; and all citations, charts, graphs, maps, photos, or other graphics, and must include all information below. The applicant should consider the weight of each technical review criteria (see Technical Review Criteria) when preparing the Technical Volume.

The Technical Volume should clearly describe and expand on information provided in the concept paper.

Technical Volume Content Requirements Overview	
Section	**Approximate Percent Content of the Technical Volume**
Cover Page	N/A
Project Overview	10%
Technical Approach and Impact	40%
Cost Benefit and Support of Wide Scale Adoption	5%
Management and Organization	15%
Workplan	20%
Risk Analysis and Mitigation	10%

Cover Page:

The cover page must include:

- The project title
- Specific NOFO topic area
- Technical and business POCs (name, email, phone)
- The project team, including recipient name, entity type, and names of all team member organizations
- The project locations
- The proposed federal funding level, cost share, and period of performance
- Senior or key personnel and other Covered Individuals
- Statements regarding confidentiality

Project Overview:

This section must include a description of:

- The technology solution to be demonstrated.
- The major value proposition of the proposed solution and the plan to translate pilot demonstration results into a commercial solution.
- The team's rationale for pursuing this project.
- The high-level objectives and performance targets for the project.

- The demonstration location and why it was chosen.
- The impact of DOE funding and how the DOE funding, relative to prior, current, or anticipated funding from other public and private sources, is necessary to achieve the project objectives.
- How the project will enable further replication or extension of the project and approach.
- The ways the proposed project location and related infrastructure, skilled workforce, and others will contribute to the overall project viability and long-term success.

Technical Approach and Impact:

This section must include a description of:

- The extent to which the project will improve grid performance and reliability while maintaining affordability—specifically, how the project will deliver measurable affordability benefits to ratepayers (e.g., reduced congestion costs, deferred capital investment, and improved efficiency of existing assets).
- The specific system proposed for this project, including any existing engineering evaluations and design work and how it directly addresses the topic area objectives and requirements.
- A clear articulation of similarities and differences relative to the currently deployed existing systems.
- The extent to which the project has the potential to deliver near-term impact (for example, to increase capacity, reliability, resource adequacy, resilience, affordability, and replicability).
- Preliminary supply chain assessment for project systems, including availability of equipment to be deployed on the project.
- The advantages of the proposed approach over current state of practice and the overall impact on addressing the goals and objectives of the NOFO if successful.
- The capability of the proposed approach to achieve the anticipated performance targets, including a description of previous work done and prior results.
- The expected outcomes of the project (e.g., number of customers impacted, improvement in reliability metrics, percentage increase of capacity).
- The proposed work schedule for planning, construction, and commissioning that support the proposed in-service date.
    - The schedule should describe information related to any permitting, procurement, and subcontracting activities, including steps that could delay project execution such as public comment and response periods, procurement lead times, weather-related construction delays, or others.

Cost Benefit and Support of Wide Scale Adoption:

This section must include:

- An analysis of the costs and benefits to the utility system, including: a Techno-Economic Analysis (TEA) of the proposed technology solution, outline of benefits to utility customers, and how the proposed project supports the topic area goals and objectives.
- Potential sources of cost reductions for future projects and estimates of Nth-of-a-kind costs.
- Strategies and key actions to scale and replicate the proposed solution for wide-scale adoption, including key partnerships, future demonstrations, and similar.

Management and Organization:

This section must include:

- Management Plan, including:
  - Key organizational members and structure
  - Project partners roles and responsibilities
  - Relevant prior experience
  - Plan to address changes to the personnel, approach, or responsibilities as the project moves from planning to implementation and demonstration.
- Description of the skills and expertise the Lead Project Manager (LPM) and Project Team have to successfully design, develop, and operate the proposed plan.
- Description of any relevant prior organizational experience that demonstrates an ability to perform tasks of similar risk and complexity and, if applicable, details on the applicant team's prior work together on projects.
- Time commitment of key roles and personnel: a table showing time commitment (hours per week) of key organizational roles for all project phases and key personnel to fill each role.
- A summary organization chart of the team that identifies any subrecipients or contractors.

Workplan:

The Workplan should include:

- A summary of the Project Objectives
- Technical Scope
- Work Breakdown Structure (WBS)
- Project Tasks
- Any Milestones
- Go/No-Go decision points
- Project schedule

A detailed statement of project objectives (SOPO) must be provided as part of the application. The summary should be consistent with the SOPO. The SOPO will contain a more detailed description of the WBS and tasks. The Workplan must include:

- Technical Scope Summary.
- Proposed Go/No-Go Decision Points.
- Work Breakdown Structure (WBS), structured with a hierarchy of performance period (approximately annual), task, and subtask.
- Integrated Project Schedule (IPS) showing critical path for the entire project, including task and subtask durations, milestones, and Go/No-Go decisions.
- Build America Buy America (BABA) Requirements for Infrastructure Projects: The workplan must include a short statement on whether the project will involve construction, alteration, maintenance, or repair of public infrastructure in the United States. (See Build America, Buy America and 2 CFR 184 for applicable definitions and other information).
- A summary of the End of Project Goals.

Risk Analysis and Mitigation:

This section must include an initial Risk Management Plan (RMP), including:

- Identify technical risks, including technology, systems integration, infrastructure, engineering, scale-up, and similar elements.
- Identify security risks, including cybersecurity, physical security, internal and external threat identification and response, and similar elements.
- Identify financial risks, including project finance, market and regulatory structures, commercial business models, and similar elements.
- Identify environmental and site risks, including known or potential impacts to local communities or Indian Tribes or otherwise related to siting, supply chain and end use, and proposed actions to mitigate risks.
- Identify organizational risks, including project team, project management structure, and similar elements.
- Identify execution risks, including engineering, procurement, construction, permitting, safety, testing, and similar elements.
- Identify workforce-related risks, including availability, attraction and retention of appropriately skilled workers, labor disputes and unrest, health and safety considerations, and similar elements.
- Identify local stakeholder risks, including known or anticipated local concerns or opposition.
- Assess the probability of each risk occurring and potential impacts.
- Identify proposed mitigations for identified risks.

5. Biographical Sketch

As part of the application, each Covered Individual at the applicant and subrecipient levels must submit a biographical sketch (Biosketch). Use SciENcv (Science Experts Network Curriculum Vitae) to produce a DOE compliant PDF version of the Biosketch. The Biosketch does not have a page limit, though some fields in SciENcv have character limitations for consistency.

The Biosketch and CPS Common Forms must comply with the instructions in NSPM-33 Implementation Guidance Pre- and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending (Other) Support[29] and the **DOE NOFO- Specific Biosketch Instructions** below. The Biosketch and CPS Common Forms must together include a list of all sponsored activities, awards, and appointments directly supporting the individual's research or indirectly supporting the individual by supporting students, research staff, space, equipment, or other research expenses:

- Whether paid or unpaid
- Provided as a gift with terms or conditions or provided as a gift without terms or conditions
- Full-time, part-time, or voluntary
- Faculty, visiting, adjunct, or honorary
- Cash or in-kind

[29] This table supersedes in its entirety, Table 2a and Paragraph 7 of the Disclosure Requirements and Standardization Section of the NSPM-33 Implementation Guidance.

- Foreign and domestic
- Governmental or private-sector

All connections with malign foreign talent recruitment programs must be identified.[30]

Please note the following:

- Except Covered Individuals, which is defined in the NOFO Part 1, *Application Content and Form—Application Content Requirements, Covered Individual Definition, Designation and Responsibility*, all other definitions of terms used in the *Biosketch* are available at: NSPM-33 Definitions.
- If any conflict exists between NSPM-33 Implementation Guidance Pre- and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending (Other) Support and the **DOE NOFO-Specific Biosketch Instructions** below, follow the DOE NOFO-Specific Biosketch Instructions.

DOE/NNSA NOFO-Specific Biosketch Instructions	
Persistent Identifier (PID) of the Covered Individual	The PID field is required for all NOFOs and Awards that encompass R&D activities or technical assistance to support R&D activities. For NOFOs and Awards that do not meet the criteria above, the PID field is optional.
Professional Preparation	In addition to the professional preparation listed on the Biosketch Common Form, Covered Individuals may use this section to list other types of training or programs, for example, a certification or credential from a Registered Apprenticeship or Labor Management Partnership.
Appointments and Positions Reporting Timeframe	Identify all domestic and foreign professional appointments and positions, both inside and outside the primary organization. There should be no lapses in time over the past 10 years or since age 18, whichever period is shorter.
Products: Limitation on number provided	List up to 10 products or activities most closely related to the proposed project. Products may also include professional and scholarly activities related to the proposed effort (e.g., conference, committee participation, etc.).

6. Current and Pending (Other) Support

Current and pending (other) support (CPS Common Form) is used to identify potential duplication, overcommitment, potential conflicts of interest or commitment, and all other sources of support.

As part of the application, each Covered Individual at the prime applicant and subrecipient level must submit a CPS Common Form. Use SciENcv (Science Experts Network Curriculum Vitae) to produce a DOE compliant PDF version of the CPS Common Form. The CPS Common Form does not have a page limit, though some fields in SciENcv have character limitations for consistency.

[30] See P.L. 117-167 § 10638 (4) for the definition of malign foreign talent recruitment program.

The Biosketch and CPS Common Forms must comply with the instructions in NSPM-33 Implementation Guidance Pre- and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending (Other) Support[31] and the DOE NOFO-Specific CPS Instructions below. The CPS Common Form and Biosketch Common Form must together include a list of all sponsored activities, awards, and appointments whether directly supporting the individual's research or indirectly supporting the individual by supporting students, research staff, space, equipment, or other research expenses:

- Whether paid or unpaid
- Provided as a gift with terms or conditions or provided as a gift without terms or conditions
- Full-time, part-time, or voluntary
- Faculty, visiting, adjunct, or honorary
- Cash or in-kind
- Foreign and domestic
- Governmental or private-sector

All connections with malign foreign talent recruitment programs must be identified in current and pending support.

Please note:

- Except Covered Individuals, which is defined in the NOFO Part 1, *Application Content and Form—Application Content Requirements, Covered Individual Definition, Designation and Responsibility*, all other definitions of terms used in the *CPS Common Form* are available at: NSPM-33 Definitions.
- If conflict exists between NSPM-33 Implementation Guidance Pre- and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending (Other) Support and the DOE/NNSA NOFO-Specific CPS Instructions below, **follow the DOE NOFO-Specific CPS Instructions**.

DOE/NNSA NOFO-Specific CPS Instructions	
Persistent Identifier (PID) of the Covered Individual	The PID field is required for all NOFOs and Awards that encompass R&D activities or technical assistance to support R&D activities. For NOFOs and Awards that do not meet the criteria above, the PID field is optional.
Reporting Timeframe for Proposals, Projects, and In-Kind Contributions	Disclose only **current** and **pending** support, as defined in the "Status of Support" field of the SciENcv CPS Common Form.

[31] This table supersedes in its entirety, Table 2a and Paragraph 7 of the Disclosure Requirements and Standardization Section of the NSPM-33 Implementation Guidance.

DOE/NNSA NOFO-Specific CPS Instructions	
Types of Proposals and Active Projects to Disclose	"Current and pending support" is a term most relevant to R&D activities in the academic setting. For individuals employed by for-profit entities or individuals who do not conduct R&D, examples of activities to report on the Current and Pending Support form include: • Consulting activities that are outside your full-time employment • Any "moonlighting" • Honoraria and appointments
Disclosure Instructions for In-Kind Travel	Follow the disclosure instructions for travel in NSPM-33 Implementation Guidance Pre- and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending (Other) Support.
Current and Pending (Other) Support Addendum	The Current and Pending (Other) Support Addendum is **not** required for this NOFO.

7. Project Description and Assurances Document (PDAD)

Applicants for all three topic areas must complete and submit the PDAD. There are requirements specific to Topic Area 1 and Topic Area 3 the applicant must respond to and certify responses. Applicants must prepare the PDAD in the format provided as a template in eXCHANGE. The PDAD must be signed by the Authorized Organizational Representative (AOR) on behalf of the organization. Save the PDAD in a single PDF file using the following convention for the title "Control Number_LeadOrganization_PDAD.pdf."

8. Report on Resilience Investments (Topic Area 1 only)

Applicants must submit a report detailing past, current, and future efforts to reduce the likelihood and consequences of disruptive events. The report must summarize any programs and related approved funding the Applicant has implemented over the past 3 years to reduce the likelihood of events when electric grid operations are disrupted; preventively shut off; or cannot operate safely due to extreme weather, wildfire, or a natural disaster. The report must also summarize current and future efforts planned over at least the next 3 years to reduce the likelihood and consequences of disruptive events. The Report on Resilience Investments must not exceed 10 pages. Save the Report on Resilience Investments in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_Resilience_Investments.pdf."

9. Energy Information Administration (EIA) Form 861 (Topic Area 1, small utilities only)

To ensure status as a small utility, applicants that are small utilities applying to Topic Area 1 must submit the EIA Form 861 for the last reporting year showing the total retail electricity sales to ultimate customers. Save the EIA Form 861 report in a single MS Excel file using the following convention for the title "ControlNumber_LeadOrganization_EIA861.xlsx."

F. Funding Restrictions

The program-specific funding restrictions that apply to awards funded under this NOFO are identified below. Standard funding restrictions are described in the NOFO Part 2, *Funding Restrictions* section.

Applicable Funding Restrictions		
Title	**Location**	**Additional Information**
Buy America Preference for Infrastructure Projects	NOFO Part 1	Applies to awards made under this NOFO
Allowable Costs	NOFO Part 2	Applies to awards made under this NOFO
Pre-Award Costs	NOFO Part 2	Applies to awards made under this NOFO
Performance of Work in the United States (Foreign Work Waiver Requirement)	NOFO Part 2	Applies to awards made under this NOFO
Foreign Travel	NOFO Part 2	Foreign Travel is not allowed for awards made under this NOFO
Lobbying	NOFO Part 2	Applies to awards made under this NOFO
Equipment and Supplies	NOFO Part 2	Purchase of American-made equipment and supplies applies to this award.
Davis-Bacon Act Requirements	NOFO Part 2	Applies to awards made under this NOFO

1. Buy America Preference for Infrastructure Projects

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

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

Refer to DOE's Standard Terms and Conditions and 2 CFR Part 184 to determine whether the Buy America Preference applies and if you should consider applying the Buy America Preference in the proposed project's budget and schedule. The Buy America Preference does not apply to prime recipients that are for-profit entities.

V. Submission Requirements and Deadlines

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

A. Required Registrations

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

You must have an active account with SAM.gov, which includes having a Unique Entity Identifier (UEI). SAM.gov registration can take several weeks. On the registration page, you can also click on the Entity Registration Checklist for the information you will need to register.

Each applicant must:

- Be registered in SAM.gov before submitting an application
- Provide a valid Unique Entity Identifier in the 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 make a federal award to an applicant until the applicant complies with all applicable UEI and SAM requirements. If an applicant has not fully complied by the time DOE is ready to make a federal award, the applicant will be disqualified to receive a federal award, and the DOE will select another applicant to award.

2.eXCHANGE

Register and create an account in DOE's eXCHANGE database site identified in the Key Facts section of the NOFO Part 1. You can use this account to apply to open NOFOs offered by the DOE office sponsoring this NOFO. To view and submit applications to open opportunities under other DOE offices, you must access its eXCHANGE site. You may need to be registered in more than one eXCHANGE site to submit applications for opportunities managed by different DOE offices.

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

DOE 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 electronic systems used by DOE, including eXCHANGE, constitutes the authorized representative's approval and electronic signature.

C. Submission Date and Times

All required submissions must be submitted to the eXCHANGE site identified in the Key Facts section of NOFO Part 1 no later than 5:00 p.m. ET on the dates provided in the Key Facts section. Letters of intent, concept papers, and the application have different deadlines.

Applicants are strongly encouraged to submit all required application documents at least 48 hours before the submission deadline. Under normal conditions (i.e., at least 48 hours before the submission deadline), set aside at least one hour to submit application documents. Once you submit the application, you can revise or update your submission until the deadline expires. If you change any of your documents, you must resubmit them before the deadline. DOE will not extend the submission deadline due to server or connection congestion.

D. Intergovernmental Review

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

VI. Application Review Information

A. Standards for Application Evaluation

Eligible applications will be evaluated based on this NOFO and the guidance in the "DOE Merit Review Guide for Financial Assistance," effective October 1, 2020.

B. Responsiveness Review

The following concept papers and applications will be deemed nonresponsive and will not be reviewed or considered:

- Project concepts or approaches identified as NOT of interest (see the Applications Specifically Not of Interest section above)
- Applicants and applications that do not meet the Eligibility Criteria in NOFO Parts 1 and 2

C. Review Criteria

1. Compliance Criteria

All submissions for concept papers and applications must:

- Comply with the content and form requirements listed in Application Content Requirements and Submission Requirements and Deadlines of the NOFO Part 1 and 2
- Include all required documents
- Be uploaded and successfully submitted in the eXCHANGE site indicated in the Key Facts section at the beginning of this NOFO
- Meet the submission deadline stated in Key Facts no later than 5:00 p.m. ET

DOE will not review or consider submissions that:

- Are not submitted through the correct eXCHANGE site for this NOFO
- Are submitted after the due date and time
- Are incomplete

If required, applicants must submit a letter of intent and a concept paper by 5:00 p.m. ET on the due date listed on the Key Facts section to be eligible to submit an application. If required, applicants who do not submit a letter of intent and concept paper are not eligible to submit an application.

2. Technical Review Criteria

Concept Papers

Concept papers are evaluated based on the following factors. All sub-criteria are of equal weight.

Concept paper criterion: Overall NOFO Responsiveness and Viability of the Project (Weight: 100%)

This criterion involves consideration of:

- The applicant clearly describes the proposed technology, how the technology is unique and innovative, and how the technology will advance the current state of the industry
- The applicant identifies the risks and challenges of the technology; regulatory and financial aspects of the application, including possible mitigation strategies; and shows the impact DOE funding and the proposed project would have on the relevant field and application
- The applicant has the qualifications, experience, capabilities, and other resources necessary to complete the proposed project
- The proposed work, if successfully accomplished, would clearly meet the objectives as in the NOFO
- The applicant clearly describes how the project will deliver near-term impact (for example, to increase capacity, reliability, resource adequacy, resilience, affordability, and replicability) and provides metrics for measuring the projected impact.

Applications

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

Review Criterion Overview	
Criterion	**Weight**
Technical Approach and Impact	40%
Financial and Market Viability	20%
Management and Organization	20%
Workplan	20%

Criterion 1: Technical Approach and Impact (40%)

This criterion involves consideration of the following sub-criteria:

Project Technical Approach and Impact

- **Project Objectives**
  - Degree to which the proposed project approach supports the objectives, requirements, and desired outcomes for the overall NOFO and Topic Area under which the application is submitted.
- **Project Relevance**
  - Extent to which the project has the potential to deliver near-term impact (for example, to increase capacity, reliability, resource adequacy, resilience, affordability, and replicability).
- **Affordability and Customer Cost Impacts**
  - Degree to which the proposed project will reduce or avoid electricity system costs and result in lower costs for customers.
- **Project Timeline**
  - Degree to which the proposed project demonstrates a robust ability to rapidly achieve technical objectives, thereby facilitating expeditious *speed to power*.
- **Project Description**

  - Degree to which the proposed technology, site, deployment plan, and commissioning activities are clearly described in the application.
- **Project Work Scope**
  - Degree to which technical work scope to achieve full system operation is clearly defined, including applicable testing and validation plans; project development; and construction, commissioning, and testing.
- **Project Government Collaboration**
  - Where appropriate, the extent to which the applicant demonstrates how it plans to use other federal or state programs and partnerships.

Technology Commercialization

- **Industry Adoption**
  - Degree to which the proposed project reasonably expects to enable, encourage, and accelerate broader industry-wide implementation.
- **Design Scalability**
  - Sufficient technical detail addressing whether the proposed technologies and systems would be commercially beneficial at a greater scale.

Criterion 2: Financial and Market Viability (20%)

This criterion involves consideration of the following sub-criteria:

- **Project TEA**
  - Adequate details in the preliminary techno-economic analysis to justify viability and feasibility of the project and the value proposition and timeline of the technology to be replicated.
- **Project Financing**
  - Availability, credibility, and risk or terms of nonfederal cost share sources and funds necessary to meet ongoing cost share needs, including the ability to use DOE financial assistance funding from this NOFO with state and local incentives and private financing.
- **Financial Commitment**
  - Degree to which the applicant addresses each key participating organization's financial commitment to the proposed project, including overall financial strength and financial ability to implement the proposed plan and the ability of the applicant to cover project cost overruns.
- **Existing Resource Utilization**
  - Degree to which the proposed project uses available resources, such as testing infrastructure, workforce, supplies, or equipment, to meet the required NOFO objectives.
- **Project Development Plan**
  - Adequacy of the business plan for developing key project agreements, such as financing, acquisition strategies, supply chain, site control, securing skilled workforce and a variety of suppliers, and other relevant project documents.
- **Impact of DOE Funding**
  - Degree to which DOE funding is necessary to achieve the demonstration project objectives.
- **Market Potential**

  - Degree to which the application justifies the economic viability, and potential replication or extension beyond DOE funding of the system to be demonstrated, including securing follow-on investments.
- **Financial Risk Assessment**
  - Adequacy and clarity of the financial risk assessment and management discussion, including project finance, market and regulatory structures, commercial business models, and similar elements as well as the quality of the mitigation strategies to address them

Criterion 3: Management and Organization (20%)

This criterion involves consideration of the following sub-criteria:

- **Management Capability**
  - Capability of the recipient, the proposed team, and key personnel to manage and address all aspects of the proposed work with a high probability of success.
- **Team Experience**
  - Qualifications and relevant experience, including number of years and specific project experience, of the key project participants in performing similar projects and the allocation of responsibility commensurate with this experience.
- **Time Commitment**
  - Reasonableness of time commitment from key personnel to successfully manage a project of this size and complexity.
- **Participation**
  - Level of participation by project participants as evidenced by letters of commitment and how well they are integrated into the Workplan.
- **Facilities and Infrastructure Use**
  - Degree to which the necessary facilities and infrastructure are available to support the project.
- **Project Management Discussion**
  - Strength of the project management discussion in the project Workplan to give confidence in a high likelihood of project success.
- **Project Management Structure**
  - Degree to which the applicant has defined and described a project management structure that appropriately integrates DOE and key team members.
- **Team Roles**
  - Clarity and appropriateness of the roles of the team members.
- **Organizational Risk**
  - Adequacy and clarity of the organizational risk assessment and management discussion, including project team, project management structure, and similar elements as well as the quality of the mitigation strategies to address them.

Criterion 4: Workplan (20%)

This criterion involves consideration of the following sub-criteria:

- **Project Schedule**
  - Overall reasonableness of the Integrated Project Schedule based on the associated complexity of the application.
- **Workplan Clarity**

  - Degree to which the proposed Workplan and critical path have been clearly and thoroughly described and thoughtfully considered.
- **Workplan Tasks**
  - Degree to which the task descriptions are clear, detailed, timely, and reasonable, resulting in a high likelihood that the proposed Workplan will succeed in meeting the project goals.
- **Milestone Clarity**
  - Strength and level of clarity in defining the project phases, metrics, Integrated Project Schedule, and Go/No-Go criteria.
- **Deliverables**
  - Strength of the deliverables as defined in the application, such that DOE and independent experts can review key technical, financial, regulatory, and permitting milestones at appropriate project Go/No-Go decision points to mitigate project risk and enable the successful design, procurement, construction, and operation of the proposed project.
- **Execution Risk**
  - Adequacy and clarity of the execution risk assessment and management discussion, including applicable engineering, procurement, construction, permitting, safety, testing, operations, and similar elements as well as the quality of the mitigation strategies to address them.

D. Other Selection Factors

In addition to the above criteria, the Selection Official may consider the degree to which the following program policy factors are achieved to help determine which applications to select for award negotiations:

- The proposed project exhibits technological diversity when compared with the existing DOE project portfolio and other projects selected from the subject NOFO
- The proposed project, including proposed cost share, optimizes available DOE funding to achieve programmatic objectives
- The level of industry involvement and demonstrated ability to accelerate demonstration and commercialization and overcome key market barriers
- The likelihood the proposed project will lead to increased high-quality employment and manufacturing in the United States
- The proposed project accelerates transformational technological advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty
- The proposed project, or group of projects, represents a desired geographic distribution (considering past awards and current applications)
- The proposed project will procure U.S. iron, steel, manufactured products, and construction materials
- The proposed project demonstrably advances the Administration's policy priorities
- The applicant contributes to a broad range of recipients likely to produce immediately demonstrable results and recipients with the potential for potentially longer-term, breakthrough results, consistent with the objectives of the NOFO

- The proposed project contributes to the variety of organizations and organization types and sizes selected from the subject NOFO when compared with the existing DOE project portfolio
- For Topic Areas 1 and 2, the applicant supports the availability of information before, during, and after resilience events by participating in the Outage Data Initiative Nationwide (ODIN) [32]
- The proposed project, when compared with existing DOE project portfolio and other projects to be selected from the subject NOFO, contributes to the total portfolio
- The project's solution or strategy will maximize deployment or replication
- The project promotes increased coordination with nongovernmental entities for demonstrating technologies and research applications that facilitate technology transfer

[32] More information is available at https://odin.ornl.gov/.

VII. Selection and Award Notices

The NOFO Part 2, *Selection and Award Notices* provides information on notifications for concept papers (if applicable), applications, award negotiations, and post-selection information requests.

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 and DOE. 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
- Infrastructure Investment and Jobs Act-Specific Requirements
- Fraud, Waste and Abuse requirements
- Safety, Security, and Regulatory requirements
- Environmental Review in Accordance with National Environmental Policy Act requirements

Post-award requirements and administration that apply to awards funded under this NOFO are identified below. Detailed descriptions of standard funding restrictions are provided in the NOFO Part 2, *Post-Award Requirements and Administration* section. Detailed descriptions of program-specific funding restrictions are provided below the table.

Applicable Post-Award Requirements and Administration	
Title	**Location**
Real Property and Equipment	NOFO Part 1
Go/No-Go Review	NOFO Part 1
Cybersecurity Plan (required prior to award)	NOFO Part 1
Rights in Technical Data	NOFO Part 1
Subject Invention Utilization Reporting	NOFO Part 2
U.S. Manufacturing Commitments	NOFO Part 2
Invoice Review and Approval	NOFO Part 2
Cost Share Payment	NOFO Part 2

1. Real Property and Equipment

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

For 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 award period of performance ends, 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 will 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

When the property is no longer needed for authorized project purposes, the recipient must request disposition instructions from DOE. For-profit entity disposition requirements are set forth in 2 CFR 910.360. Property disposition requirements for other non-federal entities are set forth in 2 CFR 200.310 – 200.316.

In addition, 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 (FY23 Consolidated Appropriations Act [PL No. 117- 328], Division D, Title III, § 309).

2. Go/No-Go Review

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 technical success is definitively achieved in the current phase and the potential for success in future phases is evaluated. 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
- Overall contribution to the program goals and objectives.

Federal funding beyond the Go/No-Go decision point (continued funding) is contingent on:

- Availability of federal funds appropriated by Congress for the program
- The availability of future-year budget authority
- Recipient's technical progress compared with the Milestone Summary Table in Attachment 1 of the award
- The recipient submitting required reports
- The 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
- The recipient submitting a continuation application[33]

[33]A continuation application is a non-competitive application for an additional budget period within a previously approved project period. At least 90 days before the end of each

- Written approval of the continuation application by the Grants Officer

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

- Continue to fund the project, contingent on the availability of funds appropriated by Congress for the program and the availability of future-year budget authority
- Recommend redirection of work under the project
- Hold 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 a recipient fails to comply with the requirements of an award, DOE may take appropriate action, including but not limited to, redirecting, suspending, or terminating the award.

3. Cybersecurity Plan

For Topic Area 2 (40107) and Topic Area 3 (40103(b)) only

Applicants selected for award negotiations must submit a cybersecurity plan to DOE prior to receiving funding (under IIJA section 40126).[34,35] These plans are intended to foster a cybersecurity-by-design approach for IIJA efforts. DOE will use these plans to ensure effective integration and coordination across its research, development, and demonstration programs. A cybersecurity plan is **not** required as part of the application for this NOFO, but all projects selected under this NOFO must submit a cybersecurity plan during the award negotiation phase.

DOE recommends using open guidance and standards, such as the National Institute of Standards and Technology's (NIST) Cybersecurity Framework (CSF) and the DOE Cybersecurity Capability Maturity Model (C2M2).[36] The cybersecurity plan created under

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budget period, the recipient must submit its continuation application per the instructions in the award terms and conditions.

[34] 42 U.S.C. § 18725.

[35] Consistent with PL 117-58, § 40101e(2)(A)(ii), a grant under Section 40101 may not be used for cybersecurity.

[36] NERC critical infrastructure protection (CIP) standards for entities responsible for the availability and reliability of the bulk electric system. NIST IR 7628: 2 Smart grid cyber security strategy and requirements. NIST SP800-53, Recommended Security Controls for Federal Information Systems and Organizations: Catalog of security controls in 18 categories, along with profiles for low-, moderate-, and high-impact systems. NIST SP800-82, Guide to Industrial Control Systems (ICS) Security. NIST SP800-39, Integrated Enterprise-Wide Risk Management: Organization, mission, and information system view. AMI System Security Requirements: Security requirements for advanced metering infrastructure. ISO (International Organization for Standardization) 27001, Information Security Management Systems: Guidance on establishing governance and control over security activities (this document must be purchased). IEEE (Institute of Electrical and Electronics Engineers) 1686-2007, Standard for Substation Intelligent Electronic Devices (IEDs) Cyber Security Capabilities (this document must be purchased). DOE Cybersecurity Capability Maturity Model (C2M2).

IIJA section 40126 should explain any deviation from open standards, including when proprietary standards are applied where the awardee determines is appropriate.

Please note:

- Cybersecurity plans should be adequate to meet the threats and vulnerabilities associated with the proposed efforts and demonstrate the cybersecurity maturity of the project.
- Cybersecurity plans may cover a range of topics relevant to the proposed project—e.g., software development lifecycle, third-party risks, and incident reporting.
- At a minimum, cybersecurity plans should address questions noted in IIJA section 40126(b), Contents of Cybersecurity Plan.[37]

Supplementary guidance on the cybersecurity plan requirement is available at https://www.energy.gov/ceser/bipartisan-infrastructure-law-implementation.

4. Government Rights in Data

For U.S. Government rights in application information, please refer to the Use and Disclosure of Application Information section in this Part 1 of the NOFO. The U.S. Government rights to data produced under the award or used in the performance of the award varies according to following classifications.

Limited Rights Data: Limited Rights Data is data (other than computer software) developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged. For limited rights data used in the performance of the award, the U.S. Government may inspect such data for the purposes of verifying the limited rights data and restricted rights assertion or for evaluating work performance but will not normally require delivery of such data. For awards requiring delivery of Limited Rights Data and to ensure the protection of such data, the Limited Rights Data must be properly marked as set forth in the award's intellectual property terms and conditions.

Unlimited Rights: Unlimited Rights Data is data first produced under the award or unmarked data delivered to the U.S. Government as part of the award. Unlimited rights mean the right of the U.S. Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose whatsoever, and to have or permit others to do so.

Patentable Information: In addition to any other protection allowed under the award, invention disclosures and other patentable information may be protectable from public disclosure for a reasonable time to allow for filing a patent application.

5. Invoice Review and Approval

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

- Summary of costs by cost categories

[37] 42 U.S.C. § 18725.

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

6. Cost Share Payment

DOE requires recipients to contribute the cost share amount incrementally over the life of the award. The terms and conditions of the award will specify the recipient's cost share interval, such as by invoice period or on a budget period basis. The recipient's cost share for each interval must always reflect the overall cost share ratio negotiated by the parties (e.g., the total cost sharing on each invoice when considered cumulatively with previous invoices must reflect, at a minimum, the cost sharing percentage negotiated). When FFRDC funding will be provided directly to the FFRDCs by DOE, recipients must provide project cost share at a percentage commensurate with the FFRDC costs, on a budget period basis, resulting in a higher interim invoicing cost share ratio than the total award ratio.

In limited circumstances, and where it is in the government's interest, the DOE Grants Officer may approve a request by the recipient to meet its cost share requirements on a less frequent basis than required by the terms and conditions of the award. Regardless of the interval requested, the recipient must be up to date on cost share at each interval. The Grants Officer must approve all such requests before they go into effect. These requests must be sent 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, as necessary, to show the recipient has complied with its cost share obligations to date.

B. Helpful Websites

- **Infrastructure Investment and Jobs Act:** https://www.congress.gov/bill/117th-congress/house-bill/3684/text
- **Outage Data Initiative Nationwide**: https://odin.ornl.gov/
- **Program Website:** https://www.energy.gov/gdo/grid-resilience-and-innovation-partnerships-grip-program

C. Questions and Support

1. Questions

Once a NOFO is issued, DOE personnel can only communicate (in writing or otherwise) with applicants regarding the NOFO through the established question and answer process described below. Questions regarding this NOFO must be submitted to DE-FOA-0003580@netl.doe.gov no later than 3 business days before the application due date and time. Please note, feedback on individual concepts will not be provided through Q&A.

All questions and answers related to this NOFO will be posted on the eXCHANGE site listed in the Key Facts section above. **You must first select the NOFO Number to view the questions and answers specific to this NOFO**. DOE will attempt to respond to a question within 3 business days, unless a similar question and answer has already been posted on the website.

Questions related to the registration process and use of the eXCHANGE site listed in the Key Facts. should be submitted to InfrastructureExchangeSupport@hq.doe.gov.

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, you can call 866-606-8220 or live chat with the Federal Service Desk.

IX. Other Information

The NOFO Part 2, *Other Information* provides additional information and requirements that apply to all DOE NOFOs.

Acronyms

Acronym	Spelled Out	Acronym	Spelled Out
API	Application Programming Interface	**LPM**	Lead Project Manager
ARL	Adoption Readiness Level	**M&O**	Management and Operation
BABA	Build America Buy America	**NERC**	North American Electric Reliability Corporation
C2M2	DOE Cybersecurity Capability Maturity Model	**NETL**	National Energy Technology Laboratory
CFR	Code of Federal Regulations	**NIST**	National Institute of Standards and Technology
CIP	Critical Infrastructure Protection	**NOFO**	Notice of Funding Opportunity
CSF	Cybersecurity Framework	**NSF**	National Science Foundation
CRADA	Cooperative Research and Development Agreement	**NSPM**	National Security Policy Memorandum
DOE	United States Department of Energy	**OMB**	Office of Management and Budget
DOI	Digital Object Identifier	**OSHA**	The Occupational Safety and Health Administration
DMSP	Data Management and Sharing Plan	**OSTI**	DOE's Office of Scientific and Technical Information
EDX	Energy Data eXchange	**OTA**	Other Transaction Authority
FFRDC	Federally Funded Research and Development Center	**PD**	Project Director
GOGO	Government Owned and Operated	**PI**	Principal Investigator
ICS	Industrial Control Systems	**R&D**	Research and Development
IED	Intelligent Electronic Devices	**RMP**	Risk Management Plan
IEEE	Institute of Electrical and Electronics Engineers	**SAM**	System for Award Management
IIJA	Infrastructure Investment and Jobs Act	**SMART**	Specific, Measurable, Achievable, Relevant, and Timely
IPS	Integrated Project Schedule	**SOPO**	Statement of Project Objectives
IRA	Inflation Reduction Act	**SPOC**	Single Point of Contact
ISO	International Organization for Standardization	**TEA**	Techno-Economic Analysis
KPI	Key Performance Indicators	**UEI**	Unique Entity Identifier
LDES	Long-Duration Energy Storage	**WBS**	Work Breakdown Structure