

FINANCIAL ASSISTANCE FUNDING OPPORTUNITY ANNOUNCEMENT



U.S. Department of Energy (DOE) Grid Deployment Office (GDO) Office of Clean Energy Demonstrations (OCED)

Bipartisan Infrastructure Law (BIL) – Grid Resilience and Innovative Partnerships (GRIP)

Funding Opportunity Announcement (FOA) Number: DE-FOA-0003195

FOA Type: Modification 000001

Assistance Listing Number: 81.254

SUMMARY OVERVIEW OF KEY INFORMATION: Grid Innovation and Partnerships (GRIP) Program	
Issuing Agency	Grid Deployment Office (GDO), in conjunction with the Office of Clean Energy Demonstrations (OCED)
Program Overview	The GRIP program will provide funding to modernize the American electric grid and to maximize the benefits of the clean energy transition as the nation works to curb the climate crisis, empower workers, and advance environmental justice.
Objective	1. Transform the U.S. electric grid at the transmission and distribution levels by increasing resilience in the face of extreme disruptions, enabling data-rich and flexible grid performance, and spurring innovation at all stages of project ideation and execution; 2. Prioritize energy justice as an essential component of infrastructure development by dramatically altering the relationship between energy providers and their communities; and 3. Catalyze and leverage private sector and non-federal public capital for impactful technology and infrastructure deployment.
Topic Areas	Topic Area 1: Grid Resilience Grants (40101(c)) Topic Area 2: Smart Grid Grants (40107) Topic Area 3: Grid Innovation Program (40103(b))

Eligible Applicants	Topic Area 1 • electric grid operator; • electricity storage operator; • electricity generator; • transmission owner or operator; • distribution provider; • fuel supplier; • And any other relevant entity, as determined by the Secretary. Topic Area 2 • institutions of higher education; • for-profit entities; • non-profit and not-for-profit entities; and • state and local governmental entities, and tribal nations. Topic Area 3 • a State; • a combination of 2 or more States; • an Indian Tribe; • a unit of local government; and • a public utility commission. <i>For all Topic Areas, eligibility is restricted to Domestic Entities.</i>
Funding	It is anticipated that this FOA will provide Federal funding of \$3.9 billion for Fiscal Years 2024-2025. Topic Area 1: approximately \$918 million Federal funding; 100% cost match (small utility exception of 1/3 cost match). Topic Area 2: approximately \$1,080 million Federal funding; 50% cost share Topic Area 3: approximately \$1,820 million Federal funding; 50% cost share
Deadlines	January 12, 2024 at 5pm ET: Concept Papers Due (All Topic Areas) April 17, 2024 at 5pm ET: Full Applications Due (Topic Area 1 & 3) May 22, 2024 at 5pm ET: Full Applications Due (Topic Area 2)

FOA Issue Date:	November 13, 2023
1st Informational Webinar:	November 20, 2023
2nd Informational Webinar	TBD*
GRIP Community Benefits Plan Webinar	TBD*
Additional Webinars:	TBD*
Submission Deadline for Concept Papers (Topic Area 1):	1/12/2024 5pm ET
Submission Deadline for Concept Papers (Topic Area 2):	1/12/2024 5pm ET
Submission Deadline for Concept Papers (Topic Area 3):	1/12/2024 5pm ET
Expected Date for Concept Paper Notifications (All Topic Areas)	February 2024
Submission Deadline for Full Applications (Topic Area 1):	4/17/2024 5pm ET
Submission Deadline for Full Applications (Topic Area 2):	5/22/2024 5pm ET
Submission Deadline for Full Applications (Topic Area 3):	4/17/2024 5pm ET
Expected Date for Pre-Selection Interviews (All Topic Areas)	July – August 2024

Expected Date for DOE Selection Notifications (Topic Area 1):	Summer/Fall 2024
Expected Date for DOE Selection Notifications (Topic Area 2):	Summer/Fall 2024
Expected Date for DOE Selection Notifications (Topic Area 3):	Summer/Fall 2024
Expected Timeframe for Award Negotiations (Topic Area 1):	Winter 2024/2025
Expected Timeframe for Award Negotiations (Topic Area 2):	Winter 2024/2025
Expected Timeframe for Award Negotiations (Topic Area 3):	Winter 2024/2025

***Additional webinars will be announced via an amendment to the FOA.**

- Applicants must submit a Concept Paper by 5 p.m. ET on the due date(s) listed above to be eligible to submit a Full Application.
- To apply to this FOA, applicants must register with and submit application materials through Exchange at <https://infrastructure-exchange.energy.gov/>, the online application portal.
- **Unique Entity Identifier (UEI) and System for Award Management (SAM)** - Each applicant (unless the applicant is excepted from those requirements under 2 CFR 25.110) is required to: (1) register in the SAM at <https://www.sam.gov> before submitting an application; (2) provide a valid UEI number in the application; and (3) maintain an active SAM registration with current information when the applicant has an active federal award or an application or plan under consideration by a federal awarding agency. Designating an Electronic Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in SAM registration. DOE may not make a federal award to an applicant until the applicant has complied with all applicable UEI and SAM requirements and, if an applicant has not fully complied with the requirements by the time DOE is ready to make a federal award, DOE will determine that the applicant is not qualified to receive a federal award and use that determination as a basis for making a federal award to another applicant.

More information about SAM registration for applicants is found at:

https://www.fsd.gov/gsafsd_sp?id=gsafsd_kb_articles&sys_id=650d493e1bab7c105465eaccac4bcbcb.

NOTE: If clicking the SAM links do not work, please copy and paste the link into your browser

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

- Applicants must designate primary and backup points-of-contact in Exchange with whom DOE will communicate to conduct award negotiations. If an application is selected for award negotiations, it is not a commitment to issue an award. It is imperative that the applicant/selectee be responsive during award negotiations and meet negotiation deadlines. Failure to do so may result in cancelation of further award negotiations and rescission of the selection.



Modifications

Mod. No.	Date	Description of Modification
000001	11/24/2023	The modification revises the following: • The table starting on the 2nd cover page of the FOA is modified to add deadline times, and to correct the respective deadline submission dates for full applications submitted to Topic Area 2 and Topic Area 3. • Section IV.A and IV.C are modified to clarify the form and content requirements for the concept paper. • The Appendices has been modified to remove “SAMPLE COST SHARE CALCULATION FOR BLENDED COST SHARE PERCENTAGE” (previously Appendix B). The appendices is re-alphabetized, and impacted references throughout the FOA document have been updated consistent with this change. • Minor edits have been made throughout the FOA document to improve clarity and to update terminology for consistency throughout the FOA (as appropriate replace “proposal” with “application” or “proposed project”). • The Concept Paper Form (referenced in Section IV.C and available on Exchange) is modified to include character limits in the following sections: Project Details, Project Impacts, and Community Benefits; and to rename the submit button, now named <i>Finalize Form</i>. Text that is revised or newly incorporated with this modification is highlighted in yellow (applies to FOA document only). Please also note that applicants have been experiencing issues with downloading FOA related documents in Infrastructure Exchange. Specifically, FOA files accessed from the Infrastructure Exchange website have been downloading as corrupted. For impacted applicants, identical FOA documents can be accessed

		at GRANTS.GOV. Please see the Infrastructure Exchange website DE-FOA-00003195 (GRIP) at https://infrastructure-exchange.energy.gov/ for instructions to access the documents at GRANTS.GOV.
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I. Funding Opportunity Description

A. Background and Context

The Grid Deployment Office (GDO), in conjunction with the Office of Clean Energy Demonstrations (OCED), is issuing this Funding Opportunity Announcement (FOA). Awards made under this FOA will be funded, in whole or in part, with funds appropriated by the *Infrastructure Investment and Jobs Act*,¹ more commonly known as the Bipartisan Infrastructure Law (BIL).

BIL is a once-in-a-generation investment in modernizing and upgrading American infrastructure to enhance U.S. competitiveness, drive the creation of good-paying union jobs, tackle the climate crisis, and ensure strong access to economic and environmental benefits for disadvantaged communities.² BIL appropriates more than \$62 billion to the U.S. Department of Energy (DOE)³ to invest in American manufacturing and workers; expand access to energy efficiency and clean energy; deliver reliable, clean, and affordable power to more Americans; and demonstrate and deploy the technologies of tomorrow through clean energy demonstrations.

DOE's BIL investments will support efforts to build a clean and equitable energy economy that achieves a zero-carbon electricity system by 2035, and to put the United States on a path to achieve net-zero emissions economy-wide by no later than 2050⁴ to benefit all Americans. As new load and generation come online as the market moves in line with these goals, deploying the projects that will support a more resilient and reliable grid will be critical. At present, aging grid infrastructure leaves the grid increasingly vulnerable to attacks.⁵ The increasing frequency of extreme weather events is leading to energy supply disruptions that threaten the

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

² Pursuant to Executive Order (E.O.) 14008, "Tackling the Climate Crisis at Home and Abroad," January 27, 2021, and the Office of Management and Budget's Interim Justice40 Implementation Guidance M-21-28 and M-23-09, DOE recognizes disadvantaged communities as defined and identified by the White House Council on Environmental Quality's Climate and Economic Justice Screening Tool (CEJST), located at <https://screeningtool.geoplatform.gov/>. DOE's Justice40 Implementation Guidance is located at <https://www.energy.gov/sites/default/files/2022-07/Final%20DOE%20Justice40%20General%20Guidance%20072522.pdf>.

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

⁴ E.O. 14008, "Tackling the Climate Crisis at Home and Abroad," January 27, 2021.

⁵ See ICF International, *Electric Grid Security and Resilience: Establishing a Baseline for Adversarial Threats*, at 26 (June 2016).

economy, put public health and safety at risk, and can devastate affected communities all over the country.

DOE will invest approximately \$3.9 billion across three programs covered by this FOA – each with specific statutory requirements– for the Fiscal Years (FY) 2024 through FY 2025 to deploy technologies to increase grid reliability and resilience. Together DOE refers to these programs as the Grid Resilience and Innovation Partnerships (GRIP) program. The activities to be funded under this FOA support BIL sections 40101(c), 40107, and 40103(b)⁶ as well as the broader government-wide approach to modernize the American electric grid and to maximize the benefits of the clean energy transition as the nation works to curb the climate crisis, empower workers, and advance environmental justice. The GRIP Program focuses on these BIL sections:

- Section 40101(c): Grid Resilience Grants
- Section 40107: Smart Grid Grants
- Section 40103(b): Grid Innovation Program

i. Technology Space and Program Purpose

Climate change is increasing the threats to our power system infrastructure. Disruptive weather events are intensifying and are broadening in scope, impacting larger areas at a time. Other climate impacts like droughts are long-lasting, compounding the potential impact of disruptive events and other threats such as wildfires, floods, and mudslides. Previous methods and approaches to prepare for disruptions are no longer sufficient to meet the increasing threats to the power system. Increasing interdependencies between critical infrastructure systems will continue to impact our power system.

With these trends in mind, building a more resilient and reliable grid is critical. Studies indicate a more resilient and reliable grid must inherently have the following characteristics: increased grid reliability and flexibility, the ability to easily interconnect new clean energy to enhance generation mix diversity, and improved system cost-effectiveness.⁷ There is currently insufficient development of projects to support these characteristics, particularly projects that would achieve the following outcomes: 1) increasing transfer capacity between regions, 2) addressing the most consequential system challenges, such as increasing interconnection queue time for clean energy, and 3) increasing supply of diverse location-constrained energy resources to enhance resource adequacy and

⁶ 42 USC § 18711(c); 42 USC § 18712(b); 42 USC § 17386

⁷ National Renewable Energy Laboratory (NREL). Interconnections Seam Study. October 2020. <https://www.nrel.gov/analysis/seams.html>

reduce outages.⁸ Therefore, DOE is eager to leverage federal dollars under the GRIP program to bring together state, Tribal, community, and industry stakeholders to support these outcomes and others of equal or greater public benefit to build the grid that America needs. The GRIP program, which is open to applications across the transmission and distribution system, is one key mechanism available to support transformative and high-impact transmission projects, especially those for which federal funding would reduce the risk of a novel investment or development strategy that can provide a replicable path to additional project activity.

DOE is looking to leverage funding to unlock transformative projects that would not otherwise be built and deployed across the transmission system and/or distribution system without the support provided by the GRIP program. With the funding provided by the BIL across these three programs, there is an opportunity to not only invest in power system infrastructure that addresses critical national, interregional, and regional needs, but also a unique chance to build partnerships between states, local governments, Tribes, and power system operators that align industry objectives with broader regional, interregional, and national goals to enhance reliability, all-hazards resilience, and efficiency of the electric grid. A comprehensive approach that considers all the opportunities available within the BIL can result in more coordinated efforts across relevant stakeholders that can ultimately guide investment strategies for improving resilience beyond what the BIL can directly support.

Concurrently, infrastructure investments in power system resilience offer the opportunity to include a diverse set of populations, including underserved and disadvantaged communities, in the development of resilience strategies that focus on communities and equitable access to opportunities and the benefits that derive from them. DOE believes there are significant benefits to be realized by coordinating the implementation of the three BIL programs focused on power sector infrastructure, grid reliability and resilience.

This FOA supports the Administration's goals by facilitating the modernization of our electrical grid, enhancing energy efficiency, reducing emissions, driving the development of a robust workforce, and bolstering delivery of reliable, clean, and affordable energy to American families and businesses.

⁸ Lawrence Berkeley National Laboratory (LBNL). "Queued Up: Characteristics of Power Plants Seeking Transmission Interconnection." April 2022. <https://emp.lbl.gov/queues>

As part of the whole-of-government approach to advance equity and encourage worker organizing and collective bargaining,^{9,10,11} and in alignment with BIL sections 40101(c), 40107, and 40103(b), this FOA and any related activities will seek to encourage meaningful engagement and participation of workforce organizations, including labor unions, as well as underserved communities and underrepresented groups, including Indian Tribes.¹² Consistent with Executive Order 14008,¹³ this FOA is designed to help meet the goal that 40% of the overall benefits of certain Federal investments in clean energy and climate solutions be delivered to disadvantaged communities, as defined and identified by CEJST pursuant to the Executive Order, and to drive creation of accessible, good-paying jobs with the free and fair chance for workers to join a union.

ii. Strategic Goals

This FOA seeks applications to address three goals:

1. Transform the U.S. electric grid at the transmission and distribution levels by increasing resilience in the face of extreme disruptions, enabling data-rich and flexible grid performance, and spurring innovation at all stages of project ideation and execution;
 2. Prioritize energy justice as an essential component of infrastructure development by dramatically altering the relationship between energy providers and their communities; and
 3. Catalyze and leverage private sector and non-federal public capital for impactful technology and infrastructure deployment.
-
- 1. Transform the U.S. electric grid at the transmission and distribution levels by increasing resilience in the face of extreme disruptions, enabling data-rich and flexible grid performance, and spurring innovation at all stages of project ideation and execution.**

As stated above, shifts in customer and generator behavior and composition and the impacts of a changing climate are driving the need for a transformational modernization of the electric grid. For purposes of this FOA, those needs will be

⁹ E.O. 13985, “Advancing Racial Equity and Support for Underserved Communities Through the Federal Government,” January 20, 2021. E.O. 14091, “Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government,” February 16, 2023.

¹⁰ E.O. 14025, “Worker Organizing and Empowerment,” April 26, 2021.

¹¹ E.O. 14052, “Implementation of the Infrastructure Investment and Jobs Act,” November 18, 2021.

¹² E.O. 13175, November 6, 2000, “Consultation and Coordination with Indian Tribal Governments,” charges all executive departments and agencies with engaging in regular, meaningful, and robust consultation with Tribal officials in the development of federal policies that have Tribal implications. [Memorandum on Tribal Consultation and Strengthening Nation-to-Nation Relationships | The White House](#).

¹³ E.O. 14008, “Tackling the Climate Crisis at Home and Abroad,” January 27, 2021.

addressed through each of the Topic Area priorities described in Section I.B. Projects will be funded under this FOA with the objective to address the urgent demands of aging infrastructure, increasing climate change-induced natural disasters, a transition to clean energy generation sources, and the increasing preponderance of distributed, electrified, and renewable resources on the grid.

The priorities of the Topic Areas as a whole are to:

- i. increase regional and interregional electricity transfer capacity
- ii. increase system resilience in the face of climate change-induced natural disasters
- iii. address the most consequential system challenges that contribute to the increasing interconnection queue time for clean energy
- iv. enable data-rich and flexible grid performance
- v. spur innovation at all stages of project ideation and execution
- vi. facilitate clean energy deployment, generation mix diversity, and other system benefits

2. Prioritize energy justice as an essential component of infrastructure development by dramatically altering the relationship between energy providers and their communities.

An objective of this FOA and resulting projects is to dramatically alter the relationship between energy providers and their communities. GRIP projects will see applicants working in collaboration with communities to ensure their voices are incorporated in the planning and execution of grid modernization projects, with the intent to prioritize energy justice. This mission is particularly relevant for disadvantaged communities and Tribes impacted by grid development projects, and the impact on these communities will be carefully considered as part of award funding decisions.

The projects funded under this FOA will demonstrate clear additionality and innovation in community and labor engagement, and a departure from a “business-as-usual” approach. BIL funding provides the opportunity to fund various initiatives that would not otherwise be possible, and which will improve the lives and livelihood of communities by reducing energy burden for the most disadvantaged, improving communication with customers and reducing restoration times before and during outages, providing good paying jobs and training for the community, and reducing negative environmental impacts for communities, among others.

In keeping with the Administration’s goals, and as an agency whose mission

includes strengthening our country's energy prosperity, DOE seeks projects that should not only contribute to the country's energy technology and climate goals, but also meet the following four priority goals: (1) support meaningful community and labor engagement; (2) invest in the American workforce; (3) advance diversity, equity, inclusion, and accessibility; and (4) contribute to the goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities (the Justice40 Initiative).

3. Catalyze and leverage private sector and non-federal public capital for impactful technology and infrastructure deployment and foster an environment for sharing of best-practices and replication throughout the industry.

DOE is interested in leveraging Federal infrastructure funding to maximize grid infrastructure deployment at-scale through applications that leverage private sector and non-federal public capital to advance deployment goals. Successful projects will demonstrate how federal investments under the GRIP program can lead to additional future investments by industry, communities, venture capital, and other private debt and equity capital. Investments should prioritize grid improvements especially in cases where GRIP investments can overcome institutional barriers and perceived risk to both deliver beneficial grid outcomes and demonstrate an approach suitable for replication. Further, projects will provide innovative and thoughtful mechanisms for collaboration and replication across the industry, enabling technology solutions and best practices for wider adoption beyond the scope of this program.

iii. Priority Areas for Investment

Below are a list of Projects and Technologies that are a high priority for this FOA:

- Projects that cover multiple utility service territories and will evolve and share utility best practices that increase resilience against extreme weather and adapt to the changing energy and technology landscapes.
- Projects that address substation hardening, including the automation and digitization of substations, and/or coordination with upgrades that enable distributed energy resource integration and electrification readiness.
- Projects that propose to construct new transmission infrastructure to resolve a specific and identified contingency condition that the applicant has been unable to resolve using standard investment and planning approaches.

- Projects that significantly increase the transmission capacity of existing rights-of-way using advanced conductors, grid-enhancing technologies, or high-voltage direct current in coordination with investments that enable integration and full utilization of high-capacity corridors.
- Projects that will deploy solutions to **increase** the **rate of** processing of interconnection applications and minimize the queue-related delays for clean energy and electrification loads at both the transmission and distribution levels.
- Projects that in combination with priority investments will foster growth of a highly skilled power sector workforce and minimize workforce constraints associated with power sector innovation.
- Projects that have a significant impact on the transmission system, including projects that leverage advanced transmission technologies and can reduce or remove the existing technical, economic, and regulatory barriers, demonstrate enhanced operational flexibility or capacity, and that enhance reliability to accelerate wide scale transmission expansion and renewable energy interconnection.
- Projects that implement novel and replicable approaches to reducing energy burden and increasing resilience for disadvantaged communities, especially projects that increase access to cheaper generation resources and reduce the impact of infrastructure costs.

iv. Elements of a Successful Application

Responsive applications in all Topic Areas of this FOA will clearly explain:

- The impact of the project on the affected workforce, by retaining, improving, or creating new jobs that can be quantified by location and duration.
- The project's clear physical scope and implementation plan.
- The replicability, extensibility, and scalability of the method, model, financing, planning, regulatory approach, technology, or other solution given the system in which it will be demonstrated.

- Estimated costs and value propositions for the proposed project including contribution to system cost effectiveness, as well as a relative value comparison to alternative approaches.
- How quantitative, measurable metrics relating to the intended improvements in grid outcomes will be utilized to evaluate success.
- How the proposed project will support data standards (e.g., Green Button Connect), interoperability, and non-discriminatory data access on a real-time and ongoing basis.
- How federal funding to address the risks identified in the application will increase the likelihood of securing additional public and/or private investment.
- How the project will invest in America's workforce, meaningfully engage communities and stakeholders, advance energy, and environmental justice, and ensure diversity, equity, inclusion, and accessibility.
- The readiness, viability, and expected timing of the deployment strategy, including key milestones relating to critical financial, development, and implementation stages of the project.
- The project management strategy, including use of project funds to secure subrecipient or vendor expertise to support prime recipients on project management, accounting, environmental justice community engagement, federal reporting, and technical oversight.
 - Note: this approach has been identified as a potential path forward to address resource limitations at recipient organizations. It is not required that external expertise and groups be included, but use of project funds to support these functions will be allowed in accordance with applicable federal cost principles (Section I.i Allowable Costs)

v. Teaming Partner List (Optional)

DOE is compiling a Teaming Partner List to facilitate the formation of project teams for this FOA. The Teaming Partner List allows organizations that may wish to participate on a project to express their interest to other applicants and explore potential partnerships.

Updates to the Teaming Partner List will be available in the Clean Energy Infrastructure Exchange ("Exchange") website. The Teaming Partner List will be regularly updated to reflect new teaming partners who provide their organization's information.

SUBMISSION INSTRUCTIONS: View the Teaming Partner List by visiting the Exchange homepage and clicking on "Teaming Partners" within the left-hand navigation pane. This page allows users to view published Teaming Partner Lists. To join the Teaming Partner List, submit a request within Exchange. Select the appropriate Teaming Partner List from the drop-down menu, and fill in the following information: Investigator Name, Organization Name, Organization Type, Topic Area, Background and Capabilities, Website, Contact Address, Contact Email, and Contact Phone.

DISCLAIMER: By submitting a request to be included on the Teaming Partner List, the requesting organization consents to the publication of the above-referenced information. By facilitating the Teaming Partner List, DOE is not endorsing, sponsoring, or otherwise evaluating the qualifications of the individuals and organizations that are identifying themselves for placement on this Teaming Partner List. DOE will not pay for the provision of any information, nor will it compensate any applicants or requesting organizations for the development of such information.

B. Topic Areas

The proposed objectives, eligibility, and technical approaches for each of the three GRIP programs are outlined below.

- Topic Area 1: Grid Resilience Grants (BIL section 40101(c))
- Topic Area 2: Smart Grid Grants (BIL section 40107¹⁴)
- Topic Area 3: Grid Innovation Program (BIL section 40103(b))

i. Topic Area 1: Grid Resilience Grants (40101(c))

Objectives:

This program supports activities that reduce the likelihood and consequence of impacts to the electric grid due to extreme weather, wildfire, and natural disaster. The statutory language requires prioritization of projects that will generate the greatest community benefit (whether rural or urban) in reducing

¹⁴ Topic Area 2 is authorized under section 1306 of the Energy Independence and Security Act of 2007, which was later amended by section 40107 of the BIL. The authority is codified at 42 USC §17386.

the likelihood and consequences of disruptive events.¹⁵ DOE particularly seeks projects that will progress the field in the following areas:

- Projects that address comprehensive transformational transmission and distribution technology solutions that will mitigate one or multiple *specific* hazards across a region or within a community, including but not limited to wildfires, floods, high wind events including tornadoes and hurricanes, and extreme temperatures (extreme heat or extreme cold). Applications should demonstrate how risks associated with a specific hazard were identified and how proposed investments are targeted to mitigate those particular risks. Applications should also discuss any specific resilience needs and/or disproportionate impacts associated with severe or prolonged outages that are relevant to the region or community directly impacted by the proposed scope.
- Projects that enable a system operator to develop expertise in and demonstrate the benefits of modern approaches that go beyond a grid operator's business-as-usual framework to providing improved system resilience. **Applications** should describe the extent to which the proposed approach is industry-leading and how the applicant would leverage project success to de-risk the proposed approach for broader implementation.
- Projects that are structured to encourage consistency of approach and dissemination of learnings by including participation of multiple eligible entities.
- Projects that aggregate resilience efforts across multiple service territories.

DOE encourages applicants to consider resilience in all aspects of the proposed project scope, including elements such as material selection (e.g., for replacement poles), concurrent vegetation management, and undergrounding, even if these elements are not the main focus of the proposed project. As described in Section I.A above, all projects proposed under this FOA should demonstrate that they will provide significant economic and justice benefits to communities, that they can leverage capital investment, and that they lead to repeatable solutions for other entities.

Some technical approaches of interest and priority investments include the following.

¹⁵ 42 USC § 18711(c)(4)

Applicants will demonstrate a transformational, comprehensive approach to mitigating one or more specific hazards across a region or within a community. Concurrently, DOE encourages applicants to align proposed grid resilience and grid hardening investments with broader State, Tribal, or regional resilience or energy security plans. DOE is particularly interested in applications that modernize system infrastructure and improve resilience outcomes with current service territory resilience and reliability metrics as a baseline, including clear qualitative explanations of resilience challenges facing a specific set of assets.

Applications in this area could include:

- Projects that demonstrate a clear strategic approach, supported with innovative uses of technology to assist in risk identification, project planning, and operation (e.g., improved forecasting, work order management, and crew deployment approaches).
- Substation hardening projects with automation and digitization scope, as well as substation hardening projects that are coordinated with upgrades to enable distributed energy resource (DER) integration and/or electrification-readiness.
- Improvement of system adaptivity specifically for resilience purposes, such as through deployment of Fault Location, Isolation, and Service Restoration (FLISR) and/or use of & smart reclosers and similar technologies.
- Projects that minimize or mitigate system conditions that exacerbate the risk of specific hazards (such as, but not limited to, wildfire occurrence) and may lead to wildfires or other system disturbances. This includes but is not limited to:
 - Monitoring and control technologies, advance modeling software, and adaptive protection devices.
 - Projects that include reconductoring and incorporating upgrades to the electric system as an ancillary requirement for hardening projects that prove overall resiliency benefits.
- Projects that cover multiple utility service territories and will evolve and share utility best practices in areas such as vegetation management, pole, and equipment replacement for storm hardening, and undergrounding. This includes projects to establish new best practices that are resilient to

increasing extreme weather as well as the changing energy and related technology landscapes.

- Advanced reconductoring approaches that expand transmission and distribution capacity along existing infrastructure and rights of way using materials, equipment, and operational approaches that advance beyond current typical industry practices. This includes conductors that increase capacity/ampacity 1.5x relative to the existing equipment and especially increase capacity or advanced conductors (modern composite and/or carbon cores).
- Approaches to construct new transmission (at or above 69 kV) infrastructure to resolve a specific, identified contingency condition, provided that applicants describe the nature of the condition and the impact of that condition on system resilience (generally or to a specific subset of customers). Applicants should include a clear explanation for why it has been unable to resolve the condition thus far under standard planning and investment approaches. Projects that satisfy these conditions are eligible for a higher maximum federal award (see Section II.A).

In addition, there are a broad range of activities, technologies, equipment, and hardening measures to reduce the likelihood and consequences of disruptive events that are eligible for funding as specified in the applicable statutory language.

The following activities are NOT eligible¹⁶ for funding under Topic Area 1: construction of: (I) a new electric generating facility; (II) a new large-scale battery-storage facility that is not used for enhancing system adaptive capacity during disruptive events; or (III) cybersecurity.

Additionally, new transmission lines at or above 69 kV will not be considered for funding, except in the case that applicant clearly demonstrates that the new transmission line either completes a radial loop or solves an N-1 contingency issue.

Topic Area 1 Requirements

- Small utility set-aside. Thirty percent (30%) of the total funding available for Topic Area 1 will be set aside for small utilities, which are defined as entities that sell no more than 4,000,000 MWh of electricity per year.¹⁷ Entities

¹⁶ See BIL section 40101(e)(2), as codified at 42 USC § 18711(e)(2).

¹⁷ 42 USC § 18711(c)(5)

applying for this set aside must demonstrate their eligibility by submitting their total retail electricity sales to ultimate customers as reported to the Energy Information Administration (EIA) on Form 861 for the last reporting year.

In addition to submission of the Form 861, applications to Topic Area 1 must include a Project Description and Assurances Document (PDAD) certifying the applicant is a Small Utility (sells no more than 4,000,000 MWh of electricity per year). The PDAD template is provided as [Appendix E](#).

- Report on Resilience Investments. As part of its application, an applicant must submit a report detailing past, current, and future efforts by the eligible entity to reduce the likelihood and consequences of disruptive events.¹⁸ The report must summarize any program and related approved funding that the applicant's organization has implemented over the past 3 years to reduce the likelihood of events in which operations of the electric grid 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.

In addition to submission of the report, applications to Topic Area 1 must include a PDAD that confirms the total amount (USD) of qualifying resilience investments that have been spent for the previous 3 years and the time period utilized for calculation of the reported amount. The PDAD template is provided as [Appendix E](#).

- Funding supplemental to existing efforts. Grants under this program are in general intended to be supplemental to existing hardening efforts of applicants for any given year.¹⁹ "Existing hardening efforts" includes projects that have been funded in whole or part by a subaward under the Grid Resilience Formula Funding for States and Indian Tribes (BIL 40101(d))²⁰ program. The applicant should describe in the technical volume how the grant funding provided by this program would result in proposed activities that are additional to efforts that would have been undertaken but-for the funding and will generate the greatest community or regional resilience benefit in reducing the likelihood and consequences of disruptive events. This may include the acceleration or expansion of planned activities that would not be accelerated or expanded but-for the funding. The narrative should reference the *Report on*

¹⁸ 42 USC § 18711(c)(2)(B)

¹⁹ 42 USC § 18711(c)(1)(A)

²⁰ 42 USC § 18711(d)

Resilience Investments to demonstrate how the proposed activities would be additional to existing planned investments.

- Biennial Report to Congress. Every two years, DOE will submit a report to Congress covering data on the cost of projects, the types of activities funded, and the extent to which the ability of the power grid to withstand disruptive events has increased.²¹ Awardees will be required to track and report this data to DOE.
- BIL Section 40101(d), DE-FOA-0002736 (ALRD 2736). Per BIL section 40101(e)(2) (C) APPLICATION LIMITATIONS. —*An eligible entity may not submit an application for a grant provided by the Secretary under subsection (c) and a grant provided by a State or Indian Tribe pursuant to subsection (d) during the same application cycle.*

If the applicant is a subawardee/contractor under an application submitted under BIL Section 40101(d), ALRD 2736, the applicant must describe the differences between the subject GRIP FOA 3195 application (40101(c)) and the ALRD 2736 (40101(d)) application in the PDAD. The PDAD template is provided as **Appendix E**.

Topic Area 1 Teaming Arrangements

Eligible applicants include electric grid operators; electricity storage operators; electricity generators; transmission owners or operators; distribution providers; fuel suppliers; and any other relevant entity as determined by the Secretary.²² Applicants must certify that the prime applicant is an eligible entity type as listed above via completion and submission of the PDAD. The PDAD template is provided as **Appendix E**.

It is important to ensure that States, Tribes or territories are engaged in the approach. The expectation of DOE is that regulatory stakeholders will be engaged in this process to ensure cost recovery may be achieved.

ii. Topic Area 2: Smart Grid Grants (40107)

Objectives

The 40107 Smart Grid Grants program is aimed at supporting projects that will achieve the goals and objectives set out in FOA Section I.A.ii through innovative

²¹ 42 USC § 18711(i)

²² 42 USC § 18711(a)(2)

and ambitious uses of cutting-edge, market-ready technologies. These technologies can include new devices, materials, engineering designs, or software tools. DOE particularly seeks projects that will progress the field in the following areas:

- Projects that focus on the use of innovative materials, tools, and engineering approaches to improve system capacity and flexibility. Applications should clearly delineate the ways in which the proposed approach(es) are industry-leading and/or represent a significant advance in capabilities for the applicant.
- Projects that meaningfully improve grid operators' ability to use data to deliver benefits to ratepayers and support policy goals. Applications should describe the types and sources of data and provide a qualitative description of the extent of the corpus of data available. In addition, applications should specify how the project will improve one or more grid operators' ability to use data for operational purposes, planning purposes, or both, and the extent to which the project will enable usage of data across silos within and across organizations.
- Projects that are structured to de-risk broad adoption of innovative technologies and approaches by including participation of multiple eligible entities (especially multiple grid operators) and a clear strategy for assessing the benefits of the proposed innovations.

As described in Section I.A above, all applications submitted under this FOA should demonstrate that they will provide significant economic and justice benefits to communities, that they can leverage capital investment, and that they lead to repeatable solutions for other entities.

Some technical approaches of interest and priority investments are discussed, but not limited to, the below.

Applicants are encouraged to coordinate with and support broader State, local, Tribal, and regional strategies on resilience, energy security, energy and environmental justice, and decarbonization. In addition, smart grid technologies funded and deployed at-scale under this program should have a pathway to wider market adoption such that the funding significantly encourages and facilitates the development of a smart grid and best practices for achievement and governance (Smart Grid Investment Matching Grant Program) of smart grid capabilities.²³ Aggregation of smart grid technologies is encouraged to accelerate

²³ 42 USC §17386(e)(1)(C)

deployment. Under this Topic Area, DOE seeks applications that propose to use ambitious implementation of modern technologies as described below.

- Applications that propose to promote innovative project development on the transmission system, especially projects that improve transfer capacity within existing rights-of-way and those that foster coordination between multiple grid operators. Applications of interest include:
 - Applications that propose to significantly increase the transmission capacity of existing rights-of-way through deployment of advanced conductors or High Voltage Direct Current (HVDC), investments to enable integration and full utilization of high-capacity corridors, and innovative approaches to improving transfer capacity within existing rights-of-way, subject to the requirement that such approaches demonstrate at least a 1.5x improvement in transfer capacity. Projects that meet these objectives are eligible for a higher maximum federal award (see Section II.A);
 - Applications that propose to significantly increase the operational capacity of the existing transmission network through the use of grid-enhancing technologies (GETs), specifically advanced power flow control, dynamic line rating, congestion management approaches, and network topology optimization. Applications should address the extent to which the project would reduce barriers to commercial scale-up (for example, associated with regulatory frameworks, technical validation needs, integration with operational practice, or other factors);
- Applications that propose to promote strategic use of data for grid operations and planning and enable utilities and other grid operators to derive actionable insights from grid data across all facets of their operations. Proposed approaches may include improvements to data cleaning, management, and warehousing; innovative planning, engineering, modeling, and decision support tools; and enhancements to interoperability of systems and datasets, especially between distributed energy resources (DERs) and grid operators, between a regional transmission organization (RTO) and a transmission or distribution system operator, or between different functions within a grid operator (e.g., billing and system planning).
- **Applications** that lead to more rapid processing of interconnection applications and minimize queue-related delays for clean energy (and/or integration of electrification load) at both the transmission and distribution levels. Projects may include hardware, software, project design, business process innovation, regulatory innovation, or any combination thereof. Of

interest are applications that address all phases of the interconnection process, including application intake and management; scenario generation and impact modeling; mitigation planning, design, and engineering; or any combination thereof.

- Applications that propose to enable innovation at the substation level to promote system efficiency and agility given increasing penetration of intermittent generating resources and DERs.

This may include:

- Technologies at the substation level that can manage real and reactive power, reverse power flows, voltage transients, and harmonic content in such a manner as to provide tangible improvement in a grid operator's ability to fully and cost-effectively integrate clean generation, electrification load, and DERs;
 - Technologies that demonstrably improve coordination of substation operations with customer-sited resources and technologies to provide quantifiable improvements in quality of service or economic metrics;
 - Processes, hardware, and software that can rapidly adapt to changes in grid topology and other conditions;
 - Capabilities to support flexible energy dispatch and black starts, including from inverter-based resources;
 - Improved modularity in design to facilitate adaptivity to future changes in load, DER deployment, or customer needs downstream of the substation.
- Applications that may be for feature development of market-ready technologies, including software suites for planning, modeling, and control.
 - Foundational investments in communications infrastructure, including optical ground wire, dark fiber, operational fiber, and wireless broadband communications networks, are of interest but should be considered within a project scope that demonstrates how such communications infrastructure can provide benefits to ratepayers and/or promote achievement of policy goals. DOE encourages applications that include communications investments to incorporate other priority areas as listed above.
 - Applications that focus on advanced metering infrastructure (AMI) deployment should have a clear roadmap of the smart grid applications that will be enabled by the deployment of AMI and should include data forecasting on current or future clean energy and/or electrification-related load management needs that necessitate the use of AMI. DOE encourages

applications that include AMI deployment to incorporate other priority areas as listed above.

- Applications that focus on increasing grid resilience in relation to extreme weather or natural disasters should have a clear connection to and focus on smart grid components.
- Aggregation and integration of distributed energy resources and other “grid-edge” devices to provide system benefits, such as renewable energy resources, electric vehicle charging infrastructure, vehicle-to-grid technologies and capabilities, and smart building technologies, are eligible. *Note, as indicated in Section I.C below, applications that propose to devote a significant percentage of budget to customer incentives are not of interest in this program.*
- Applications that have the potential to impact multiple utility services territories and reflect a high level of coordination among partners and that incorporate technologies or approaches that support the objectives or priority areas listed above.
- All applications will be expected to incorporate industry-leading cybersecurity protocols appropriate to minimize risk while increasing the digitalization and connectivity of grid infrastructure.

In addition, a broad set of eligible smart grid investments and capabilities is allowed under the Smart Grid Investment Matching Grant Program,²⁴ and any combination of smart grid technologies and functions that support the objectives, see 42 U.S.C. 17386(b)²⁵.

The following activities are NOT eligible for funding under Topic Area 2:

Qualifying Smart Grid investments do not include any of the following:

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

²⁴ [42 USC §17386\(b\) \(2023\) Federal matching fund for smart grid investment costs \(house.gov\)](#)

²⁵ [42 USC §17386\(b\) \(2023\) Federal matching fund for smart grid investment costs \(house.gov\)](#)

(3) 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.

(4) After the development and publication by the Institute of 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.

(5) Expenditures for physical interconnection of generators or other devices to the grid except those that are directly related to enabling Smart Grid functions.

(6) Expenditures for ongoing salaries, benefits, or personnel costs not incurred in the initial installation, training, or startup of smart grid functions.

(7) Expenditures for travel, lodging, meals, or other personal costs.

(8) Ongoing or routine operation, billing, customer relations, security, and maintenance expenditures.

(9) Such other expenditures that the Secretary determines not to be Qualifying Smart Grid Investments by reason of the lack of the ability to perform Smart Grid functions or lack of direct relationship to Smart Grid functions.²⁶

Teaming Arrangements

Topic Area 2 includes a broad range of eligibility for all types of domestic applicants. See FOA section III.A.ii for more detail. DOE encourages technology vendors to submit applications as the prime applicant, in collaboration with utility partners. DOE encourages applicant teams to include a broad set of stakeholders, including but not limited to, electric grid operator or owners, technology vendors, system integrators, subject matter experts, local energy and environmental justice organizations, and community leaders. In addition, State, Tribal, territory, or regulatory stakeholders should be engaged in the approach as appropriate.

iii. Topic Area 3: Grid Innovation Program (40103(b))

Objectives

²⁶ See 42 U.S.C. 17386(c)

The 40103(b) program is targeted at achieving the goals and objectives set out in FOA Section I.A.ii through high-impact, innovative projects. DOE seeks applications that may include technical and/or non-technical (e.g., focused on regulatory or business model innovation) approaches that improve grid reliability and resilience on the local, regional, and interregional scales. Applications may address the transmission system, the distribution system, storage, or a combination. DOE particularly seeks projects that include Independent System Operators (ISO), Regional Transmission Organizations (RTO), and/or Power Pools and will progress the field in the following areas: demonstrate an innovation in the approach to the project or deploy a technology innovation.

- Projects that improve the reliability and resilience of the electrical grid especially in light of the need for significant changes to grid infrastructure driven by additions of clean generation (including over broad geographical areas) and electrification load (including in load pockets), updates to legacy assets, and increasing stress from climate-related weather events and other threats to physical infrastructure. Projects should provide a clear description of how the proposed scope will enable a high quality of affordable electrical service given the need for these significant changes.
- Projects that leverage this program to affect durable and transformative change within and beyond the impacted project area, both through accomplishment of the specific project scope proposed as well as through use of that scope to de-risk or establish a novel approach that can be used for similar projects. For example, proposed projects may make use of novel approaches to project planning or cost allocation that would be adopted for future projects, novel organizational structures that would persist past the scope of the project, and/or novel technical approaches that can easily be replicated at additional sites.
- Projects that demonstrate meaningful public/private partnership approaches through strategic involvement of *both* public and private sector actors. In particular, DOE recognizes that while eligibility for this topic area is restricted to States, local governments, Tribes, and public utility commissions, many projects may be executed primarily by private sector subrecipients. In these cases, applications should describe the approach of the public sector applicant and any additional public sector project partners to providing support to the overall project goal, including through policy and/or regulatory actions, and the approach that public sector entities will take to promote replicability of the proposed project structure.

Applications combining multiple approaches are encouraged, and all applications should demonstrate how the proposed new, innovative approaches interact with

each other and any existing infrastructure to increase overall system resiliency. Applications that invest in America's workforce; advance energy and environmental justice and support the goals of the Justice40 Initiative; engage in meaningful community and stakeholder engagement; and advance diversity, equity, inclusion, and accessibility are of particular importance in this topic area. This also includes leveraging existing local, state, regional, and federal resource that identify system needs, including the National Transmission Needs Study²⁷.

Technical approaches of interest and priority investments are discussed, but are not limited to, the below.

Applicants are encouraged to clearly situate proposed projects within broader State, local, Tribal, and regional strategies on resilience, energy security, energy, and environmental justice, and decarbonization. Applications under this topic area may address the transmission system, the distribution system, storage, or a combination. Under this topic area, DOE seeks applicants to use ambitious and innovative project concepts to address the following areas of particular interest:

- Innovative project approaches on the transmission system, including those leveraging advanced transmission technologies and those that can reduce or remove the existing technical, economic, and/or regulatory barrier(s) necessary to accelerate wide scale transmission expansion and renewable energy interconnection. Proposed solutions should demonstrate enhanced transmission system operational flexibility or capacity while enhancing reliability. Projects that meet these objectives are eligible for a higher maximum federal award (see Section II.A). Applications may include one or more of the following approaches of interest:
 - Planning, modeling, cost allocation, investments, and strategies that accelerate interconnection of clean energy generation and/or storage, or delivery of service for electrification-related load;
 - Interregional or cross-ISO/RTO projects that address key grid reliability, flexibility, and/or resilience challenges, including any challenges or needs identified by local, regional, or national analyses such as IRPs, ISO/RTO transmission planning studies, the National Transmission Needs Study, or the Atlantic Offshore Wind Transmission Study;
 - Transmission lines which have been identified by the relevant grid operator/ISO/RTO as needed or as supporting the deployment of clean energy resources;

²⁷ [National Transmission Needs Study | Department of Energy](#)

- Addressing grid integration challenges for difficult-to-access clean generation resources, including offshore wind and geothermal generation;
- Major new transmission lines using approaches to reduce permitting and execution risk, including through leveraging novel permitting or land acquisition authorities and approaches, use of other relevant existing rights-of-way such as highway corridors, and other relevant approaches;
- Demonstration of reliable and resilient distribution system operations given high penetrations of distributed renewable generation, energy storage, and flexible customer loads as a percentage of total load, up to and including “full electrification” scenarios in a well-defined portion of a distribution system. Relevant projects may incorporate:
 - Electrification of industrial, commercial, and building energy uses including through district energy systems;
 - Black-start capable systems and control approaches to minimize negative impacts during power grid disruptions;
 - Provision of grid services in real time from distributed, advanced grid-forming inverter-based systems at sufficient scale and system complexity, especially when based on locationally- and temporally specific system conditions rather than system-wide peak conditions or resource availability constraints.
- Behind the meter asset operations, aggregation, and coordination to provide demand response and grid services, including building systems, distributed generation, energy storage, electric vehicle fleets and others.
- Projects applications for energy storage may be applied to the transmission system, the distribution system, or a combination.
 - Innovative storage projects that deploy utilize renewable energy resources or varied energy storage in innovative and replicable ways to provide specific resilience benefits;
 - Strategic deployment of storage technologies in communities or regions that experience frequent extreme weather or other natural disasters or to provide a specific ability to better integrate variable renewable energy and electrification load. Applications should explicitly discuss why energy storage is the most beneficial and cost-effective approach to providing these benefits, especially as compared to traditional grid infrastructure. Projects may include any type of energy storage;

- Innovative storage technologies that offer different performance characteristics than lithium-ion battery energy storage systems, provided that such technologies are market-ready, and the proposed project is not focused on retiring technical risks.
- Transformative projects that enable coordinated operations and/or planning across the transmission and distribution networks, resulting in improved combination system applications and joint resilience, functionality, and cost-effectiveness across both grid sectors. This could involve using assets in one sector to provide services to the other in a manner that mitigates specific upgrade or expansion requirements, or efforts to improve visibility and communication across sectors to allow for optimization of grid planning or operations.
- Applications that demonstrate novel and replicable approaches to reducing energy burden and increasing resilience for disadvantaged communities, especially projects that increase access to cheaper generation resources, reduce the impact of infrastructure costs, or both. Applications that reduce energy burden in combination with one or more of the above objectives are of particular interest.
- Applications that include technologies, approaches, or other innovative techniques that are not specifically addressed above but have the potential to meet the goals and objectives of this topic area by demonstrating innovative approaches or enhancing regional resilience are eligible for consideration.²⁸

Teaming Arrangements

Entities who are eligible to apply to Topic Area 3 include States, a combination of 2 or more States, Indian Tribes, units of local government, and public utility commissions. See Section III.A for more information.

This topic area seeks to support demonstrations at sufficient scale and within a system of sufficient complexity to establish confidence in the value proposition of the proposed approach. Applicants are encouraged to assemble diverse and multi-functional project teams capable of receiving and managing project funds (federal and non-federal share), executing on technology deployments and upgrades, conducting operational testing and validation, analyzing resultant data and performance, and clearly communicating and disseminating findings to key stakeholders and decision makers. The team must designate one team member

²⁸ See 42 U.S.C. 18712(b)(3)

to serve as the prime recipient and that team member must qualify as an eligible applicant.

In addition, all teams should clearly articulate their ***strategy to enable wide-scale adoption*** of their proposed solutions following a successful demonstration and their ***intended commitment*** to utilize these or resultant solutions within their own systems and jurisdictions. Projects selected under this topic area will attempt to resolve technical and commercial adoption barriers by increasing stakeholder confidence in the performance, cost, and value characteristics of their proposed system. To ensure maximum impact following these demonstrations, a clear plan to disseminate findings, replicate successes, incorporate the outcomes of the demonstrations into investment decision-making frameworks, and activate additional public and private capital is crucial. These plans should consider which stakeholders and decision makers must be informed as to the demonstration results, what types and quality of information would lead to concrete investment decisions, and how to integrate with local, Tribal, state, and regional energy strategies and transition plans to amplify overall impact and rate of adoption. Initial strategies should be presented in the application, but it is expected that these plans will be developed more fully over the course of the project.

iv. Applications Specifically Not of Interest

The following types of applications will be deemed nonresponsive and will not be reviewed or considered (See Section III.D. of the FOA):

- Applicable to **All Topic Areas**
 - Applications that fall outside the technical parameters specified in Sections I.A. and I.B. of the FOA.
 - Applications for proposed technologies that are not based on sound scientific principles (e.g., violates the laws of thermodynamics).
 - Applications which dedicate a significant budget allocation towards funding customer rebate or incentive programs.
- Topic Area 1:
 - Applications that propose the construction of a new electric generating facility.
 - Applications that propose the construction of a large-scale battery-storage facility unless the battery enhances system adaptive capacity during disruptive events.
 - In addition, the following types of applications are not of interest: **applications that propose** new transmission lines at or above 69 kV except in the case that applicant clearly demonstrates that the new transmission line either completes a radial loop or solves an N-1

contingency issue; applications that focus primarily on enhancements to cybersecurity or physical security.

- Topic Area 2: See 42 U.S.C. 17386(c).
- Topic Area 3:
 - 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 prime applicants propose to sub-allocate funding according to schema that lack sufficient detail for DOE to evaluate their potential impact, or that are presented at a concept-level stage.

C. Community Benefits Plan: Job Quality and Equity

To support the goal of building a clean and equitable energy economy, BIL-funded projects are expected to (1) support meaningful community and labor engagement; (2) invest in America's workforce; (3) advance diversity, equity, inclusion, and accessibility (DEIA); and (4) contribute to the President's goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities (the Justice40 Initiative).²⁹ To ensure these goals are met, applications must include a Community Benefits Plan that describes how the proposed project would incorporate the four objectives stated above.

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

a. Community and Labor Engagement

The project planning should include engagement with an inclusive collection of local labor unions, governments, Tribal entities, and other stakeholders -- such

²⁹ The Justice40 Initiative, established by E.O. 14008, sets a goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities. The Justice40 Interim Guidance provides a broad definition of disadvantaged communities (page 2): <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>.

as, residents and businesses, entities that carry out workforce development programs, and community-based organizations that support or work with disadvantaged communities. Considering the importance of the four priorities listed above and the financial investment in the projects to be funded under this FOA, stakeholder engagement is a relatively small cost that delivers high value. Proactive and meaningful engagement with stakeholders ensures stakeholders' perspectives can be incorporated into the project plan, allows for transparency, and helps reduce or eliminate certain risks associated with the project.

b. Quality Jobs

In keeping with the Administration's goals, and to ensure the agency's energy projects contribute to overall economic prosperity, DOE strongly supports investments that expand accessible good-paying jobs, with assurances that workers will have a free and fair chance to join a union; promote worker power for marginalized workers and in hard-to-organize and changing industries; improve job quality through the adoption of strong labor standards; support responsible employers; foster safe, healthy, and inclusive workplaces and communities free from harassment and discrimination, and support strategies that develop a skilled and inclusive local workforce to build and maintain the country's energy infrastructure and grow domestic manufacturing.

c. Diversity, Equity, Inclusion, and Accessibility

Advancing equity, civil rights, racial justice, and equal opportunity is a key priority of the Biden Administration. The term "equity" means the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; persons otherwise adversely affected by persistent poverty or inequality; and individuals who belong to multiple such communities.³⁰

As part of a whole of government approach to advancing equity, this FOA seeks to encourage the participation of underserved communities³¹ and

³⁰ E.O. 13985, "Advancing Racial Equity and Support for Underserved Communities Through the Federal Government" (Jan. 20, 2021). E.O. 14091, "Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government," February 16, 2023.

³¹ The term "underserved communities" refers to populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, as exemplified by the list of in the definition of "equity." E.O. 13985. For purposes of this FOA, communities identified as disadvantaged or underserved communities by their respective States;

underrepresented groups, ensure equitable access to business opportunities, good-paying jobs, career-track training, and other economic opportunities. Partnerships with community-based organizations, comprehensive support services to reduce barriers to access to opportunities and ensuring business and employment opportunities for members of disadvantaged communities are key tools. Applicants are required to describe how DEIA objectives will be incorporated in the project.

Further, Applicants are highly encouraged to include individuals from groups historically underrepresented^{32,33} in science, technology, engineering, and math (STEM) fields on their project teams.

communities identified on the Index of Deep Disadvantage referenced at <https://news.umich.edu/new-index-ranks-americas-100-most-disadvantaged-communities/>, and communities that otherwise meet the definition of “underserved communities” stated above.³² According to the National Science Foundation’s 2019 report titled, “Women, Minorities and Persons with Disabilities in Science and Engineering”, women, persons with disabilities, and underrepresented minority groups—blacks or African Americans, Hispanics or Latinos, and American Indians or Alaska Natives—are vastly underrepresented in the STEM (science, technology, engineering, and math) fields that drive the energy sector. That is, their representation in STEM education and STEM employment is smaller than their representation in the U.S. population. <https://nces.nsf.gov/pubs/nsf19304/digest/about-this-report> For example, in the U.S., Hispanics, African Americans and American Indians or Alaska Natives make up 24 percent of the overall workforce, yet only account for 9 percent of the country’s science and engineering workforce. DOE seeks to inspire underrepresented Americans to pursue careers in energy and support their advancement into leadership positions. <https://www.energy.gov/articles/introducing-minorities-energy-initiative>

³² According to the National Science Foundation’s 2019 report titled, “Women, Minorities and Persons with Disabilities in Science and Engineering”, women, persons with disabilities, and underrepresented minority groups—blacks or African Americans, Hispanics or Latinos, and American Indians or Alaska Natives—are vastly underrepresented in the STEM (science, technology, engineering, and math) fields that drive the energy sector. That is, their representation in STEM education and STEM employment is smaller than their representation in the U.S. population. <https://nces.nsf.gov/pubs/nsf19304/digest/about-this-report> For example, in the U.S., Hispanics, African Americans and American Indians or Alaska Natives make up 24 percent of the overall workforce, yet only account for 9 percent of the country’s science and engineering workforce. DOE seeks to inspire underrepresented Americans to pursue careers in energy and support their advancement into leadership positions. <https://www.energy.gov/articles/introducing-minorities-energy-initiative>

³³ See also. Note that Congress recognized in Section 305 of the American Innovation and Competitiveness Act of 2017, Public Law 114-329:

(1) [I]t is critical to our Nation’s economic leadership and global competitiveness that the United States educate, train, and retain more scientists, engineers, and computer scientists; (2) there is currently a disconnect between the availability of and growing demand for STEM-skilled workers; (3) historically, underrepresented populations are the largest untapped STEM talent pools in the United States; and (4) given the shifting demographic landscape, the United States should encourage full participation of individuals from underrepresented populations in STEM fields.

Minority Serving Institutions³⁴, Minority Business Enterprises, Minority Owned Businesses, Woman Owned Businesses, Veteran Owned Businesses, Tribal Colleges and Universities, or entities located in an underserved community that meet the eligibility requirements (See Section III) are encouraged to apply as the prime applicant or participate on an application as a proposed partner to the prime applicant. The Selection Official may consider the inclusion of these types of entities as part of the selection decision (See Section V.C.i. Program Policy Factors).

d. Justice40 Initiative

In addition to the Federal government's initiative to achieve greater participation from underserved communities and underrepresented groups, this FOA supports DOE's commitment to the Justice40 Initiative.³⁵ Benefits include (but are not limited to) measurable direct or indirect investments or positive project outcomes that achieve or contribute to the following in disadvantaged communities: (1) a decrease in energy burden; (2) a decrease in environmental exposure and burdens; (3) an increase in access to low-cost capital; (4) an increase in high-quality job creation, the clean energy job pipeline, and job training for individuals; (5) increases in clean energy enterprise creation and contracting (e.g., minority-owned or disadvantaged business enterprises); (6) increases in energy democracy, including community ownership; (7) increased parity in clean energy technology access and adoption; and (8) an increase in energy resilience.

³⁴ Minority Serving Institutions refers to universities and colleges that serve a significant percentage of students from minority groups, including Historically Black Colleges and Universities/Other Minority Institutions as educational entities recognized by the Office of Civil Rights (OCR), U.S. Department of Education, and identified on the OCR's Department of Education U.S. accredited postsecondary minorities' institution list. See <https://www2.ed.gov/about/offices/list/ocr/edlite-minorityinst.html>.³⁵ The Justice40 initiative, created by E.O. 14008, establishes a goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities. The Justice40 Interim Guidance provides a broad definition of disadvantaged communities (Page 2): <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>. The DOE, Office of Management and Budget, and/or the Council on Environmental Quality (CEQ) may issue additional and subsequent guidance regarding the designation of disadvantaged communities and recognized benefits under the Justice40 Initiative. DOE will also recognize disadvantaged communities as defined and identified by the White House Council on Environmental Quality's Climate and Economic Justice Screening Tool (CEJST), which can be located at <https://screeningtool.geoplatform.gov/>³⁶ 42 USC § 18711(c)(5)

³⁵ The Justice40 initiative, created by E.O. 14008, establishes a goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities. The Justice40 Interim Guidance provides a broad definition of disadvantaged communities (Page 2): <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>. The DOE, Office of Management and Budget, and/or the Council on Environmental Quality (CEQ) may issue additional and subsequent guidance regarding the designation of disadvantaged communities and recognized benefits under the Justice40 Initiative. DOE will also recognize disadvantaged communities as defined and identified by the White House Council on Environmental Quality's Climate and Economic Justice Screening Tool (CEJST), which can be located at <https://screeningtool.geoplatform.gov/>³⁶ 42 USC § 18711(c)(5)

D. Authorizing Statutes

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 (IIJA), Section 40101(c) (codified at 42 USC § 18711(c)), and Section 40103(b) (codified at 42 USC § 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 USC § 17386)

Awards made under this announcement will fall under the purview of 2 Code of Federal Regulation (CFR) Part 200 as amended by 2 CFR Part 910.

E. Notice of Bipartisan Infrastructure Law–Specific Requirements

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

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

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

II. Award Information

A. Award Overview

i. Estimated Funding

Under BIL sections 40101(c), 40107, and 40103(b), the BIL appropriated approximately \$10.5 billion for the five-year period encompassing FY 2022 through FY 2026, via annual release of competitive FOAs. This FOA will include Federal funding for both FY 2024 and FY 2025, totaling approximately \$3.9 billion of funding that DOE expects to make available for new awards under this FOA, subject to the availability of appropriated funds. DOE anticipates making approximately 40-100 awards under this FOA. DOE may issue one, multiple, or no awards. Individual award amounts vary by topic area (see details below).

DOE may issue awards in one, multiple, or none of the following topic areas:

	Anticipate d Number of Awards	Anticipated Minimum Award Size for Any One Individual Award (Fed Share)	Anticipated Maximum Award Size for Any One Individual Award (Fed Share)	Approximate Total Federal Funding Available for All Awards
Topic Area 1: Grid Resilience Grants (40101(c))	10-20*	Small utilities: \$10 million All others: \$50 million	All projects: \$100 million Exceptions: (a) Projects that construct new transmission at or above 69 kV except in the case that applicant clearly demonstrates that the new transmission line either completes a radial loop or solves an N-1 contingency issue, provided that applicants describe the nature of the condition and the impact of that condition on system resilience (generally or to a specific subset of customers): \$250 million (b) Projects that aggregate multiple utility service territories: \$250 million	\$918 million

			Note that for all projects, funding award request must not exceed the total of the applicant's last three years of resilience investments**	
Topic Area 2: Smart Grid Grants (40107)	25-40	\$10 million	All projects: \$50 million Exceptions: (a) Projects that aggregate multiple utility service territories: \$100 million (b) Projects that deploy advanced conductors for transmission line capacity improvement at scale: \$250 million	\$1,080 million
Topic Area 3: Grid Innovation Program (40103(b))	4-40	N/A	All projects: \$250 million Exception: Projects that deploy significant transmission investments: \$1 billion	\$1,820 million

*Approximately 3-6 of the anticipated number of awards will be made to small utilities. Thirty percent (30%) of the total funding available will be set aside for small utilities, which are defined as entities that sell no more than 4,000,000 MWh of electricity per year.³⁶

**DOE may not award a grant to an eligible entity in an amount that is 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”.³⁷ DOE will interpret “efforts to reduce the likelihood and consequences of disruptive events” as those activities, technologies, equipment, and hardening measures that are eligible for grants under this provision.³⁸

DOE may establish more than one budget period for each award and fund only the initial budget period(s). Funding for all budget periods, including the initial budget period, is subject to the availability of appropriated funds and is not guaranteed.

ii. Period of Performance

DOE anticipates making awards that will run from 60 months to 96 months in length (see table below), comprised of one or more budget periods. Project

³⁶ 42 USC § 18711(c)(5)

³⁷ 42 USC § 18711(c)(3)

³⁸ 42 USC § 18711(e)1

continuation will be contingent upon several elements, including satisfactory performance, DOE's Go/No-Go decision, and the availability of appropriated funds. For a complete list and more information on the Go/No-Go review, see Section VI.B.xv.

Topic Area	Period of Performance
1	60 months
2	60 months
3	60 - 96 months

iii. New Applications Only

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

B. DOE Funding Agreements

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

i. Cooperative Agreements (applies to Topic Area 3 ONLY)

DOE generally uses cooperative agreements to provide financial and other support to prime recipients.

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

DOE has substantial involvement in all projects funded via cooperative agreement. See Section VI.B.x of the FOA for more information on what substantial involvement may involve.

ii. Grants (applies to Topic Area 1 and 2 ONLY)

Although DOE has the authority to provide financial support to prime recipients through grants, DOE generally does not fund projects through grants. DOE will fund Topic Area 1 and 2 projects through grants.

III. Eligibility Information

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

A. Eligible Applicants

i. Topic Area 1 (Section 40101(c))

The following domestic entities are eligible to apply:

- electric grid operator;
- electricity storage operator;
- electricity generator;
- transmission owner or operator;
- distribution provider;
- fuel supplier;
- And any other relevant entity, as determined by the Secretary.

ii. Topic Area 2 (Section 40107)

The following domestic entities are eligible to apply:

- institutions of higher education;
- for-profit entities;
- non-profit and not-for-profit entities; and
- state and local governmental entities, and tribal nations.

iii. Topic Area 3 (Section 40103(b))

The following domestic entities are eligible to apply:

- a State;
- a combination of 2 or more States;
- an Indian Tribe;
- a unit of local government; and
- a public utility commission.

iv. General Requirements for Eligible Applicants for Topic Areas 1, 2, and 3

a. Domestic Entities

To qualify as a domestic entity, the entity must be organized, chartered, or incorporated (or otherwise formed) under the laws of a particular state or territory of the United States; have majority domestic ownership and control; and have a physical place of business in the United States.

b. Foreign Entities

In limited circumstances, DOE may approve a waiver to allow a foreign entity to participate as a prime recipient or subrecipient. A foreign entity may submit a Full Application to this FOA, but the Full Application must be accompanied by an explicit written waiver request. Likewise, if the applicant seeks to include a foreign entity as a subrecipient, the applicant must submit a separate explicit written waiver request in the Full Application for each proposed foreign subrecipient.

Appendix B lists the information that must be included in a foreign entity waiver request. The applicant does not have the right to appeal DOE's decision concerning a waiver request.

c. National Laboratories/FFRDCs

National Laboratories and Federal Funded Research and Development Centers (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 is applicable to both DOE/NNSA and non-DOE/NNSA National Laboratories and FFRDCs.

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 prime recipient or subrecipient will be considered non-responsive.

d. Federal agencies

Federal agencies, instrumentalities, and corporations (other than DOE) are eligible to participate as a subrecipient if the agency, instrumentality, or corporation satisfies the applicable eligibility statutory requirements, but are not eligible to apply as a prime recipient; except for the Tennessee Valley Authority, who is eligible to participate as a prime recipient and as a subrecipient under Topic Area 1.

e. Teaming Arrangements

The project team must designate one team member to serve as the prime recipient and that team member must qualify as an eligible entity. If the project team will operate as an incorporated or unincorporated consortium, DOE may request the applicant to provide additional information, such as any collaboration agreement, that describes management structure and the rights and responsibilities of each consortium member.

f. Additional Restrictions

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

Nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995, are not eligible to apply for funding. Nonprofit organizations described in section 501(c)5 of the Internal Revenue Code are eligible to apply for funding.

v. Restricted Eligibility (applies to Topic Area 1 and Topic Area 3 ONLY)

In accordance with 2 CFR 910.126, 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 BIL, as codified at 42 U.S.C. 18711 and 42 U.S.C. 18712(c), respectively.

Applicants must certify that the prime applicant is an eligible entity for the Topic Area via completion and submission of the PDAD. The PDAD template is provided as [Appendix E](#).

B. Cost Sharing

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

Topic Area	Topic Area Title	Cost Match/Share Requirement
1	Section 40101(c) – “Grants to Eligible Entities on Preventing Outages and Enhancing the Resilience of the Electric Grid (Grid Resilience Grants)”	An eligible entity that receives a grant under this section shall be required to match 100% of the amount of the Federal grant. Exception for small utilities: An eligible entity that sells not more than 4,000,000 megawatt hours of electricity per year shall be required to match 1/3 of the grant. *See Appendix A. The cost share must come from non-federal sources unless otherwise allowed by law.
2	Section 40107 – “Deployment of Technologies to Enhance Grid Flexibility (Smart Grid Grants)”	The cost share must be at least 50% of the total project costs. The cost share must come from non-federal sources unless otherwise allowed by law.
3	Section 40103 (b) – “Program Upgrading Our Electric Grid and Ensuring Reliability and	Section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352) shall apply. The cost share must be

	Resiliency (Grid Innovation Program)”	at least 50% of the total project costs. ^{39,40} The cost share must come from non-federal sources unless otherwise allowed by law.
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***Cost matching:** “Cost matching” for the non-federal share is calculated as a percentage of the Federal funds only, rather than the Total Project Cost.

To assist applicants in calculating proper cost match/share amounts, DOE has included a cost share information sheet and sample cost share calculation as Appendix A to this FOA.

i. Legal Responsibility

Although the cost share requirement applies to the project as a whole, including work performed by members of the project team other than the prime recipient, the prime recipient is legally responsible for paying the entire cost share. If the funding agreement is terminated prior to the end of the project period, the prime recipient is required to contribute at least the cost share percentage of total expenditures incurred through the date of termination.

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

vi. Cost Share Allocation

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

vii. Cost Share Types and Allowability

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

³⁹ Total project costs is the sum of the government share and the recipient share of project costs.

⁴⁰ Energy Policy Act of 2005, Pub. L. 109-58, sec. 988. Also see 2 CFR 200.306 and 2 CFR 910.130 for additional cost sharing requirements.

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

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

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

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

The prime recipient may not use to meet cost share obligations sources including, but not limited to, the following:

- 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); or
- Expenditures that were reimbursed under a separate federal program.

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

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

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

viii. Cost Share Verification

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

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

C. Compliance Criteria

Concept Papers and Full Applications must meet all compliance criteria listed below or they will be considered noncompliant. DOE will not review or consider noncompliant submissions, including Concept Papers and Full Applications that were: submitted through means other than specifically stated in the FOA; submitted after the applicable deadline; and/or submitted incomplete. DOE will not extend the submission deadline for applicants that fail to submit required information by the applicable deadline due to server/connection congestion.

i. Concept Papers

Concept Papers are deemed compliant if:

- it complies with the content and form requirements in Section IV.C. of the FOA;
- all required documents are included; and
- is successfully uploaded in Exchange <https://infrastructure-exchange.energy.gov/>, including clicking the “Submit” button, by the deadline stated in the FOA.

ii. Full Applications

A full application is deemed compliant if:

- it complies with the content and form requirements in Section IV.D. of the FOA;
- includes all required documents; and
- is successfully uploaded in Exchange <https://infrastructure-exchange.energy.gov/>, including clicking the “Submit” button, by the deadline stated in the FOA.

D. Responsiveness Criteria

All Applications Specifically Not of Interest, as described in Section I.C. of the FOA, are deemed nonresponsive and are not reviewed or considered. For additional guidance, see Section I.A.iii “Elements of a Responsive Application”.

E. Other Eligibility Requirements (Reserved)

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

An entity may submit more than one Concept Paper and Full Application to this FOA, provided that each application describes a unique, distinct project and provided that an eligible Concept Paper was submitted for each Full Application.

G. Questions Regarding Eligibility

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

IV. Application and Submission Information

A. Application Process

The application process will include two phases: a Concept Paper phase and a Full Application phase. **Only applicants who have submitted an eligible Concept Paper will be eligible to submit a Full Application.**

At each phase, DOE performs an initial eligibility review of the applicant submissions to determine whether they meet the eligibility requirements of Section III of the FOA. DOE will not review or consider submissions that do not meet the eligibility requirements of Section III. All submissions must conform to the following form and content requirements, including maximum page lengths (described below). Concept papers full applications must be submitted Exchange <https://infrastructure-exchange.energy.gov/>. **DOE will not review or consider submissions submitted through means other than specifically stated in the FOA, submissions submitted after the applicable deadline, or incomplete submissions.** DOE will not extend deadlines for applicants who fail to submit required information and documents due to server/connection congestion.

The Concept Paper must conform to the requirements of the Concept Paper Form that is available on Exchange at <https://infrastructure-exchange.energy.gov/> for use.

The Full Application must conform to the following requirements:

- Each must be submitted in Adobe PDF format unless stated otherwise;
- Each must be written in English;
- All pages must be formatted to fit on 8.5 x 11-inch paper with margins not less than one inch on every side. Use Calibri typeface, a black font color, and a font size of 12 point or larger (except in figures or tables, which may be 10-point font). A symbol font may be used to insert Greek letters or special characters, but the font size requirement still applies. References must be included as footnotes or endnotes in a font size of 10 or larger. Footnotes and endnotes are counted toward the maximum page requirement;
- Page numbers must be included in the footer of every page; and
- Each submission must not exceed the specified maximum page limit, including cover page, charts, graphs, maps, and photographs when printed using the formatting requirements set forth above and single spaced. If applicants exceed the maximum page lengths indicated below, DOE will review only the authorized number of pages and disregard any additional pages.

Applicants are responsible for meeting each submission deadline. **Applicants are strongly encouraged to submit their Concept Papers and Full Applications at least 48 hours in advance of the submission deadline.** Under normal conditions (i.e., at least 48 hours in advance of the submission deadline), applicants should allow at least 1 hour to submit a Concept Paper and Full Application. Once the Concept Paper and Full Application is submitted as specifically stated in the FOA, applicants may revise or update that submission until the expiration of the applicable deadline. If changes are made to any of these documents, the applicant must resubmit the Concept Paper and Full Application before the applicable deadline.

DOE urges applicants to carefully review their Concept Paper and Full Application to allow sufficient time for the submission of required information and documents. Full Applications that pass the initial eligibility review will undergo comprehensive technical merit review according to the criteria identified in Section V of the FOA.

i. Additional Information on Exchange

Exchange is designed to enforce the deadlines specified in this FOA. The “Apply” and “Submit” buttons will automatically disable at the defined submission deadlines. Should applicants experience problems with Exchange, the following information may be helpful.

Applicants that experience issues with submission PRIOR to the FOA deadline: In the event that an applicant experiences technical difficulties with a submission, the applicant should contact the Exchange helpdesk for assistance (InfrastructureExchangeSupport@hq.doe.gov). The Exchange helpdesk and/or the Exchange system administrators will assist applicants in resolving issues.

B. Application Forms

To access application forms and instructions available on Exchange, go to <https://infrastructure-exchange.energy.gov/> and select the appropriate funding opportunity number.

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

TechnicalVolume_Part_1
TechnicalVolume_Part_2

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

C. Content and Form of the Concept Paper

Each Concept Paper must be limited to a single Topic Area. Do not consolidate multiple Topic Areas into a single Concept Paper.

Applicants are required to develop the concept paper using the Concept Paper Form which is available on Exchange at <https://infrastructure-exchange.energy.gov/> for use. The Concept Paper must conform to the following content requirements, the Concept Paper Form requirements, and must not exceed the stated character limits for each Section within the Concept Paper Form. DOE will review only information provided in accordance with the character limits stated within the Concept Paper Form and will disregard information provided beyond the character limits.

Section	Description
Project Overview	Applicant Name

	• Project Partners • Project Name • Project Location(s) • GRIP Topic Area • Project Budget, including Federal Funds Requested and Applicant Cost Share
Project Details	• How the project addresses the topic area's eligible uses and technical approaches. • The impact that DOE funding would have on the proposed project. • The type of technology(ies) to be deployed and elements of innovation of the deployment of the technology(ies). • The potential for replicability or for broader adoption. • The readiness, viability, and expected timing of the project. Identification of risks and challenges, including risk mitigation strategies. • The project management team and key personnel and project partners, including the skill/expertise of the project management team and partners, any prior experience that demonstrates an ability to perform similar tasks, whether the project team has worked together previously, and whether the project team has adequate access to necessary facilities and equipment.
Project Impacts	• The impact of the project to reduce innovative technology risk; achieve further deployment at-scale; and lead to additional private sector investments. • How the project supports State, local, Tribal, community and regional resilience, in reducing the likelihood and consequences of disruptive events, decarbonization, or other energy strategies and plans. • The grid-benefit outcomes to be delivered by the project (e.g., number of customers impacted, improvement in reliability metrics).
Community Benefits Plan	Applicants are required to succinctly describe their approach to the Community Benefits Plan, addressing the four core elements: • Community and labor engagement leading to negotiated agreements. • Investing in job quality and workforce continuity. • Advancing diversity, equity, inclusion, and accessibility. • Contributing to the Justice40 Initiative goal that 40% of overall benefits of certain federal investments flow to disadvantaged communities.
Addendum A Topic Area 1 ONLY, if applicable*	Applicants who 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 to ensure status as a small utility.
*Small utilities ONLY: 30% of the total funding available for 40101(c) will be set aside for small utilities, which are defined as entities that sell no more than 4,000,000 MWh of electricity per year.⁴¹	

DOE makes an independent assessment of each Concept Paper based on the criteria in Section V of the FOA. DOE will encourage a subset of applicants to submit Full Applications. Other applicants will be discouraged from submitting a Full Application. An applicant who receives a “discouraged” notification may still submit a Full Application. DOE will review all eligible Full Applications. However, by discouraging the submission of a Full Application, DOE intends to convey its lack of programmatic interest in the proposed project to save the applicant the

⁴¹ 42 USC §18711(c)(5)

time and expense of preparing an application that is unlikely to be selected for award negotiations.

DOE may include general comments provided from reviewers on an applicant's Concept Paper in the encourage/discourage notification sent via email at the close of that phase.

D. Content and Form of the Full Application

Applicants must submit a Full Application by the specified due date and time to be considered for funding under this FOA. Applicants must complete the following application forms found on the Exchange website at <https://infrastructure-exchange.energy.gov/> in accordance with the instructions.

Applicants should reference the date and time stated on the FOA cover page to plan for the number of days from receipt of the Concept Paper Encourage/Discourage notification to preparing and submitting a Full Application. Regardless of the date the applicant receives the Encourage/Discourage notification, the submission deadline for the Full Application remains the date and time stated on the FOA cover page.

All Full Application documents must be marked with the control number issued to the applicant.

i. Full Application Content Requirements

Component	File Format	Page Limit	File Name
SF-424: Application for Federal Assistance	PDF	N/A	ControlNumber_LeadOrganization_424
Technical Volume	PDF	25	ControlNumber_LeadOrganization_Technical Volume
Resumes	PDF	3 pages each	ControlNumber_LeadOrganization_Resumes
Letters of Commitment	PDF	1 page each	ControlNumber_LeadOrganization_LOCs
Community Partnership Documentation	PDF	1 page each	ControlNumber_LeadOrganization_PartnerDocs
Statement of Project Objectives (SOPO)	MS Word	5	ControlNumber_LeadOrganization_SOPO

Budget Justification Workbook	MS Excel	N/A	ControlNumber_LeadOrganization_Budget_Justification
Summary/Abstract for Public Release	PDF	2	ControlNumber_LeadOrganization_Summary
Summary Slide	MS PowerPoint	Up to 3	ControlNumber_LeadOrganization_Slides
Subrecipient Budget Justification	MS Excel	N/A	ControlNumber_LeadOrganization_Subrecipient_Budget_Justification
Environmental Questionnaire	PDF	N/A	Control Number_LeadOrganization_EQ
SF-LLL Disclosure of Lobbying Activities	PDF	N/A	ControlNumber_LeadOrganization_SF-LLL
Foreign Entity Waiver Requests and Foreign Work Waiver Requests	PDF	N/A	ControlNumber_LeadOrganization_Waiver
Community Benefits Plan: Job Quality and Equity	PDF	12	ControlNumber_LeadOrganization_CBenefits
Community Benefits Plan Budget Justification Workbook	MS Excel	N/A	ControlNumber_LeadOrganization__CBenefits_Budget_Justification
Current and Pending Support	PDF	N/A	ControlNumber_LeadOrganization_CPS
Potentially Duplicative Funding Notice (if applicable)	PDF	N/A	ControlNumber_LeadOrganization_PDFN
Transparency of Foreign Connections	PDF	N/A	ControlNumber_LeadOrganization_TFC_BusinessSensitive_
Report on Resilience Investments Topic Area 1 ONLY	PDF	10	ControlNumber_LeadOrganization_Resilience Investments
EIA 861 Topic Area 1 ONLY, if applicable*	PDF	N/A	ControlNumber_LeadOrganization_EIA861
Locations of Work	MS Excel	N/A	ControlNumber_LeadOrganization_LOW
Project Description and Assurances Document (PDAD)	PDF	N/A	ControlNumber_LeadOrganization_PDAD
*Small utilities ONLY: 30% of the total funding available in 40101(c) will be set aside for small utilities, which are defined as entities that sell no more than 4,000,000 MWh of electricity per year. ⁴²			

Note: The maximum file size that can be uploaded to the Exchange website is 10MB. See Section IV.B.

Each Full Application must be limited to a single concept or technology. Do not consolidate unrelated concepts and technologies in a single Full Application. Full Applications must conform to the following content and form requirements and must not exceed the stated page limits. **If applicants exceed the maximum page lengths indicated below, DOE will review only the authorized number of pages and disregard any additional pages.**

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

⁴² 42 USC §18711(c)(5)

ii. SF-424: Application for Federal Assistance

Complete all required fields in accordance with the instructions on the form. The form is available on Exchange at <https://infrastructure-exchange.energy.gov/>. The list of certifications and assurances in Field 21 can be found at <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>, under Certifications and Assurances. Note: The dates and dollar amounts on the SF-424 are for the complete project period and not just the first project year, first phase or other subset of the project period. Save the SF-424 in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_424".

ii. Technical Volume

The Technical Volume must be submitted in PDF format. The Technical Volume must conform to the following content and form requirements, including maximum page lengths. This volume must address the technical review criteria as discussed in Section V of the FOA. Save the Technical Volume in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_TechnicalVolume".

Note: If a file exceeds 10MB but is still within the maximum page limit specified in the FOA, it must be broken into parts and denoted to that effect. For example:

TechnicalVolume_Part_1
TechnicalVolume_Part_2

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 Full Application may not be more than 25 pages, including the cover page, table of contents, and all citations, charts, graphs, maps, photos, or other graphics, and must include all the information in the table below. The applicant should consider the weighting of each of the technical review criterion (see Section V of the FOA) when preparing the Technical Volume.

The Technical Volume should clearly describe and expand upon information provided in the Concept Paper. The Technical Volume must conform to the following content requirements:

Technical Volume Content Requirements	
SECTION/PAGE LIMIT	DESCRIPTION
Cover Page	The cover page should include the project title, the specific FOA Topic Area being addressed, both the technical and business points of contact, names of all team member organizations, names of project managers, names of the Senior/Key personnel and their organizations, the project location(s), and any statements regarding confidentiality.
Project Overview (Approximately 10% of the Technical Volume)	The Project Overview should contain the following information: • Project Overview: The applicant should briefly summarize the project details, including the hardware, software, new operational approach, or other central element deployed in the proposed project. The applicant should briefly summarize what makes this project innovative and/or transformational for the areas directly impacted by the deployment. Finally, the applicant should identify any notable direct benefits to communities and/or workers as a result of the project. • Background: The applicant should discuss the background of their organization, including any specific history, successes, and current project development status (i.e., the development baseline) directly relevant to the technical topic being addressed in the Full Application. • Project Goal: The applicant should explicitly identify the targeted improvements to the baseline infrastructure, practices, and regulatory framework, and/or technology and the critical success factors in achieving that goal, including the ways in which the proposed project location and related infrastructure, skilled workforce, community benefits, etc. will contribute to the success of the overall project. This section should include a succinct statement (1-3 sentences, clearly highlighted) of what the applicant expects the project to achieve if successful, with performance metrics if possible. Please ensure this statement is in bold text. • DOE Impact: The applicant should discuss the impact that DOE funding would have on the proposed project. Applicants should specifically explain how DOE funding, relative to prior, current, or anticipated funding from other public and private sources, is necessary to enable the project to progress, and to achieve its intended objectives. • Community Benefits Plan: Job Quality and Equity – The applicant should summarize the overall anticipated benefits that will accrue to the local community and disadvantaged communities. These should be presented as a targeted list of commitments which are expounded upon in the Community Benefits Plan template referenced below. These commitments could include but are not limited to: the commitment to negotiate a Community Benefits and/or Workforce Agreement; measurable decrease in energy burden; decreased duration, frequency, or impact of power disruption; increased access to clean power; support of minority business enterprises; DEIA initiatives; the plan to attract,

	train, and retain a skilled labor force with strong labor standards; the number of jobs created; and the plan to ensure workers' free and fair chance to join a union. This section should also identify potential partners the applicant is working with to support these objectives. • Constraints on Resources: Identify any potential long-term constraints the project will have on the community's access to natural resources (e.g., water) and Tribal cultural resources. If applicable, describe a long-term cleanup strategy that ensures communities and neighborhoods remain healthy and safe and not burdened with cleanup costs and waste. • Climate Strategy: The applicant should outline a climate resilience strategy that accounts for climate impacts and extreme weather patterns such as high winds (tornadoes and hurricanes), heat and freezing temperatures, drought, wildfire, and floods.
Technical Description, Innovation, and Impact (Approximately 30% of the Technical Volume)	The Technical Description should contain the following information: • Relevance and Outcomes: The applicant should provide a detailed description of the project. Applicants should include a description of the types and quantities of technologies to be deployed, supporting efforts associated with technology deployment, specific targeted grid outcomes, and other principles and objectives that will be pursued during the project. This section should describe the relevance of the proposed project to the goals and objectives of the FOA. The applicant should clearly specify the expected outcomes of the project (e.g., number of customers impacted, improvement in reliability metrics). • Feasibility: The applicant should demonstrate the technical feasibility of the proposed approach and capability of achieving the anticipated performance targets, including a description of previous work done and prior results. This section should also address the project's access to necessary infrastructure (e.g., transportation, water, electric transmission), including any use of existing infrastructure, as well as to a skilled workforce. • Innovation and Impacts: The applicant should describe the current standard practice and/or state-of-the-art technology in the applicable field, the specific innovation of the proposed approach, the advantages of the proposed approach over current state of practice, and the overall impact on advancing the field of the project is successful. • The applicant should describe how the project supports State, local, Tribal, regional, and national resilience, decarbonization, or other energy goals, strategies, and plans. • The applicant should address the potential impact of the project to reduce perceived risk for project deployment; achieve further deployment at-scale to; and lead to additional private sector investments. • <u>Topic Area 1 (Grid Resilience Grants) applications must:</u>

	○ Address how the proposed project will generate the greatest community, regional, or interregional resilience benefit in reducing the likelihood and consequences of disruptive events. ○ Address how the project (1) comprehensively mitigates one or more hazards faced by community or region; (2) comprehensively mitigates the potential for equipment to cause a wildfire in a community or region; (3) fully addresses the consequences of an outage caused by a natural hazard; and/or (4) mitigates economic risk as derived from outage duration or outage frequency. ○ Address how the federal funding provided by this program would result in proposed activities that go beyond and are additional to efforts that would have been undertaken but-for the funding and will generate the greatest community or regional resilience benefit in reducing the likelihood and consequences of disruptive events. The narrative should reference the <i>Report on Resilience Investments</i> to demonstrate how the proposed activities would be additional to existing planned investments. • <u>Topic Area 2 (Smart Grid Grants) applications must:</u> ○ Describe how the project will have a significant effect in encouraging and facilitating the development of smart grid functions identified as the <i>technical approaches of interest and priority investments</i> in Section I.B.ii, Topic Area 2. ○ Describe how the project would enhance the system flexibility to meet program objectives. • <u>Topic Area 3 (Grid Innovation Program) applications must:</u> ○ Describe how the project will address innovative approaches and deployment goals across transmission systems, distribution, storage, or a combination as identified as the technical approaches of interest and priority investments in Section I.B.iii, Topic Area 3. ○ Describe how each partner associated with the application will contribute to project success and replicability.
Workplan (Approximately 40% of the Technical Volume)	The Workplan should include a summary of the Project Objectives, Technical Scope, Work Breakdown Structure (WBS), Milestones, Go/No-Go Decision Points, and Project Schedule. A detailed SOPO is separately requested. The Workplan should contain the following information: • Project Objectives: The applicant should provide a clear and concise (high-level) statement of the goals and objectives of the project as well as the expected outcomes, consistent with the Project Goal statement in the Project Overview section. • Technical Scope Summary: The applicant should provide a summary description of the overall work scope and approach to achieve the objective(s). The overall work scope is to be divided by performance

	periods that are separated by discrete, approximately annual decision points (see below for more information on Go/No-Go decision points). The applicant should describe the specific expected result of each performance period, including milestones detailed in the Community Benefits Plan. • WBS and Task Description Summary: The Workplan should describe the work to be accomplished and how the applicant will achieve the milestones, will accomplish the final project goal(s), and will produce all deliverables. It should be clear to reviewers how the individual activities and tasks will, if successful, result in the accomplishment of the full suite of overall Project Objectives. The Workplan is to be structured with a hierarchy of performance period (approximately annual), task and subtasks, which is typical of a standard WBS for any project. The Workplan shall contain a concise description of the specific activities to be conducted over the life of the project. The description shall be a full explanation and disclosure of the project being proposed (i.e., a statement such as “we will then complete a proprietary process” is unacceptable). It is the applicant’s responsibility to prepare an adequately detailed task plan to describe the proposed project and the plan for addressing the objectives of this FOA. The summary provided should be consistent with the SOPO. The SOPO will contain a more detailed description of the WBS and tasks. • Milestone Summary: The applicant should provide a summary of appropriate milestones throughout the project to demonstrate success. A milestone may be either a progress measure (which can be activity based) or a Specific, Measurable, Attainable, Realistic and Timely (SMART) technical milestone. SMART milestones should be Specific, Measurable, Achievable, Relevant, and Timely, and must demonstrate a technical achievement rather than simply completing a task. Unless otherwise specified in the FOA, the minimum requirement is that each project must have at least one milestone per quarter for the duration of the project with at least one SMART technical milestone per year (depending on the project, more milestones may be necessary to comprehensively demonstrate progress). The applicant should also provide the means by which the milestone will be verified. • Go/No-Go Decision Points (See Section VI.B.xv for more information on the Go/No-Go Review): provide a summary of project-wide Go/No-Go decision points at appropriate points in the Workplan. At a minimum, each project must have at least one project-wide Go/No-Go decision point for each budget period (12 to 18-month period) of the project. The applicant should also provide the specific objective criteria to be used to evaluate the project at the Go/No-Go decision point. The summary provided should be consistent with the SOPO. Go/No-Go decision points are considered “SMART” and can fulfill the requirement for an annual SMART milestone. • End of Project Goal: The applicant should provide a summary of the end of project goal(s). At a minimum, each project must have one SMART end
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	of project goal. The summary provided should be consistent with the SOPO. • Project Schedule (Gantt Chart or similar): The applicant should provide a schedule for the entire project, including task and subtask durations, milestones, and Go/No-Go decision points. • Buy America Requirements for Infrastructure Projects: Within the first 2 pages of the Workplan or project description, include a short statement on whether the project will involve the construction, alteration, maintenance and/or repair of public infrastructure in the United States. See Appendix B for applicable definitions and other information regarding Infrastructure Projects and the Buy America Requirement. • Project Management: The applicant should discuss the team’s proposed management plan, including the following: ○ The overall approach to and organization for managing the work, including an organizational chart. ○ The roles and responsibilities of each project team member. ○ Any critical handoffs/interdependencies among project team members. ○ The technical and management aspects of the management plan, including systems and practices, such as financial and project management practices. ○ The approach to project risk management, including a plan for securing a qualified workforce and mitigating risks to project performance including but not limited to community or labor disputes. ○ A description of how project changes will be handled. ○ If applicable, the approach to Quality Assurance/Control. ○ How communications will be maintained among project team members.
Technical Qualifications and Resources (Approximately 20% of the Technical Volume)	The Technical Qualifications and Resources should contain the following information: • Describe the project team’s unique qualifications and expertise, including those of key subrecipients. • Describe the project team’s existing equipment and facilities, or equipment or facilities already in place on the proposed project site, that will facilitate the successful completion of the proposed project; include a justification of any new equipment or facilities requested as part of the project. • This section should also include relevant, previous work efforts, demonstrated innovations, and how these enable the applicant to achieve the project objectives.

	Describe the time commitment of the key team members to support the project.
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iii. Resumes

A resume provides information that can be used by reviewers to evaluate the individual's skills and experience of the key project personnel. Applicants are required to submit resumes (up to three pages in length) for each project manager and key personnel that include the following:

1. Contact Information;
2. Education: Include all academic institutions attended, major/area, degree;
3. Training: Include certifications or credentials from a Registered Apprenticeship or Labor Management Partnership;
4. Professional Experience: Beginning with the current position, list professional/academic positions in chronological order with a brief description;
5. List all current academic, professional, or institutional appointments, foreign or domestic, at the applicant institution or elsewhere, whether or not remuneration is received, and, whether full-time, part-time, or voluntary; and
6. There should be no lapses in time over the past ten years or since age 18, whichever time period is shorter. Do not include professional headshots.

Save the resumes in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_Resumes".

iv. Letters of Commitment

Submit letters of commitment from all subrecipient and third-party cost share providers. If applicable, the letter must state that the third party is committed to providing a specific minimum dollar amount or value of in-kind contributions allocated to cost sharing. The following information for each third party contributing to cost sharing should be identified: (1) the name of the organization; (2) the proposed dollar amount to be provided; and (3) the proposed cost sharing type – (cash or in-kind contributions). Each letter must not exceed 1 page. If applicable, also include any letters of commitment from suppliers/partners/end users/future customers/labor unions/community-based organizations. Each letter must not exceed 1 page. Save the letters of commitment in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_LOCs".

Letters of support or endorsement for the project from entities that do not have a substantive role in the project are not required nor desired.

v. Community Partnership Documentation

In support of the Community Benefits Plan, applicants are encouraged to submit documentation to demonstrate existing or planned partnerships with community entities, such as organizations that work with local stakeholders most vulnerable to or affected by the project. Examples of such entities include organizations that carry out workforce development programs, labor unions, Tribal organizations, and community-based organizations that work with disadvantaged communities. The partnership documentation can be a letter on a partner's letterhead outlining the planned partnership and signed by an officer of the entity, a Memorandum of Understanding, or another similar agreement. Such letters must state the specific nature of the partnership and must not be general letters of support. If the applicant intends to enter into Workforce and Community Agreements as part of the Community Benefits Plan, they should include letters from proposed partners. Each letter must not exceed one page. In total, the partnership documentation must not exceed 10 pages. Save the partnership documentation in a single PDF file using the following convention for the title: "ControlNumber_LeadOrganization_PartnerDoc".

vi. Statement of Project Objectives (SOPO)

Applicants are required to complete a SOPO as part of the application materials. A SOPO template is available as **Appendix D** of the FOA. The SOPO, including the Milestone Table, must not exceed 5 pages when printed using standard 8.5 x 11 paper with 1" margins (top, bottom, left, and right) with font not smaller than 12-point (except in figures or tables, which may be 10-point font). Save the SOPO in a single Microsoft Word file using the following convention for the title "ControlNumber_LeadOrganization_SOPO".

vii. Budget Justification Workbook

Applicants are required to complete the Budget Justification Workbook which is available on Exchange at <https://infrastructure-exchange.energy.gov/> for use and to describe the level of detail required in the budget justification. Although the data requested is mandatory, the use of the budget justification workbook is not. Prime recipients must complete each tab of the Budget Justification Workbook for the project as a whole, including all work to be performed by the prime recipient and its subrecipients and contractors. Applicants should include costs associated with implementing the various BIL-specific requirements (e.g., Buy America requirements for infrastructure projects, Davis-Bacon, Community Benefits Plan, reporting, oversight) and with required annual audits and incurred cost proposals in their proposed budget documents. Such costs may be reimbursed as a direct or indirect cost. The "Instructions and Summary" included with the Budget Justification Workbook will auto-populate as the applicant enters information into the Workbook. Applicants must carefully read the

“Instructions and Summary” tab provided within the Budget Justification Workbook. Applicant may submit multiple budget files as needed. Save the Budget Justification Workbook in a single Microsoft Excel file using the following naming convention “ControlNumber_LeadOrganization_Budget_Justification”.

viii. Summary/Abstract for Public Release

Applicants are required to submit a two-page summary/abstract of their project. The project summary/abstract must contain a summary of the proposed activity but must not contain any proprietary or sensitive business information. The Summary is intended to serve as a concise project description to aid in the **application** review process and should not be presented in the form of a mock press release or news story. However, it should only contain information suitable for dissemination to the public.

Summary should be a self-contained document. The first page of the summary should identify the name of the applicant, the project manager, the project title, the objectives of the project, a description of the project, including methods to be employed, the potential impact of the project (e.g., benefits, outcomes), and major participants (for collaborative projects). The summary should also include estimates of jobs created or supported, disadvantaged communities benefitted by the project, anticipated community engagement commitments. As appropriate for the project, the summary should also include quantified estimated benefits to the system that the project is intended to create (e.g., resilience, reliability, access to new energy resources, decarbonization). If necessary, this information can be included in Page 2 of the project summary/abstract.

The project summary/abstract must not exceed 2 pages when printed using standard 8.5 x 11 paper with 1” margins (top, bottom, left, and right) with font not smaller than 12-point. Save the Summary for Public Release in a single PDF file using the following naming convention “ControlNumber_LeadOrganization_Summary”.

ix. Summary Slide

Applicants are required to provide up to 3 slides summarizing the proposed project. This slide is used during the evaluation process.

The Summary Slide template requires the following information:

- A technology summary;
- A description of the technology’s impact;
- Proposed project goals;
- Proposed project impact in communities affected, including:

- Number of electric customers who benefitted from the project.
- Number of electric customers who benefitted from the project in disadvantaged communities.
- Jobs:
 - Total amount of jobs/positions created (do not count by hours of labor)
 - Number of direct permanent and temporary positions created from the proposed project in the next 5 years within local communities.
 - Number of direct permanent and temporary positions created from the proposed project in the next 5 years under a union agreement within local communities.
- Any expected environmental impacts (negative or otherwise), and whether they are located in disadvantaged communities.
- Any other measurable benefits in communities impacted.

- Any key graphics (illustrations, charts and/or tables);
- The project's key idea/takeaway;
- Project title, prime recipient, project manager and key personnel information; and
- Requested DOE funds and proposed applicant cost share.

Save the Summary Slides in a single Microsoft PowerPoint file using the following convention for the title "ControlNumber _LeadOrganization _Slides".

x. Subrecipient Budget Justification (if applicable)

Applicants must provide a separate budget justification for each subrecipient that is expected to perform work estimated to be more than \$250,000 or 25 percent of the total work effort (whichever is less), which is available on Exchange at <https://infrastructure-exchange.energy.gov/>. The budget justification must include the same justification information described in the "Budget Justification" section above. Save each subrecipient budget justification in a Microsoft Excel file using the following convention for the title "ControlNumber _LeadOrganization _Subrecipient _Budget _Justification".

xi. Environmental Questionnaire

The Applicant must submit an environmental questionnaire providing for the work of the entire project. The Applicant is also responsible for submitting a separate environmental questionnaire for each proposed subrecipient performing at a different location. The environmental questionnaire is available on Exchange at <https://infrastructure-exchange.energy.gov/>. Save the

Environmental Questionnaire in a single PDF file using the following convention for the title “Control Number_Lead Organization_EQ”.

NOTE: If selected for award and if a subrecipient’s location is not known at the time of application, a subsequent environmental questionnaire will be needed prior to them beginning work at an alternate location.

xii. SF-LLL: Disclosure of Lobbying Activities (required)

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

Prime recipients and subrecipients are required to complete and submit SF-LLL, “Disclosure of Lobbying Activities” to ensure that non-federal funds have not been paid and will not be paid to any person for influencing or attempting to influence any of the following in connection with the application:

- An officer or employee of any federal agency;
- A member of Congress;
- An officer or employee of Congress; or
- An employee of a member of Congress.

Save the SF-LLL in a single PDF file using the following convention for the title “ControlNumber_LeadOrganization_SF-LLL”.

xiii. Waiver Requests (if applicable)

i. Foreign Entity Participation

For projects selected under this FOA, as set forth in Section III, all prime recipients and subrecipients must qualify as domestic entities. To request a waiver of this requirement, the applicant must submit an explicit waiver request in the Full Application. Appendix B lists the information that must be included in a waiver request.

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

As set forth in Section IV.I.iii., all work for projects selected under this FOA must be performed in the United States. To request a waiver of this requirement, the applicant must submit an explicit waiver request in the Full Application. Appendix B lists the information that must be included in a foreign work waiver request.

Save the Waivers in a single PDF file using the following convention for the title “ControlNumber_LeadOrganization_Waiver”.

xiv. Community Benefits Plan: Job Quality and Equity

The Community Benefits Plan: Job Quality and Equity (Community Benefits Plan or Plan) must set forth the applicant's approach to ensuring that federal investments advance four goals: 1) community and labor engagement; 2) investing in job quality and workforce continuity; 3) advancing DEIA; and 4) contributing to the Justice40 Initiative. The below sections include the requirements for each goal. The Community Benefits Plan should indicate the applicant's intention to engage meaningfully with labor and community stakeholders on these goals, including the potential of entering into formal Workforce and Community Agreements. Given project complexity and sensitivities, applicants should consider pursuing multiple agreements. DOE expects the information contained in the Community Benefits Plan to deepen and evolve during each phase.

Applicants should complete each portion of the initial Community Benefits Plan to the greatest extent possible. In cases where information is incomplete, applicants should clearly explain the reason for missing information and provide plans to address those gaps during the project. Applicant must explain how their strategy to implement their Community Benefits Plan goals in the project proposed will accomplish their goals. If the applicant has prior or ongoing efforts to advance energy and environmental justice, DEIA, community and labor engagement, or quality jobs, the application should discuss, briefly and at an appropriate level, how they are incorporating lessons learned, why they are germane to the proposed project, and how the applicant will build on these prior/ongoing efforts.

For your convenience, a Community Benefits Plan template is available at: [About Community Benefits Plans](#). Applicants are strongly encouraged to use the template to complete their specific Plan. If the template is not used, the Plan must address all the elements described below, and as outlined in the template, and in the technical review criterion titled "Community Benefits Plan: Job Quality & Equity." See Section V. of the FOA.

The applicant's Community Benefits Plan must include at least one SMART milestone per budget period to measure progress on the proposed actions. The Plan will be evaluated as part of the technical review process. If DOE selects a project, DOE will incorporate the Community Benefits Plan into the award and the recipient must implement its Community Benefits Plan when carrying out its project. Public transparency around the plan and SMART commitments ensure accountability. In addition, DOE will evaluate the recipient's progress during the award period of performance, including as part of the Go/No-Go review process.

The Community Benefits Plan must not exceed 12 pages. It must be submitted in PDF format using the following convention name for the title: “Control Number_LeadOrganization_CBP.”

For additional information, see [About Community Benefits Plans](#).

The Community Benefits Plan must address the following:

1. Community and Labor Engagement: The Community Benefits Plan must describe the applicant’s actions to date and plans to engage with community partners, such as local and/or Tribal governments, labor unions, and community-based organizations that support or work with underserved communities, including disadvantaged communities as defined for purposes of the Justice40 Initiative. Applicants should provide descriptions of these community partners’ involvement in the applicant’s actions to date, **as well as their planned involvement** throughout project deployment. By facilitating community input, social buy-in, and accountability, such engagement can substantially reduce or eliminate stalls or slowdowns, litigation, and other risks associated with project implementation.

Community and labor engagement should lay the groundwork for the negotiation of Workforce and Community Agreements, which could take the form of one or more kinds of negotiated agreements with communities, labor unions, or, ideally, both. Registered apprenticeship programs, labor-management training partnerships, quality pre-apprenticeship programs, a card check provision, and local and targeted hiring goals are all examples of provisions that Workforce and Community Agreements could cover that would increase the success of a DOE-funded project.

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

If selected for funding, applicants will be expected to execute on any proposed Workforce and Community Agreements that identify how community and labor concerns, vulnerabilities, and benefits will be addressed.

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

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

As the 1935 National Labor Relations Act states, employees' ability to organize, bargain collectively, and participate, through labor organizations of their choosing, in decisions that affect them contributes to the effective conduct of business and facilitates amicable settlements of any potential disputes between employees and employers, providing assurances of project efficiency, continuity, and multiple public benefits.

The Plan must include:

- A) A summary of the applicant's plan to attract, train, and retain a skilled and well-qualified workforce for construction *and* ongoing operations/production activities. This summary should include estimates of workforce education and training opportunities, organized labor involvement, and quality jobs created as a result of the **proposed project**. A collective bargaining agreement, labor-management partnership, or other similar agreement would provide evidence of such a plan. Alternatively, applicants may describe:
 - i. Wages, benefits, and other worker supports to be provided, benchmarking against prevailing wages for construction and local median wages for other occupations;
 - ii. Commitments to invest in workforce education and training, including measures to reduce attrition, increase productivity from a committed and engaged workforce, and support the development of a resilient, skilled, and stable workforce for the project; and
 - iii. Efforts to engage employees in the design and execution of workplace safety and health plans.

NOTE: Because Project Labor Agreements (PLAs) have been shown to reduce project costs, avoid work delays, and improve efficiency, they are preferred on construction projects of all sizes and may be required for large construction projects (above \$35M or possibly lower, on a case-by-case basis). Assessment of applicability will be conducted on a case-by-case basis and in consultation with recipients to ensure project feasibility.

- B) It is declared to be the policy of the United States to eliminate the causes of certain substantial obstructions to the free flow of commerce by encouraging the practice and procedure of collective bargaining and by

protecting the exercise by workers of full freedom of association. Applicant should provide a description of how and if they plan to affirmatively support worker organizing and collective bargaining. This might include a commitment to negotiate pre-hire project labor agreements for construction activity, a pledge to remain neutral during any union organizing campaigns, intention or willingness to permit union recognition through card check (as opposed to requiring union elections), intention or willingness to enter into binding arbitration to settle first contracts, a pledge to allow union organizers access to appropriate onsite non-work places (e.g., lunch rooms), a pledge to refrain from holding captive audience meetings, and other supportive commitments or pledges.

- C) Please disclose any violations found within the past two years under the National Labor Relations Act, Fair Labor Standards Act, Occupational Safety and Health Act, Service Contract Act, Davis-Bacon Act, or Title VII of the Civil Rights Act and any steps taken to improve your workforce practices following this violation. Describe whether workers can form and join unions of their choosing, exercising collective voice. Employees' ability to organize, bargain collectively, and participate through labor organizations of their choosing in decisions which affect them, helps build meaningful economic power, safeguard the public interest, contribute to the effective conduct of business, and facilitate amicable settlements of disputes between employees and their employers, thus providing assurances of project efficiency, continuity, and multiple public benefits.
- D) Describe the job retention and/or transition and other workforce development opportunities associated with the project noting efforts to create or retain jobs.

3. DEIA: The Community Benefits Plan must include a section describing how DEIA objectives will be incorporated into the project. The section should detail how the applicant will partner with underrepresented businesses, educational institutions, and training organizations that serve workers who face barriers to accessing quality jobs, and/or other project partners to help address DEIA.

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

- A) Commit to partnering with Minority Business Enterprises, minority-owned businesses, women-owned businesses, and veteran-owned businesses for contractor support needs;

- B) To fill open positions for the DOE-funded project, partner with workforce training organizations serving underrepresented communities and those facing systemic barriers to quality employment, such as those with disabilities, women, returning citizens, opportunity youth, and veterans;
- C) Offer anti-bias training and education to ensure hiring professionals can recognize unconscious bias and can learn how to reduce discriminatory barriers;
- D) Support for quality apprenticeship-readiness and/or pre-apprenticeship programs in the local community that are integrated with registered apprenticeship, including cyber apprenticeship-readiness programs and cyber-registered apprenticeship programs;
- E) Provide workers with comprehensive support services, such as childcare and transportation, to increase representation and access in project's construction and operations jobs.
- F) Describe Local and/or Economic Hire efforts (e.g., recruitment preferences for economically disadvantaged populations) and provide estimates of workforce opportunities, including the number of new union and non-union jobs, created directly and indirectly through the application.

4. Justice40 Initiative: Applicants must provide an overview of benefits to disadvantaged communities that the project can deliver, supported by measurable milestones. The Justice40 Initiative section must include:

- A. Identification of applicable disadvantaged communities to which the anticipated project benefits will flow.
- B. Identification of applicable benefits that are quantifiable, measurable, and trackable, including, at a minimum, a discussion of the relevance of each of the eight DOE Justice40 Initiative benefits outlined below.

Benefits include (but are not limited to) measurable direct or indirect investments or positive project outcomes that achieve or contribute to the following in disadvantaged communities: (1) a decrease in energy burden; (2) a decrease in environmental exposure and burdens; (3) an increase in access to low-cost capital; (4) an increase in high-quality job creation, the clean energy job pipeline, and job training for individuals; (5) increases in clean energy enterprise creation and contracting (e.g.,

minority-owned or disadvantaged business enterprises); (6) increases in energy democracy, including community ownership; (7) increased parity in clean energy technology access and adoption; and (8) an increase in energy resilience. Applicants should also discuss how the project will maximize all the benefits listed above.

- C. A description of how and when and to what degree are anticipated benefits are expected to flow to disadvantaged communities. For example, whether the benefits will be provided directly within the disadvantaged communities identified in the Justice40 Initiative section or in another way; whether the benefits will flow during project development or after project completion; what percentage of overall project benefits will flow to disadvantaged communities and how the applicant will track benefits delivered.
- D. A discussion of anticipated negative and cumulative environmental impacts on disadvantaged communities. Applicants should discuss any anticipated negative or positive environmental impacts associated with the project, and how they will mitigate any negative impacts. Within the context of cumulative impacts created by the project, applicants should use Environmental Protection Agency's EJSCREEN tool to quantitatively discuss existing environmental impacts in the project area. See [EJScreen: Environmental Justice Screening and Mapping Tool](#).

For projects funded under this FOA, DOE will provide specific reporting guidance for the benefits described above. However, recipients must also report how project benefits flow to applicable disadvantaged communities, in furtherance of the advancement of the policy priorities outlined above. For example, a recipient can describe how a project will increase access to clean energy and decrease harmful emissions in disadvantaged communities and provide methods for tracking the progress of these outcomes.

Save the Community Benefits Plan in a single PDF file using the following convention for the title "ControlNumber_LeadOrganization_CBenefits".

xv. Community Benefits Plan Budget Justification

Applicants must provide a separate budget justification identifying the Community Benefit Plan costs included in the "Budget Justification Workbook.", which is available on Exchange at <https://infrastructure-exchange.energy.gov/>. This Community Benefits Plan Budget Justification must include the same justification information described in the "Budget Justification Workbook" section above but should only include Community Benefits Plan costs. Save the

Community Benefits Plan Budget Justification in a Microsoft Excel file using the following convention for the title: "ControlNumber_CBP_Budget_Justification".

xvi. Current and Pending Support

Current and pending support is intended to allow the identification of potential duplication, overcommitment, potential conflicts of interest or commitment, and all other sources of support. As part of the application, the Principal Investigator or Lead Project Manager and all senior/key personnel at the applicant and subrecipient level must provide a list of all sponsored activities, awards, and appointments, whether paid or unpaid; provided as a gift with terms or conditions or provided as a gift without terms or conditions; full-time, part-time, or voluntary; faculty, visiting, adjunct, or honorary; cash or in-kind; foreign or domestic; governmental or private-sector; directly supporting the individual's research or indirectly supporting the individual by supporting students, research staff, space, equipment, or other research expenses. All connections with foreign government-sponsored talent recruitment programs must be identified in current and pending support.

For every activity, list the following items:

- The sponsor of the activity or the source of funding;
- The award or other identifying number;
- The title of the award or activity. If the title of the award or activity is not descriptive, add a brief description of the research being performed that would identify any overlaps or synergies with the proposed research;
- The total cost or value of the award or activity, including direct and indirect costs and cost share. For pending applications, provide the total amount of requested funding;
- The award period (start date through end date); and
- The person-months of effort per year dedicated to the award or activity.

To identify overlap, duplication of effort, or synergistic efforts, append a description of the other award or activity to the current and pending support.

Details of any obligations, contractual or otherwise, to any program, entity, or organization sponsored by a foreign government must be provided on request to either the applicant institution or DOE. Supporting documents of any identified source of support must be provided to DOE on request, including certified translations of any document.

PIs and senior/key personnel must provide a separate disclosure statement listing the required information above regarding current and pending support.

Each individual must sign and date their respective disclosure statement and include the following certification statement:

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

The information may be provided in the format approved by the National Science Foundation (NSF), which may be generated by the Science Experts Network Curriculum Vita (SciENCv), a cooperative venture maintained at <https://www.ncbi.nlm.nih.gov/sciencv/> and is also available at: <https://www.nsf.gov/bfa/dias/policy/nsfapprovedformats/cps.pdf>. The use of a format required by another agency is intended to reduce the administrative burden to researchers by promoting the use of common formats. If the NSF format is used, the individual must still include a signature, date, and a certification statement using the language included in the paragraph above.

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

Definitions:

Current and pending support – (a) All resources made available, or expected to be made available, to an individual in support of the individual's RD&D efforts, regardless of (i) whether the source is foreign or domestic; (ii) whether the resource is made available through the entity applying for an award or directly to the individual; or (iii) whether the resource has monetary value; and (b) includes in-kind contributions requiring a commitment of time and directly supporting the individual's RD&D efforts, such as the provision of office or laboratory space, equipment, supplies, employees, or students. This term has the same meaning as the term Other Support as applied to researchers in NSPM-33: For researchers, Other Support includes all resources made available to a researcher

in support of and/or related to all of their professional RD&D efforts, including resources provided directly to the individual or through the organization, and regardless of whether or not they have monetary value (e.g., even if the support received is only in-kind, such as office/laboratory space, equipment, supplies, or employees). This includes resource and/or financial support from all foreign and domestic entities, including but not limited to gifts provided with terms or conditions, financial support for laboratory personnel, and participation of student and visiting researchers supported by other sources of funding.

Foreign Government-Sponsored Talent Recruitment Program – An effort directly or indirectly organized, managed, or funded by a foreign government, or a foreign government instrumentality or entity, to recruit science and technology professionals or students (regardless of citizenship or national origin, or whether having a full-time or part-time position). Some foreign government-sponsored talent recruitment programs operate with the intent to import or otherwise acquire from abroad, sometimes through illicit means, proprietary technology or software, unpublished data and methods, and intellectual property to further the military modernization goals and/or economic goals of a foreign government. Many, but not all, programs aim to incentivize the targeted individual to physically relocate to the foreign state for the above purpose. Some programs allow for or encourage continued employment at United States research facilities or receipt of federal research funds while concurrently working at and/or receiving compensation from a foreign institution, and some direct participants not to disclose their participation to United States entities. Compensation could take many forms, including cash, research funding, complimentary foreign travel, honorific titles, career advancement opportunities, promised future compensation, or other types of remuneration or consideration, including in-kind compensation.

Senior/key personnel – An individual who contributes in a substantive, meaningful way to the scientific development or execution of a research, development, and demonstration (RD&D) project proposed to be carried out with a DOE award.⁴³

xvii. Report on Resilience Investments (Topic Area 1 ONLY)

Applicants must submit a report detailing past, current, and future efforts by the eligible entity to reduce the likelihood and consequences of disruptive events. The report must summarize any programs and related approved funding that your organization has implemented over the past 3 years to reduce the

⁴³ Typically, these individuals have doctoral or other professional degrees, although individuals at the masters or baccalaureate level may be considered Senior/Key Personnel if their involvement meets this definition. Consultants, graduate students, and those with a postdoctoral role also may be considered Senior/Key Personnel if they meet this definition.

likelihood of events in which operations of the electric grid 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. Save the Report on Resilience Investments in a single PDF file using the following convention for the title
“ControlNumber_LeadOrganization_ResilienceInvestments.”

xviii. EIA 861 Report (Topic Area 1, small utilities ONLY)

Applicants who 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 to ensure status as a small utility. Save the EIA 861 Report in a single PDF file using the following convention for the title
“ControlNumber_LeadOrganization_EIA861”.

xix. Locations of Work

The applicant must complete the supplied template, which is available on Exchange at <https://infrastructure-exchange.energy.gov/>, by listing the city, state, and zip code + 4 for each location where project work will be performed by the prime recipient or subrecipient(s). Save the completed template as a MS Excel file using the following convention for the title “Control Number_LeadOrganization_LOW.”

xx. Project Description and Assurances Document (PDAD)

Applicants for all three topic areas must complete and submit the PDAD. Note that there are requirements specific to Topic Area 1 and Topic Area 3, for which the applicant will respond and certify responses via the PDAD, as described in Section I.B. Applicants shall prepare the PDAD in the format provided in **Appendix E** of the FOA. The PDAD must be signed by the Authorized Organizational Representative (AOR) on behalf of the organization and be submitted in PDF format. Save the PDAD in a single PDF file using the following convention for the title “Control Number_LeadOrganization_PDAD”.

xxi. Transparency of Foreign Connections

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

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

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

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

xxii. Potentially Duplicative Funding Notice

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

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

E. Post Selection Information Requests

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

- Personnel proposed to work on the project and collaborating organizations (See Section VI.B.xviii. Participants and Collaborating Organizations);
- Current and Pending Support (See Sections IV.E.xvii. and VI.B.xix. Current and Pending Support);
- Indirect cost information;
- Other budget information;
- Letters of Commitment from third parties contributing to cost share, if applicable;

- Name and phone number of the Designated Responsible Employee for complying with national policies prohibiting discrimination (See 10 CFR 1040.5);
- Information for the DOE Office of Civil Rights to process assurance reviews under 10 CFR 1040;
- Representation of Limited Rights Data and Restricted Software, if applicable;
- Information related to Davis-Bacon Act requirements;
- Information related to any proposed Workforce and Community Agreement, as defined above in “Community Benefits Plan: Job Quality and Equity,” that applicants may have made with the relevant community;
- Any proposed or required Project Labor Agreements; and/or
- Updated Environmental Questionnaire(s).

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

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

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

G. Submission Dates and Times

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

H. Intergovernmental Review

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

I. Funding Restrictions

i. Allowable Costs

All expenditures must be allowable, allocable, and reasonable in accordance with the applicable federal cost principles. Pursuant to 2 CFR 910.352, the cost principles in the Federal Acquisition Regulations (48 CFR 31.2) apply to for-profit

entities. The cost principles contained in 2 CFR Part 200, Subpart E apply to all entities other than for-profits.

ii. Pre-Award Costs

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

Pre-award costs cannot be incurred prior to the Selection Official signing the Selection Statement and Analysis.

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

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

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

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

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

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

1. Requirement

All work performed under awards issued under this FOA must be performed in the United States. The prime recipient must flow down this requirement to its subrecipients.

2. Failure to Comply

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

3. Waiver

To seek a foreign work waiver, the applicant must submit a written waiver request to DOE. Appendix B lists the information that must be included in a request for a foreign work waiver.

Save the waiver request(s) in a single PDF file. The applicant does not have the right to appeal DOE's decision concerning a waiver request.

iv. Construction

Recipients are required to obtain written authorization from the Contracting Officer before incurring any major construction costs.

DOE strongly encourages the use of project labor agreements (PLAs) in connection with construction projects. A PLA is a pre-hire agreement between a private entity (or entities) and a labor organization (or organizations) representing individuals who will be working on the construction project. Applicants that commit to using best-practice project labor agreements will generally be likely to produce a construction workforce plan that meets the criteria in this FOA. By contrast, applicants that do not commit to using a PLA will be required to submit workforce continuity plans and show that they have taken other measures to reduce the risk of delays in project delivery.

For large construction projects, DOE may require a PLA. Assessment of applicability will be conducted on a case-by-case basis.

v. Foreign Travel

Foreign travel costs are not allowable under this FOA.

vi. Equipment and Supplies

Property disposition may be required at the end of a project if the current fair market value of property exceeds \$5,000. For-profit entity disposition requirements are set forth at 2 CFR 910.360. Property disposition requirements for other non-federal entities are set forth in 2 CFR 200.310 – 200.316.

However, pursuant to the FY23 Consolidated Appropriations Act (Pub. L. No. 117-328), Division D, Title III, Section 309, the Secretary, or a designee of the Secretary may, at their discretion, vest unconditional title or other property interests acquired under this project regardless of the fair market value of the property at the end of the award period.

vii. Build America Buy America Requirements for Infrastructure Projects

Pursuant to the Build America Buy America Act, subtitle IX of BIL (Buy America or BABA), federally assisted projects that involve infrastructure work, undertaken by applicable recipient types, require that:

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

In general, whether a given project must apply this requirement is dependent on several factors, such as the recipient's entity type, whether the work involves "infrastructure," as that term is defined in Section 70914 of the BIL (discussed in more detail in [Appendix B](#)), based in part on whether the infrastructure in question is publicly owned or serves a public function. For this FOA specifically, all projects subject to this FOA are considered "infrastructure" within the Buy America provision of BIL, based on implementation guidance from the Office of Management and Budget issued on April 18, 2022.

Moreover, based on the OMB guidance, the Buy America requirements of the BIL do not apply to DOE projects in which the prime recipient is a for-profit entity; the requirements only apply to projects whose prime recipient is a "non-Federal

entity,” e.g., a State, local government, Indian Tribe, Institution of Higher Education, or nonprofit organization. Subawards should conform to the terms of the prime award from which they flow; in other words, for-profit prime recipients are not required to flow down these Buy America requirements to subrecipients, even if those subrecipients are non-Federal entities as defined above. Conversely, prime recipients which are non-Federal entities must flow the Buy America requirements down to all subrecipients, even if those subrecipients are for-profit entities. Finally, for all applicants—both non-Federal entities and for-profit entities—DOE is including a program policy factor that the Selection Official may consider in determining which Full Applications to select for award negotiations that considers whether the applicant has made a commitment to procure U.S. iron, steel, manufactured products, and construction materials in its project.

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

Applicants are strongly encouraged to consult [Appendix B](#) for more information.

viii. Davis-Bacon Act Requirements

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

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

Applicants acknowledge that they will comply with all the Davis-Bacon Act requirements, including but not limited to:

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

6, and 8 and as defined in FAR 52.222-14; disputed labor standards determinations; DOL investigations; or legal or judicial proceedings related to the labor standards under this contract, a subcontract, or subrecipient award; and

(10) Preparing and submitting to the Contracting Officer, the Office of Management and Budget Control Number 1910-5165, Davis Bacon Semi-Annual Labor Compliance Report, by April 21 and October 21 of each year. Form submittal will be administered through the iBenefits system (<https://doeibenefits2.energy.gov>), its successor system, or other manner of compliance as directed by the Contracting Officer.

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

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

DOE anticipates contracting with a third party for a Davis-Bacon Act electronic payroll compliance software application. Recipients of funding under this FOA must ensure the timely electronic submission of weekly certified payrolls through this software as part of its compliance with the Davis-Bacon Act unless a waiver is granted to a particular contractor or subcontractor because it is unable or limited in its ability to use or access. Applicants should indicate if they will seek a waiver.

ix. Lobbying

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

Recipients and subrecipients are required to complete and submit SF-LLL, "Disclosure of Lobbying Activities" (<https://www.grants.gov/web/grants/forms/sf-424-individual-family.html>) to ensure that non-federal funds have not been paid and will not be paid to any

person for influencing or attempting to influence any of the following in connection with the application:

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

x. Risk Assessment

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

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

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

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

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

Further, as DOE invests in critical infrastructure and funds critical and emerging technology areas, DOE also considers possible threats to United States research, technology, and economic security from undue foreign government influence when evaluating risk. If high risks are identified and cannot be sufficiently mitigated, DOE may elect to not fund the applicant.

xi. Invoice Review and Approval

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

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

xii. Prohibition Related to Foreign Government-Sponsored Talent Recruitment Programs

a. Prohibition

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

b. Definitions

- 1. Foreign Government-Sponsored Talent Recruitment Program.** An effort directly or indirectly organized, managed, or funded by a foreign government, or a foreign government instrumentality or entity, to recruit science and technology professionals or students (regardless of citizenship or national origin, or whether having a full-time or part-time

position). Some foreign government-sponsored talent recruitment programs operate with the intent to import or otherwise acquire from abroad, sometimes through illicit means, proprietary technology or software, unpublished data and methods, and intellectual property to further the military modernization goals and/or economic goals of a foreign government. Many, but not all, programs aim to incentivize the targeted individual to relocate physically to the foreign state for the above purpose. Some programs allow for or encourage continued employment at United States research facilities or receipt of federal research funds while concurrently working at and/or receiving compensation from a foreign institution, and some direct participants not to disclose their participation to U.S. entities. Compensation could take many forms including cash, research funding, complimentary foreign travel, honorific titles, career advancement opportunities, promised future compensation, or other types of remuneration or consideration, including in-kind compensation.

2. **Foreign Country of Risk.** DOE has designated the following countries as foreign countries of risk: Iran, North Korea, Russia, and China. This list is subject to change.

xiii. Affirmative Action and Pay Transparency Requirements

All applicants must comply with all applicable federal labor and employment laws, including but not limited to Title VII of the Civil Rights Act of 1964, the Fair Labor Standards Act, the Occupational Safety and Health Act, and the National Labor Relations Act, which protects employees' right to bargain collectively and engage in concerted activities for the purpose of workers' mutual aid or protection.

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

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

for asking about, discussing, or sharing information about their pay or, under certain circumstances, the pay of their co-workers.

DOL's Office of Federal Contractor Compliance Programs (OFCCP) uses a neutral process to schedule compliance evaluations. Consult OFCCP's Technical Assistance Guide⁴⁴ to gain an understanding of the requirements and possible actions the recipients, subrecipients, contractors, and subcontractors must take. Additional guidance may also be found in the National Policy Assurances, produced by DOE.

Additionally, for construction projects valued at \$35 million or more and lasting more than one year, the recipients, subrecipients, contractors, and subcontractors may be selected by the OFCCP to participate in the *Mega Construction Project Program*. DOE, under relevant legal authorities including Sections 205 and 303(a) of Executive Order 11246, will require participation as a condition of the award. This program offers extensive compliance assistance with EO 11246. For more information regarding this program, see <https://www.dol.gov/agencies/ofccp/construction/mega-program>.

xiv. Foreign Collaboration Considerations

- a. Consideration of new collaborations with foreign entities and governments. The recipient will be required to provide DOE with advanced written notification of any potential collaboration with foreign entities or governments in connection with its DOE-funded award scope. The recipient will then be required to await further guidance from DOE prior to contacting the proposed foreign entity or government regarding the potential collaboration or negotiating the terms of any potential agreement.
- b. Existing collaborations with foreign entities and governments. The recipient will be required to provide DOE with a written list of all existing foreign collaborations in which has entered in connection with its DOE-funded award scope.
- c. Description of collaborations that should be reported. In general, a collaboration will involve some provision of a thing of value to, or from, the recipient. A thing of value includes but may not be limited to all resources made available to, or from, the recipient in support of and/or related to the DOE award, regardless of whether or not they have monetary value. Things of value also may include in-kind contributions (such as office/laboratory space, data, equipment, supplies, employees, students). In-kind contributions not intended for direct use on the

⁴⁴ See OFCCP's Technical Assistance Guide at: <https://www.dol.gov/sites/dolgov/files/ofccp/Construction/files/ConstructionTAG.pdf?msclkid=9e397d68c4b111ec9d8e6fecb6c710ec> Also see the National Policy Assurances <http://www.nsf.gov/awards/managing/rtc.jsp>

DOE award but resulting in provision of a thing of value from or to the DOE award must also be reported. Collaborations do not include routine workshops, conferences, use of the recipient's services and facilities by foreign investigators resulting from its standard published process for evaluating requests for access, or the routine use of foreign facilities by awardee staff in accordance with the recipient's standard policies and procedures.

V. Application Review Information

A. Technical Review Criteria

i. Concept Papers

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

Applicable to All Topic Areas

Concept Paper Criterion: Overall FOA Responsiveness and Viability of the Project (Weight: 100%)

This criterion involves consideration of the following factors:

- The proposed work, if successfully accomplished, would clearly meet the objectives as stated in the FOA for the specific topic area.
- The proposed work aligns with and supports State, local, Tribal, and/or regional resilience, decarbonization, or other energy strategies and plans.
- The applicant has identified risks and challenges (e.g., technical, financial, market, environmental, regulatory) to project success, and outlined possible mitigation strategies for each risk.
- The applicant has identified technical, operational, and administrative risks to the security of the applicant's assets and outlined possible mitigation strategies for each risk.
- The applicant has thoroughly explained the impact of DOE funding.
- The applicant has proposed strategies and accountability mechanisms to ensure:
 - i. Meaningful community and labor engagement,
 - ii. Quality jobs and workforce development,
 - iii. Support for Diversity, equity, inclusion, accessibility,
 - iv. Supporting the goals of the Justice40 Initiative.
- The applicant has the qualifications, experience, capabilities, and other resources necessary to complete the proposed project.

- The applicant has provided an estimated total project cost, characterized the project's economic viability, and demonstrated that the project provides enhanced system value and/or provides improved current and future system cost-effectiveness and delivers economic benefit.

ii. Full Applications

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

Criterion 1: Impact, Transformation, and Technical Merit (40%)

This criterion involves consideration of the following factors:

- The extent to which the project supports the objectives and desired outcomes for the Topic Area under which the application is submitted.
- The level of ambition and innovation associated with the proposed approach relative to business-as-usual approach of the industry and/or applicant team.
- The extent to which the project has the potential to deliver near-term impact.
- The magnitude of the community or regional benefits that the project will generate, such as by reducing the likelihood and consequences of disruptive events, increasing system flexibility, and/or enabling additional integration of clean generation.
- **For Topic Area 1 Only:** Extent to which the project aligns with and is additive to the current resilience investments described by the applicant outlined in the Report on Resilience Investments.
- **For Topic Area 1 Only:** The extent to which the application specifically and convincingly demonstrates the applicant's technical ability to:
 - comprehensively mitigate one or more hazards faced by community or region;
 - fully mitigate the potential for equipment to cause a wildfire in a community or region that is vulnerable to wildfires;
 - minimize the consequences of an outage caused by a natural hazard that historically affects communities in the project location;
 - minimize economic impact resulting from outage duration or outage frequency.
- **For Topic Area 3 Only:** Extent to which the project demonstrates innovative approaches to support deployment goals across transmission system, distribution system, storage, or a combination to achieve Topic Area 3 primary objectives.
- **For Topic Area 3 Only:** Extent to which the project clearly enhances collaboration between eligible entities and owners/operators to meet Topic Area 3 objectives.

Criterion 2: Project Management Team, Financial Feasibility, Project Plan, SOPO (20%)

This criterion involves consideration of the following factors:

Project Approach, Workplan, and SOPO

- Degree to which the approach and critical path have been clearly described and thoughtfully considered.
- Degree to which the task descriptions are clear, detailed, timely, and reasonable, resulting in a high likelihood that the proposed Workplan and SOPO will succeed in meeting the project goals.

Project Management

- Clarity and appropriateness of the roles and responsibilities of the project management organization and the project team, including relevant and critical subrecipients and vendors.
- The capability of the Project Manager(s) and the proposed team to manage and address all aspects of the proposed work with a high probability of success.
- The qualifications, relevant expertise, and time commitment of the individuals on the team.
- The level of participation by project participants as evidenced by letter(s) of commitment and how well they are integrated into the Project Plan/Workplan.
- Degree to which the applicant includes and documents partnerships with critical entities that will help ensure project success.
- The degree to which the applicant has defined and described a project management structure that addresses interfaces with DOE.

Project Financial Feasibility

- The reasonableness of the budget and spend plan for the proposed project and objectives.
- Soundness of proposed cost share; level of dedication as demonstrated by letter(s) of commitment that clearly identify type and amount of proposed cost share. Proposed cost share meets requirements outlined in the FOA.
- The degree to which the applicant justifies the project's economic viability.

Criterion 3: Viability, Replicability, and Additionality (20%)

This criterion involves consideration of the following factors:

Project Viability, Risks, and Mitigations

- Discussion of the project's clear physical scope and implementation plan.
- Discussion and demonstrated understanding of the key anticipated risks (e.g., technical, financial, market, supply chain, environmental, regulatory) involved in the proposed work and the quality of the mitigation strategies to address them.
- Sufficient technical detail to demonstrate that the proposed project is feasible and would likely result in the described community or regional benefits including resilience, increased access to clean or distributed energy resources, health benefits, and reduced energy burden.
- Discussion of specific mitigants or commitment to develop detailed mitigants for known risks and risks that develop over the project lifecycle.

Project Replicability, Baseline, Metrics, and Deliverables

- The level of clarity in the definition of quantitative, measurable baseline, metrics, and milestones.
- Relative to a clearly defined baseline, the strength of the quantifiable metrics, milestones, and mid-point deliverables defined in the application, such that meaningful interim progress will be made.
- Extent to which project supports and works in tandem with State, local, Tribal, or regional resilience plans; resource or system plans; decarbonization plans; or other energy strategies and plans as applicable.
- The potential impact of the project to catalyze additional private sector investments and/or non-federal public or regulated capital.
- Extent to which the project offers the greatest public benefit with a clear path to replication, scale, and ability to ensure electricity system reliability and/or resilience, provide enhanced system value and economic benefit, and contribute to the decarbonization of the electricity and broader energy systems.
- Degree to which the application identifies any partnerships with entities (including other states) outside of the applicant's jurisdiction, who will commit to encourage asset operators (e.g., utilities, merchant developers) to replicate the proposed approaches, technologies, or solutions, as applicable.
- **For Topic Area 3 Only:** The potential impact of the project to increase adoption of innovative approach(es). For example, to lead to more widespread deployment of advanced technologies; innovative partnerships; new financial arrangements; increased non-Federal investment; deployment of projects identified by innovative planning, modeling, or cost allocation approaches; and/or innovative environmental siting, permitting strategies, or community engagement practices.

Project Additionality

- The degree to which the proposed project yields additive benefit(s) from the federal funding to undertake additional efforts that would not be taken but-for the funding or to accelerate or expand planned activities that would not be accelerated or expanded but-for the funding.
- The degree to which the proposed project will deliver the greatest benefits for less Federal cost share than the minimum federal share required under this FOA.

Criterion 4: Community Benefits Plan (20%)

Every BIL-funded project is expected to contribute to the country's energy infrastructure modernization goals, energy technology demonstration and deployment goals, and climate goals, and also to (1) support meaningful community and labor engagement; (2) support quality jobs and ensure workforce continuity; (3) advance diversity, equity, inclusion, and accessibility; and (4) contribute to the Justice40 Initiative's goal that 40% of the overall project benefits flow to disadvantaged communities.

To ensure these goals are met, applications must include a Community Benefits Plan that illustrates how the proposed project plans to incorporate the four goals stated above and are encouraged to submit Community Partnership Documentation from established labor unions, Tribal entities, and community-based organizations that demonstrate the applicant's ability to achieve the above goals as outlined in the Community Benefits Plan.

This criterion involves consideration of the following factors:

Community and Labor Engagement

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

Job Quality and Workforce Continuity

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

Diversity, Equity, Inclusion, and Accessibility

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

Justice40 Initiative

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

B. Standards for Application Evaluation

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

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

C. Other Selection Factors

i. Program Policy Factors

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

- The degree to which the proposed project exhibits technological diversity when compared to the existing DOE project portfolio and other projects selected from the subject FOA.
- The degree to which the proposed project, including proposed cost share, optimizes the use of available DOE funding to achieve programmatic objectives, such as by providing a non-federal cost match or share above the threshold required by this program.
- The degree to which the proposed project will deliver the greatest benefits for less Federal cost share.
- The level of industry involvement and demonstrated ability to accelerate commercialization and overcome key market barriers.
- For Topic Areas 1 and 2, the degree to which the applicant supports the availability of information before, during, and after resilience events through participation in the Outage Data Initiative Nationwide (ODIN),⁴⁵ a voluntary program to promote increasing standardization of outage data, accessible and achievable by any size utility.
- The degree to which the proposed project will support data standards (e.g., Green Button Connect), interoperability, and non-discriminatory data access on a real-time and ongoing basis.
- The degree to which the proposed project is likely to lead to increased high-quality employment and manufacturing in the United States.
- The degree to which the proposed project will accelerate transformational technological advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty.
- The degree to which the proposed project will enable more rapid interconnection and integration of clean generation to the electric grid.
- The degree to which the proposed project will enable more geographically diverse interconnection and integration of clean generation to the electric grid.
- The degree to which the proposed project will enable clean energy capacity to be transferred into regions constrained by limited renewable generation potential.

⁴⁵ More information is available at odin.ornl.gov.

- The scale of the proposed project and the differentiated value that this scale will bring to the project and the subject area.
- The degree to which the proposed project, or group of projects, represent a desired geographic distribution (considering past awards and current applications), including whether the project is in a community facing job loss in the energy transition.
- The degree to which the proposed project includes among its applicant or team members from Minority Serving Institutions (e.g., Historically Black Colleges and Universities (HBCUs)/Other Minority Institutions), Minority Business Enterprises, Minority Owned Businesses, Women Owned Businesses, Veteran Owned Businesses, Tribal Nations, or members within underserved communities.
- The degree to which the proposed project maximizes benefits to disadvantaged communities.
- The degree to which the proposed project minimizes environmental impacts to disadvantaged communities.
- The degree to which the proposed project will maximize benefits to the workforce, by retaining, improving, or creating new jobs that can be quantified by location and duration.
- The degree to which the project's solution or strategy will maximize deployment or replication.
- The degree to which the proposed project leverages existing infrastructure, facilities, and/or workforce skills.
- The degree to which the proposed project will employ procurement of U.S. iron, steel, manufactured products, and construction materials.
- The degree to which the proposed project, when compared to the existing DOE project portfolio and other projects to be selected from the subject FOA, contributes to the total portfolio meeting the goals reflected in the Community Benefits Plan criteria.
- The degree to which the proposed project avoids duplication/overlap with other publicly or privately funded work.
- The degree to which the proposed project collectively represents a diversity of applicant types and sizes of applicant organizations.
- The degree to which the proposed project has broad public support from the communities most directly impacted by the project.
- The degree to which the proposed project enables new and expanding market segments.
- The degree to which the proposed project supports complementary efforts or projects, which, when taken together, will best achieve broader goals and objectives.

- The degree to which the project promotes increased coordination with nongovernmental entities for demonstration of technologies to facilitate technology transfer.

D. Evaluation and Selection Process

i. Overview

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

ii. Pre-Selection Interviews

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

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

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

DOE may obtain additional information through Pre-Selection Interviews that will be used to make a final selection determination, including but not limited to applicant cost share and project scope. DOE may select applications for funding and make awards without Pre-Selection Interviews. Participation in Pre-Selection Interviews with DOE does not signify that applicants have been selected for award negotiations.

iii. Pre-Selection Clarification

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

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

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

iv. Recipient Responsibility and Qualifications

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

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

DOE will consider any written comments by the applicant, in addition to the other information in the entity information domain in [SAM.gov](https://sam.gov), in making a judgment about the applicant's integrity, business ethics, and record of performance under federal awards when completing the review of risk posed by applicants as described in 2 CFR 200.206.

v. Selection

The Selection Official may consider the technical merit, the recommendations of reviewers, program policy factors, and the amount of funds available in arriving at selections for this FOA.

E. Anticipated Notice of Selection and Award Negotiation Dates

DOE anticipates notifying applicants selected for negotiation of award and negotiating awards by the dates provided on the cover page of this FOA.

VI. Award Administration Information

A. Award Notices

i. Ineligible Submissions

Ineligible Concept Papers and Full Applications will not be further reviewed or considered for award. The Contracting Officer will send a notification letter by email to the technical and administrative points of contact designated by the applicant in Clean Energy Infrastructure Exchange. The notification letter will state the basis upon which the Concept Paper or the Full Application is ineligible and not considered for further review.

ii. Concept Paper Notifications

DOE will notify applicants of its determination to encourage or discourage the submission of a Full Application. DOE will post these notifications to Exchange.

Applicants may submit a Full Application even if they receive a notification discouraging them from doing so. By discouraging the submission of a Full Application, DOE intends to convey its lack of programmatic interest in the proposed project. Such assessments do not necessarily reflect judgments on the merits of the proposed project. The purpose of the Concept Paper phase is to save applicants the considerable time and expense of preparing a Full Application that is unlikely to be selected for award negotiations.

A notification encouraging the submission of a Full Application does not authorize the applicant to commence performance of the project. Please refer to Section IV.I.ii. of the FOA for guidance on pre-award costs.

iii. Full Application Notifications

DOE will notify applicants of its determination via a notification letter by email to the technical and administrative points of contact designated by the applicant in

Exchange. The notification letter will inform the applicant whether or not its Full Application was selected for award negotiations. Alternatively, DOE may notify one or more applicants that a final selection determination on particular Full Applications will be made at a later date, subject to the availability of funds or other factors.

iv. Successful Applicants

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

The award negotiation process will take approximately 60 days. Applicants must designate a primary and a backup point-of-contact in Exchange with whom DOE will communicate to conduct award negotiations. The applicant must be responsive during award negotiations (i.e., provide requested documentation) and meet the negotiation deadlines. If the applicant fails to do so or if award negotiations are otherwise unsuccessful, DOE will cancel the award negotiations and rescind the Selection. DOE reserves the right to terminate award negotiations at any time for any reason.

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

v. Alternate Selection Determinations

In some instances, an applicant may receive a notification that its application was not selected for award and DOE designated the application to be an alternate, which means DOE may consider the Full Application for federal funding in the future. A notification letter stating the Full Application is designated as an alternate does not authorize the applicant to commence performance of the project. DOE may ultimately determine to select or not select the Full Application for award negotiations.

vi. Unsuccessful Applicants

DOE shall promptly notify in writing each applicant whose application has not been selected for award or whose application cannot be funded because of the unavailability of appropriated funds.

B. Administrative and National Policy Requirements

i. Registration Requirements

There are several required one-time actions applicants must take before applying to this FOA. Some of these actions may take several weeks, so it is vital applicants build in enough time to complete them. Failure to complete these actions could interfere with application or negotiation deadlines or the ability to receive an award if selected. These requirements are as follows:

1. Exchange

Register and create an account on Exchange at <https://infrastructure-exchange.energy.gov/>. This account will then allow the user to register for any open DOE GDO FOAs that are currently in Exchange. It is recommended that each organization or business unit, whether acting as a team or a single entity, use only one account as the contact point for each submission. Applicants should also designate backup points of contact so they may be easily contacted if deemed necessary. **This step is required to apply to this FOA.** The Exchange registration does not have a delay; however, **the remaining registration requirements below could take several weeks to process and are necessary for a potential applicant to receive an award under this FOA.**

2. System for Award Management

Register in SAM (<https://www.sam.gov>). Designating an Electronic Business Point of Contact (EBiz POC) and obtaining a special password called a Marketing Partner ID Number (MPIN) are important steps in SAM registration. Please update your SAM registration annually.

3. FedConnect

Register in FedConnect (<https://www.fedconnect.net>). To create an organization account, your organization's SAM MPIN is required. For more information about the SAM MPIN or other registration requirements, review the FedConnect Ready, Set, Go! Guide at https://www.fedconnect.net/FedConnect/Marketing/Documents/FedConnect_Ready_Set_Go.pdf.

4. Grants.gov

Register in Grants.gov (<http://www.grants.gov>) to receive automatic updates when Amendments to this FOA are posted. Please note that Concept Papers and Full Applications will **not** be accepted through Grants.gov.

5. Electronic Authorization of Applications and Award Documents

Submission of an application and supplemental information under this FOA through electronic systems used by the DOE, including Grants.gov and FedConnect.net, constitutes the authorized representative's approval and electronic signature.

ii. Award Administrative Requirements

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

iii. Foreign National Participation (Updated April 2023)

All applicants selected for an award under this FOA and project participants (including subrecipients and contractors) who anticipate involving foreign nationals in the performance of an award, will be required to provide DOE with specific information about each foreign national to satisfy requirements for foreign national participation and access approvals. The volume and type of information collected may depend on various factors associated with the award. DOE concurrence may be required before a foreign national can participate in the performance of any work under an award.

Approval for foreign nationals in Principal Investigator/Co-Investigator roles, from countries of risk (i.e., China, Iran, North Korea, and Russia), or from countries identified on the U.S. Department of State's list of State Sponsors of Terrorism (<https://www.state.gov/state-sponsors-of-terrorism/>) may require written authorization from DOE before they can participate in the performance of any work under an award.

A "foreign national" is defined as any person who is not a United States citizen by birth or naturalization. DOE may elect to deny foreign national's participation in the award. Likewise, DOE may elect to deny a foreign national's access to a DOE sites, information, technologies, equipment, programs, or personnel.

Applicants selected for award negotiations must include this requirement in subawards.

iv. Subaward and Executive Reporting

Additional administrative requirements necessary for DOE grants and cooperative agreements to comply with the Federal Funding and Transparency Act of 2006 (FFATA) are contained in 2 CFR Part 170. Prime recipients must

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

v. National Policy Requirements

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

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

DOE's decision whether and how to distribute federal funds under this FOA is subject to NEPA (42 U.S.C. § 4321, *et seq.*). NEPA requires federal agencies to integrate environmental values into their decision-making processes by considering the potential environmental impacts of their proposed actions. For additional background on NEPA, please see DOE's NEPA website at <https://www.energy.gov/nepa>.

While NEPA compliance is a federal agency responsibility and the ultimate decisions remain with the federal agency, all recipients selected for an award will be required to assist in the timely and effective completion of the NEPA process in the manner most pertinent to their proposed project. If DOE determines certain records must be prepared to complete the NEPA review process (e.g., biological evaluations or environmental assessments), the recipient may be required to prepare the records and the costs to prepare the necessary records may be included as part of the project costs.

vii. Flood Resilience

Applications should indicate whether the proposed project location(s) is within a floodplain, how the floodplain was defined, and how flooding will factor into the project's design. The base floodplain long used for planning has been the 100-year floodplain, which has a 1% chance of flooding in any given year. As directed by Executive Order 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input (2015), federal agencies, including DOE, must continue to avoid development in a floodplain to the extent possible. When doing so is not possible, federal agencies are directed to "expand management from the current base flood level to a higher vertical elevation and corresponding horizontal floodplain to address current and future flood risk and ensure that projects funded with taxpayer dollars last as long as intended." The higher flood elevation is based on one of three approaches: climate-informed science (preferred), freeboard value, or 0.2% annual flood change (500-year floodplain). EO 13690 and related

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

viii. Applicant Representations and Certifications

1. Lobbying Restrictions

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

2. Corporate Felony Conviction and Federal Tax Liability Representations

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

- a.** It is **not** a corporation that has been convicted of a felony criminal violation under any federal law within the preceding 24 months; and
- b.** It is **not** a corporation that has any unpaid federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

For purposes of these representations, a corporation is any for-profit or nonprofit entity that has filed articles of incorporation in any of the 50 states, the District of Columbia, or the various territories of the United States [but not foreign corporations]. It includes both for-profit and non-profit organizations.

3. Nondisclosure and Confidentiality Agreements Representations

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

- a.** It **does not and will not** require its employees or contractors to sign internal nondisclosure or confidentiality agreements or statements prohibiting or otherwise restricting its employees or contractors from lawfully reporting waste, fraud, or abuse to a designated investigative or law enforcement representative of a federal department or agency authorized to receive such information.

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

“These provisions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive Order relating to (1) classified information, (2) communications to Congress, (3) the reporting to an Inspector General of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety, or (4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive Orders and statutory provisions are incorporated into this agreement and are controlling.”

- (1) The limitation above shall not contravene requirements applicable to Standard Form 312 Classified Information Nondisclosure Agreement (<https://fas.org/sgp/othergov/sf312.pdf>), Form 4414 Sensitive Compartmented Information Disclosure Agreement (<https://fas.org/sgp/othergov/intel/sf4414.pdf>), or any other form issued by a federal department or agency governing the nondisclosure of classified information.
- (2) Notwithstanding the provision listed in paragraph (a), a nondisclosure or confidentiality policy form or agreement that is to be executed by a person connected with the conduct of an intelligence or intelligence-related activity, other than an employee or officer of the U.S. government, may contain provisions appropriate to the activity for which such document is to be used. Such form or agreement shall, at a minimum, require that the person will not disclose any classified information received during such activity unless specifically authorized to do so by the U.S. government. Such nondisclosure or confidentiality forms shall also make it clear that they do not bar disclosures to Congress, or to an authorized official of an executive agency or the U.S. Department of Justice, that are essential to reporting a substantial violation of law.

ix. Statement of Federal Stewardship

DOE will exercise normal federal stewardship in overseeing the project activities performed under DOE awards. Stewardship activities include but are not limited to conducting site visits; reviewing performance and financial reports; providing

assistance and/or temporary intervention in unusual circumstances to correct deficiencies that develop during the project; assuring compliance with terms and conditions; and reviewing technical performance after project completion to ensure that the project objectives have been accomplished.

x. Statement of Substantial Involvement (Applies to Topic Area 3 ONLY)

DOE has substantial involvement in work performed under awards made as a result of this FOA. DOE does not limit its involvement to the administrative requirements of the award. Instead, DOE has substantial involvement in the direction and redirection of the technical aspects of the project. Substantial involvement includes but is not limited to the following:

1. DOE shares responsibility with the recipient for the management, control, direction, and performance of the project.
2. DOE may intervene in the conduct or performance of work under this award for programmatic reasons. Intervention includes the interruption or modification of the conduct or performance of project activities.
3. DOE may redirect or discontinue funding the project based on the outcome of DOE's evaluation of the project at the Go/No-Go decision point(s).
4. DOE may review and concur with ongoing technical performance to ensure that adequate progress has been obtained within the current Budget Period before work can commence on subsequent Budget Periods.
5. DOE participates in major project decision-making processes.

xi. Intellectual Property Provisions

The standard DOE financial assistance intellectual property provisions applicable to the various types of recipients are located at <http://energy.gov/gc/standard-intellectual-property-ip-provisions-financial-assistance-awards>.

xii. Reporting

Reporting requirements are identified on the Federal Assistance Reporting Checklist and Instructions, DOE F 4600.2, attached to the award agreement. A sample checklist is available at: [BIL-GRIP Application Forms and Templates | netl.doe.gov](http://netl.doe.gov/BIL-GRIP/ApplicationFormsandTemplates).

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

- New manufacturing production or recycling capacity
- Jobs data, including:
 - Number and types of jobs provided, wages and benefits paid;
 - Workforce demographics, including local hires;
 - Efforts to minimize risks of labor disputes and disruptions;
 - Contributions to training; employee certificates and training credentials; ratio of apprentice- to journey-level workers employed;
 - Number of trainings completed, trainees placed in full-time employment, or number of trainings with workforce partnerships involving employers, community-based organizations, or labor unions.
- Justice and Equity data, including:
 - Minority Business Enterprises, minority-owned businesses, woman-owned businesses, and veteran-owned businesses acting as vendors and subcontractors for bids on supplies, services, and equipment;
 - Value, number, and type of partnerships with MSIs;
 - Stakeholder engagement events, consent-based siting activities;
 - Other relevant indicators from the Community Benefits Plan.
- Number and type of energy efficient and clean energy equipment installed.
- Funding leveraged, follow-on-funding, intellectual property generation and utilization.
- Biennial Report to Congress - (**Applies to Topic Area 1 ONLY**), See Section I.B. for more information.

xiii. Go/No-Go Review

Each project selected under this FOA will be subject to a periodic project evaluation referred to as a Go/No-Go Review. A Go/No-Go Review is a risk management tool and a project management best practice to ensure that, for the current phase or period of performance, technical success is definitively achieved and potential for success in future phases or periods of performance is evaluated, prior to beginning the execution of future phases. At the Go/No-Go decision points, DOE will evaluate project performance, project schedule adherence, the extent milestone objectives are met, compliance with reporting requirements, and overall contribution to the program goals and objectives. Federal funding beyond the Go/No-Go decision point (continuation funding) is

contingent upon (1) availability of federal funds appropriated by Congress for the purpose of this program; (2) the availability of future-year budget authority; (3) recipient's technical progress compared to the Milestone Summary Table stated in Attachment 1 of the award; (4) recipient's submittal of required reports; (5) recipient's compliance with the terms and conditions of the award; (6) DOE's Go/No-Go decision; (7) the recipient's submission of a continuation application;⁴⁶ and (8) written approval of the continuation application by the Contracting Officer.

As a result of the Go/No-Go Review, DOE may, at its discretion, authorize the following actions: (1) continue to fund the project, contingent upon the availability of funds appropriated by Congress for the purpose of this program and the availability of future-year budget authority; (2) recommend redirection of work under the project; (3) place a hold on federal funding for the project, pending further supporting data or funding; or (4) discontinue funding the project because of insufficient progress, change in strategic direction, or lack of funding.

The Go/No-Go decision is distinct from a non-compliance determination. In the event a recipient fails to comply with the requirements of an award, DOE may take appropriate action, including but not limited to, redirecting, suspending, or terminating the award.

xiv. Conference Spending

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

⁴⁶ A continuation application is a non-competitive application for an additional budget period within a previously approved project period. At least ninety (90) days before the end of each budget period, the recipient must submit its continuation application, which includes the following information:

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

General), of the date, location, and number of employees attending such conference.

xv. Indemnity

Awards resulting from this FOA will contain the following provision reminding Recipients of DOE's right of indemnification.

The Recipient shall indemnify the Government and its officers, agents, or employees for any and all liability, including litigation expenses and attorney's fees, arising from suits, actions, or claims of any character for death, bodily injury, or loss of damage to property or to the environment, resulting from the project, except to the extent that such liability results from the direct fault or negligence of Government officers, agents or employees, or to the extent such liability may not be covered by applicable allowable costs provisions.

xvi. Uniform Commercial Code (UCC) Financing Statements

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

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

xvii. Real Property and Equipment

Subject to the vesting of any property pursuant to Section 309 of the FY23 Consolidated Appropriations Act (Pub. L. No. 117-328), Division D, Title III, property disposition may be required at the end of a project if the current fair market value of property exceeds \$5,000. For-profit entity disposition requirements are set forth at 2 CFR 910.360. Property disposition requirements for other non-federal entities are set forth in 2 CFR 200.310 – 200.316.

Real property and equipment purchased with project funds (federal share and recipient cost share) are subject to the requirements at 2 CFR 200.310, 200.311, 200.313, and 200.316 (non-federal entities, except for-profit entities) and 2 CFR 910.360 (for-profit entities). For projects selected for awards under this FOA, the recipients may (1) take disposition action on the real property and equipment; or (2) continue to use the real property and equipment after the conclusion of the award period of performance with Contracting Officer approval. Recipients may continue to use the real property and equipment so long as the recipient:

- a. Continues to use the property for the authorized project purposes;
- b. Complies with the applicable reporting requirements and regulatory property standards; and
- c. Requests continued use of the property with its final SF-428 Tangible Personal Property Report and/or SF-429 Real Property Status Report submission during award closeout.

The recipient's written request for Continued Use must identify the property and include: a summary of how the property will be used (must align with the authorized project purposes); a proposed use period, (e.g., perpetuity, until fully depreciated, or a calendar date when the recipient expects to submit disposition instructions); acknowledgement that the recipient shall not sell or encumber the property or permit any encumbrance without prior written DOE approval; current fair market value of the property; and an estimated useful life or depreciation schedule for equipment.

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

xviii. Implementation of Executive Order 13798, Promoting Free Speech and Religious Liberty

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

xix. Participants and Collaborating Organizations

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

xx. Current and Pending Support

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

xxi. Interim Conflict of Interest Policy for Financial Assistance

The DOE interim Conflict of Interest Policy for Financial Assistance (COI Policy)⁴⁷ is applicable to all non-Federal entities applying for, or that receive, DOE funding by means of a financial assistance award (e.g., a grant, cooperative agreement, or technology investment agreement) and, through the implementation of this policy by the entity, to each Investigator who is planning to participate in, or is participating in, the project funded wholly or in part under the DOE financial assistance award. The term “Investigator” means the PI and any other person, regardless of title or position, who is responsible for the purpose, design, conduct, or reporting of a project funded by DOE or proposed for funding by DOE. Recipients must flow down the requirements of the interim COI Policy to any subrecipient non-federal entities. Further, for DOE funded projects, the recipient must include all financial conflicts of interest (FCOI) (i.e., managed and unmanaged/unmanageable) in its initial and ongoing FCOI reports.

It is understood that non-federal entities and individuals receiving DOE financial assistance awards will need sufficient time to come into full compliance with DOE’s interim COI Policy. To provide some flexibility, DOE allows for a staggered implementation. Specifically, prior to award, applicants selected for award negotiations must: ensure all Investigators complete their significant financial

⁴⁷ DOE’s interim COI Policy can be found at [PF 2022-17 FAL 2022-02 Department of Energy Interim Conflict of Interest Policy Requirements for Financial Assistance](#).

disclosures; review the disclosures; determine whether a FCOI exists; develop and implement a management plan for FCOIs; and provide DOE with an initial FCOI report that includes all FCOIs (i.e., managed and unmanaged/unmanageable). Recipients will have 180 days from the date of the award to come into full compliance with the other requirements set forth in DOE's interim COI Policy. Prior to award, the applicant must certify that it is, or will be within 180 days of the award, compliant with all requirements in the COI Policy.

xxii. Fraud, Waste, and Abuse

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

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

Additionally, recipients of DOE awards must be cognizant of the requirements of [2 CFR 200.113 Mandatory disclosures](#), which states:

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

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

xxvi. Human Subjects Research

Research involving human subjects, biospecimens, or identifiable private information conducted with DOE funding is subject to the requirements of DOE Order 443.1C, Protection of Human Research Subjects, 45 CFR Part 46, Protection of Human Subjects (subpart A which is referred to as the “Common Rule”), and 10 CFR Part 745, Protection of Human Subjects.

Additional information on the DOE Human Subjects Research Program can be found at: [HUMAN SUBJECTS Human Subjects Pr... | U.S. DOE Office of Science \(SC\) \(osti.gov\)](#)

xxvii. Cybersecurity Plan (Applies to Topic Areas 2 & 3 ONLY)

In accordance with BIL section 40126, applicants selected for award negotiations must submit a cybersecurity plan to DOE prior to receiving funding.⁴⁸ These plans are intended to foster a cybersecurity-by-design approach for BIL efforts. The Department 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 submission for this FOA, but all projects selected under this FOA will be required to 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).⁴⁹ The cybersecurity plan created pursuant to BIL section 40126 should document any deviation from open standards, as well as the utilization of proprietary standards where the awardee determines that such deviation is necessary.

- Cybersecurity plans should be commensurate to the threats and vulnerabilities associated with the proposed efforts and demonstrate the cybersecurity maturity of the project.

⁴⁸ 42 U.S.C. § 18725

⁴⁹ 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).

- 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 BIL section 40126 (b), Contents of Cybersecurity Plan.⁵⁰

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

xxviii. Domestic Content Commitments

Be advised that the grant agreement or cooperative agreement for funding between DOE and the awardee will require each recipient: (1) to fulfill the commitments made in its application regarding the procurement of U.S.-produced products, subject to a waiver process by DOE and (2) to fulfill the commitments made in its application regarding the procurement of other key component metals and manufactured products domestically that are deemed available in sufficient and reasonably available quantities or of a satisfactory quality at the time of award negotiation, again subject to a DOE waiver process.

VII. Questions/Agency Contacts

Upon the issuance of a FOA, DOE personnel are prohibited from communicating (in writing or otherwise) with applicants regarding the FOA except through the established question and answer process as described below. Specifically, questions regarding this FOA must be submitted to: FOA3195@netl.doe.gov. Questions must be submitted not later than 3 business days prior to the application due date and time. Please note, feedback on individual concepts will not be provided through Q&A.

All questions and answers related to this FOA will be posted on Exchange at: <https://infrastructure-exchange.energy.gov/>. **You must first select this specific FOA Number to view the questions and answers specific to this FOA.** GDO 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 website should be submitted to: InfrastructureExchangeSupport@hq.doe.gov.

⁵⁰ 42 U.S.C. § 18725

VIII. Other Information

A. FOA Modifications

Amendments to this FOA will be posted on the Exchange website and the Grants.gov system. However, you will only receive an email when an amendment or a FOA is posted on these sites by registering Grants.gov. DOE recommends that you register as soon after the release of the FOA as possible to ensure you receive timely notice of any amendments or other FOAs.

B. Government Right to Reject or Negotiate

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

C. Commitment of Public Funds

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

D. Treatment of Application Information

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

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

If an applicant chooses to submit trade secrets or business-sensitive, proprietary, or otherwise confidential information, the applicant must provide **two copies** of the submission (e.g., Concept Paper, Full Application). The first copy should be marked "non-confidential," with the information believed to be confidential deleted. The second copy should be marked "confidential" and must clearly and conspicuously identify the trade secrets or business-sensitive, proprietary, or

otherwise confidential information and must be marked as described below. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under the Freedom of Information Act or otherwise. The federal government is not liable for the disclosure or use of unmarked information and may use or disclose such information for any purpose as authorized by law.

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

Notice of Restriction on Disclosure and Use of Data:

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

In addition, (1) the header and footer of every page that contains trade secrets or business-sensitive, proprietary, or otherwise confidential information must be marked as follows: “Contains Business Sensitive Information, Trade Secrets, or Proprietary or Otherwise Confidential Information Exempt from Public Disclosure,” and (2) every line or paragraph containing such information must be clearly marked with double brackets or highlighting. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

E. Evaluation and Administration by Non-Federal Personnel

In conducting the merit review evaluation, the Go/No-Go Reviews and Peer Reviews, the government may seek the advice of qualified non-federal personnel as reviewers. The government may also use non-federal personnel to conduct routine, nondiscretionary administrative activities, including DOE contractors. The applicant, by submitting its application, consents to the use of non-federal reviewers/administrators. Non-federal reviewers must sign conflict of interest (COI) and non-disclosure acknowledgements (NDA) prior to reviewing an application. Non-federal personnel conducting administrative activities must sign an NDA.

F. Notice Regarding Eligible/Ineligible Activities

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

G. Notice of Right to Conduct a Review of Financial Capability

DOE reserves the right to conduct an independent third-party review of financial capability for applicants that are selected for negotiation of award (including personal credit information of principal(s) of a small business if there is insufficient information to determine financial capability of the organization).

H. Requirement for Full and Complete Disclosure

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

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

I. Retention of Submissions

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

J. Rights in Technical Data

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

The government has unlimited rights in technical data created under a DOE agreement. Delivery or third-party licensing of proprietary software or data developed solely at private expense will not normally be required except as specifically negotiated in a particular agreement to satisfy DOE's own needs or to ensure the commercialization of technology developed under a DOE agreement.

“Limited Rights Data”: The U.S. government will not normally require delivery of confidential or trade-secret-type technical data developed solely at private expense prior to issuance of an award, except as necessary to monitor technical

progress and evaluate the potential of proposed technologies to reach specific technical and cost metrics.

K. Copyright

The prime recipient and subrecipients may assert copyright in copyrightable works, such as software, first produced under the award without DOE approval. When copyright is asserted, the government retains a paid-up nonexclusive, irrevocable worldwide license to reproduce, prepare derivative works, distribute copies to the public, and to perform publicly and display publicly the copyrighted work. This license extends to contractors and others doing work on behalf of the government.

L. Export Control

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

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

M. Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment

As set forth in 2 CFR 200.216, recipients and subrecipients are prohibited from obligating or expending project funds (federal funds and recipient cost share) to procure or obtain; extend or renew a contract to procure or obtain; or enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that use *covered telecommunications equipment or services* as a substantial or essential component of any system, or as critical technology as part of any system. As described in Section 889 of Public Law 115-232, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

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

N. Personally Identifiable Information (PII)

All information provided by the applicant must to the greatest extent possible exclude PII. "PII" refers to information that can be used to distinguish or trace an individual's identity, such as their name, Social Security number, or biometric records, alone or combined with other personal or identifying information linked or linkable to a specific individual, such as date and place of birth or mother's maiden name. (See OMB Memorandum M-07-16 dated May 22, 2007, found at: <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2007/m07-16.pdf>)

By way of example, applicants must screen resumes to ensure that they do not contain PII such as personal addresses, personal landline/cell phone numbers, personal emails, personal social media accounts, or professional headshots.

Under no circumstances should Social Security numbers (SSNs) be included in the application. Federal agencies are prohibited from the collecting, using, and displaying unnecessary SSNs. (See the Federal Information Security Modernization Act of 2014 (Pub. L. No. 113-283, Dec 18, 2014; 44 U.S.C. § 3551).

O. Annual Independent Audits

If a for-profit entity is a prime recipient and has expended \$750,000 or more of DOE awards during the entity's fiscal year, an annual compliance audit performed by an independent auditor is required. For additional information, please refer to 2 CFR 910.501 and Subpart F.

If an educational institution, nonprofit organization, or state/local government is a prime recipient or subrecipient and has expended \$750,000 or more of federal awards during the non-federal entity's fiscal year, a Single or Program-Specific Audit is required. For additional information, please refer to 2 CFR 200.501 and Subpart F.

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

P. Informational Webinars

DOE will conduct several informational webinars at the dates and times listed in the table on the FOA cover page, with the initial webinar being held prior to concept paper submission due dates. The purpose of the initial webinar is to give applicants a chance to ask questions about the FOA process generally. As

the webinar will be open to all Applicants who wish to participate, Applicants should refrain from asking questions or communicating information that would reveal confidential and/or proprietary information specific to their project.

Attendance is not mandatory for the webinars and will not positively or negatively impact the overall review of any applicant submissions. Recordings of the webinars will be made available on the GRIP Program web page at: [Grid Resilience Innovation Partnership Programs | Department of Energy](#).

APPENDIX A – COST SHARE INFORMATION

Cost Sharing or Cost Matching

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

How Cost Sharing Is Calculated

As stated above, cost sharing is calculated as a percentage of the Total Project Cost. The following is an example of how to calculate cost sharing amounts for a project with \$1,000,000 in federal funds with a minimum 20% non-federal cost sharing requirement:

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

How Cost Matching Is Calculated

Cost matching for the non-federal share is calculated as a percentage of the Federal funds only, rather than the Total Project Cost. The following are examples of how to calculate cost matching amounts for a project with \$1,000,000 in federal funds with a minimum 20% non-federal cost matching requirement:

- Formula D: Federal share (\$) multiplied by non-federal share (%) = Non-federal **match** (\$)
Example: \$1,000,000 multiplied by 20% = \$200,000
- Formula E: Federal share (\$) plus non-federal match (\$) = Total Project Cost (\$)
Example: \$1,000,000 plus \$200,000 = \$1,200,000

- Formula F: Total Project Cost (\$) minus federal share (\$) = Non-federal **match** (\$)
Example: \$1,200,000 minus \$1,000,000 = \$200,000
- Formula G: Federal share (\$) divided by Total Project Cost (\$) = Calculated federal share of Total Project Cost (%)
Example: \$1,000,000 divided by \$1,200,000 = 83.33%
- Formula H: Non-federal match (\$) divided by Total Project Cost (\$) = Calculated non-federal share of Total Project Cost (%)
Example: \$200,000 divided by \$1,200,000 = 16.67%

The tables below provide additional examples of calculation results for the cost match (Topic Area 1) and cost share (Topic Areas 2 and 3) for the three BIL Topic Areas:

Topic Area 1: Section 40101 (c) Grid Resilience Grants (\$100M Maximum Grant (Federal Share \$)). An eligible entity shall be required to match 100% of the amount of the grant (except for Small Utilities must match 1/3 of the grant).						
Maximum Federal Share (\$)	Entity Type	Non-Federal Minimum Match Required (%)	Calculated Non-Federal Minimum Match (\$) ^D	Total Project Cost (\$) ^E	Calculated Federal Share of Total Project Costs (%) ^G	Calculated Non-Federal Share of Total Project Costs (%) ^C
\$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

Topic Area 2: Section 40107 Smart Grid Grants (\$50M Maximum Grant (Federal Share \$)). The non-federal cost share must be at least 50% of the Total Project Costs.					
Maximum Federal Share (\$)	Entity Type	Non-Federal Cost Share Minimum % of Total Project Costs (%)	Calculated Non-Federal Minimum Share (\$) ^B	Total Project Cost (\$) ^A	Calculated Non-Federal Minimum Share (%) ^C
\$50,000,000	Eligible Entity	50	\$50,000,000	\$100,000,000	50

Topic Area 3: SECTION 40103 (b) Innovative Grid Resilience Program Example breakdown for \$250M and \$1B maximum Grant (Federal Share \$) The non-federal cost share must be at least 50% of the Total Project Costs.					
Federal Share (\$)	Entity Type	Non-Federal Cost Share Minimum % of Total Project Costs (%)	Calculated Non-Federal Minimum Share (\$)^B	Total Project Cost (\$)^A	Calculated Non-Federal Minimum Share (%)^C
\$250,000,000	Eligible Entity	50	\$250,000,000	\$500,000,000	50
\$1,000,000,000	Eligible Entity	50	\$1,000,000,000	\$2,000,000,000	50

What Qualifies for Cost Sharing

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

The rules associated with what is allowable as cost share are generally the same for all types of entities but specific to whether the entity is receiving funds under a grant or cooperative agreement. The specific rules are applicable to:

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

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

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

General Cost Sharing Rules on a DOE Award

- 1. Cash Cost Share** encompasses all contributions to the project made by the recipient or subrecipient(s) for costs incurred and paid for during the project. This includes when an organization pays for personnel, supplies, or equipment for their company with

organizational resources. If the cost of the item or service is reimbursed, it is cash cost share. All cost share items must be necessary to the performance of the project.

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

DOE Financial Assistance Rules 2 CFR Part 200 as amended by 2 CFR Part 910

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

- (A) Acceptable contributions.** All contributions, including cash contributions and third-party in-kind contributions, must be accepted as part of the prime recipient's cost sharing if such contributions meet all of the following criteria:
- (1)** They are verifiable from the recipient's records.
 - (2)** They are not included as contributions for any other federally assisted project or program.
 - (3)** They are necessary and reasonable for the proper and efficient accomplishment of project or program objectives.
 - (4)** They are allowable under the cost principles applicable to the type of entity incurring the cost as follows:

- a.** For-profit organizations. Allowability of costs incurred by for-profit organizations and those nonprofit organizations listed in Attachment C to OMB Circular A–122 is determined in accordance with the for-profit cost principles in 48 CFR Part 31 in the FAR, except that patent prosecution costs are not allowable unless specifically authorized in the award document. (v) Commercial Organizations. FAR Subpart 31.2—Contracts with Commercial Organizations; and
 - b.** Other types of organizations. For all other non-federal entities, allowability of costs is determined in accordance with 2 CFR Part 200 Subpart E.
- (5)** They are not paid by the federal government under another award unless authorized by federal statute to be used for cost sharing or matching.
- (6)** They are provided for in the approved budget.

(B) Valuing and documenting contributions

- (1)** Valuing recipient’s property or services of recipient’s employees. Values are established in accordance with the applicable cost principles, which mean that amounts chargeable to the project are determined on the basis of costs incurred. For real property or equipment used on the project, the cost principles authorize depreciation or use charges. The full value of the item may be applied when the item will be consumed in the performance of the award or fully depreciated by the end of the award. In cases where the full value of a donated capital asset is to be applied as cost sharing or matching, that full value must be the lesser or the following:
 - a.** The certified book value of the depreciable remaining life of the property recorded in the recipient’s accounting records at the time of donation; or
 - b.** The current fair market value. If there is sufficient justification, the Contracting Officer may approve the use of the current fair market value of the donated property, even if it exceeds the certified value at the time of donation to the project. The Contracting Officer may accept the use of any reasonable basis for determining the fair market value of the property.
- (2)** Valuing services of others’ employees. If an employer other than the recipient furnishes the services of an employee, those services are valued at the employee’s regular rate of pay, provided these services are for the same skill level for which the employee is normally paid.
- (3)** Valuing volunteer services. Volunteer services furnished by professional and technical personnel, consultants, and other skilled and unskilled labor may be counted as cost sharing or matching if the service is an integral and necessary part of an approved

project or program. Rates for volunteer services must be consistent with those paid for similar work in the recipient's organization. In those markets in which the required skills are not found in the recipient organization, rates must be consistent with those paid for similar work in the labor market in which the recipient competes for the kind of services involved. In either case, paid fringe benefits that are reasonable, allowable, and allocable may be included in the valuation.

(4) Valuing property donated by third parties.

- a.** Donated supplies may include such items as office supplies or laboratory supplies. Value assessed to donated supplies included in the cost sharing or matching share must be reasonable and must not exceed the fair market value of the property at the time of the donation.
- b.** Normally only depreciation or use charges for equipment and buildings may be applied. However, the fair rental charges for land and the full value of equipment or other capital assets may be allowed, when they will be consumed in the performance of the award or fully depreciated by the end of the award, provided that the Contracting Officer has approved the charges. When use charges are applied, values must be determined in accordance with the usual accounting policies of the recipient, with the following qualifications:
 - i.** The value of donated space must not exceed the fair rental value of comparable space as established by an independent appraisal of comparable space and facilities in a privately owned building in the same locality.
 - ii.** The value of loaned equipment must not exceed its fair rental value.

(5) Documentation. The following requirements pertain to the recipient's supporting records for in-kind contributions from third parties:

- a.** Volunteer services must be documented and, to the extent feasible, supported by the same methods used by the recipient for its own employees.
- b.** The basis for determining the valuation for personal services and property must be documented.

APPENDIX B – WAIVER REQUESTS FOR: 1. FOREIGN ENTITY PARTICIPATION; AND 2. FOREIGN WORK

Waiver for Foreign Entity Participation

Many of the technology areas DOE funds fall in the category of critical and emerging technologies (CETs). CETs are a subset of advanced technologies that are potentially significant to United States national and economy security. For projects selected under this FOA, all recipients and subrecipients must be organized, chartered, or incorporated (or otherwise formed) under the laws of a state or territory of the United States; have majority domestic ownership and control; and have a physical location for business operations in the United States. To request a waiver of this requirement, an applicant must submit an explicit waiver request in the Full Application.

Waiver Criteria

Foreign entities seeking to participate in a project funded under this FOA must demonstrate to the satisfaction of DOE that:

- a. Its participation is in the best interest of the U.S. industry and U.S. economic development;
- b. The project team has appropriate measures in place to control sensitive information and protect against unauthorized transfer of scientific and technical information;
- c. Adequate protocols exist between the U.S. subsidiary and its foreign parent organization to comply with export control laws and any obligations to protect proprietary information from the foreign parent organization;
- d. The work is conducted within the U.S. and the entity acknowledges and demonstrates that it has the intent and ability to comply with the U.S. Competitiveness Provision; and
- e. The foreign entity will satisfy other conditions that may be deemed necessary by DOE to protect U.S. government interests.

Content for Waiver Request

A Foreign Entity waiver request must include the following:

- a. Information about the entity: name, point of contact, and proposed type of involvement with the Institute;
- b. Country of incorporation, the extent of the ownership/level control by foreign entities, whether the entity is state owned or controlled, a summary of the ownership breakdown of the foreign entity and the percentage of ownership/control by foreign entities, foreign shareholders, foreign state, or foreign individuals;

- c. The rationale for proposing a foreign entity participate (must address criteria above);
- d. A description of the project's anticipated contributions to the U.S. economy;
 - How the project will benefit the U.S., including manufacturing, contributions to employment in the U.S. and growth in new markets and jobs in the U.S.;
 - How the project will promote manufacturing of products and/or services in the United States;
- e. A description of how the foreign entity's participation is essential to the project;
- f. A description of the likelihood of Intellectual Property (IP) being created from the work and the treatment of any such IP; and
- g. Countries where the work will be performed (Note: if any work is proposed to be conducted outside the U.S., the applicant must also complete a separate request foreign work waiver).

DOE may also require:

- A risk assessment with respect to IP and data protection protocols that includes the export control risk based on the data protection protocols, the technology being developed and the foreign entity and country. These submissions could be prepared by the project lead, but the prime recipient must make a representation to DOE as to whether it believes the data protection protocols are adequate and make a representation of the risk assessment – high, medium, or low risk of data leakage to a foreign entity.
- Additional language be added to any agreement or subagreement to protect IP, mitigate risk or other related purposes.

DOE may require additional information before considering the waiver request.

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

Waiver for Performance of Work in the United States (Foreign Work Waiver)

As set forth in Section IV.I.iii., all work under funding under this FOA must be performed in the United States. To seek a waiver of the Performance of Work in the United States requirement, the applicant must submit an explicit waiver request in the Full Application. A separate waiver request must be submitted for each entity proposing performance of work outside of the United States.

Overall, a waiver request must demonstrate to the satisfaction of DOE that it would further the purposes of this FOA and is otherwise in the economic interests of the United States to perform work outside of the United States. A request for a foreign work waiver must include the following:

- The rationale for performing the work outside the U.S. (“foreign work”);
- A description of the work proposed to be performed outside the U.S.;
- An explanation as to how the foreign work is essential to the project;
- A description of the anticipated benefits to be realized by the proposed foreign work and the anticipated contributions to the US economy;
- The associated benefits to be realized and the contribution to the project from the foreign work;
- How the foreign work will benefit the U.S., including manufacturing, contributions to employment in the U.S. and growth in new markets and jobs in the U.S.;
- How the foreign work will promote domestic American manufacturing of products and/or services;
- A description of the likelihood of Intellectual Property (IP) being created from the foreign work and the treatment of any such IP;
- The total estimated cost (DOE and recipient cost share) of the proposed foreign work;
- The countries in which the foreign work is proposed to be performed; and
- The name of the entity that would perform the foreign work.

DOE may require additional information before considering the waiver request.

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

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

A. Definitions

For purposes of the Buy America requirements, based both on the statute and the Office of Management and Budget (OMB)Memorandum M-22-11 dated April 18, 2022, the following definitions apply:

Construction materials includes an article, material, or supply—other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives⁵¹—that is or consists primarily of:

- Non-ferrous metals;
- Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- Glass (including optic glass);
- Lumber; or
- Drywall.

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

For this FOA specifically, all projects subject to this FOA are considered “infrastructure” within the Buy America provision of BIL.

Moreover, according to OMB Memorandum M-22-11:

When determining if a program has infrastructure expenditures, Federal agencies should interpret the term “infrastructure” broadly and consider the definition provided above as illustrative and not exhaustive. When determining if a particular construction project of a type not listed in the definition above constitutes “infrastructure,” agencies should consider whether the project will serve a public function, including whether the project is publicly owned and operated, privately operated on behalf of the public, or is a place of public accommodation, as opposed to a project that is privately owned and not open to

⁵¹ BIL, § 70917(c)(1).

the public. Projects with the former qualities have greater indicia of infrastructure, while projects with the latter quality have fewer. Projects consisting solely of the purchase, construction, or improvement of a private home for personal use, for example, would not constitute an infrastructure project.

The Agency, not the applicant, will have the final say as to whether a given project includes infrastructure, as defined herein. Accordingly, in cases where the “public” nature of the infrastructure is unclear, but the other relevant criteria are met, DOE strongly recommends that applicants complete their full application with the assumption that Buy America requirements will apply to the proposed project.

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

B. Buy America Requirements for Infrastructure Projects (“Buy America” requirements)

In accordance with BIL Section 70914, none of the project funds (includes federal share and recipient cost share) may be used for a project for infrastructure unless:

- (1) all iron and steel used in the project are produced in the United States--this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;
- (2) all manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation; and
- (3) all construction materials⁵² are produced in the United States—this means that all manufacturing processes for the construction material occurred in the United States.

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

⁵² Excludes cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents or additives.

These requirements must flow down to all sub-awards, all contracts, subcontracts, and purchase orders for work performed under the proposed project, except where the prime recipient is a for-profit entity. Based on guidance from OMB, the Buy America requirements of the BIL do not apply to DOE projects in which the prime recipient is a for-profit entity; the requirements only apply to projects whose prime recipient is a State, local government, Indian tribe, Institution of Higher Education, or nonprofit organization.

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

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

Note that for all applicants—both non-Federal entities and for-profit entities—DOE is including a Program Policy Factor that the Selection Official may consider in determining which Full Applications to select for award negotiations that considers whether the applicant has made a commitment to procure U.S. iron, steel, manufactured products, and construction materials in its project.

C. (If applicable) DOE Submission Requirements for Full Application

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

Waivers

The DOE financial assistance agreement will require each recipient: (1) to fulfill the commitments made in its application regarding the procurement of U.S.-produced products and (2) to fulfill the commitments made in its application regarding the procurement of other key component metals and domestically manufactured products that are deemed available in sufficient and reasonably available quantities or of a satisfactory quality at the time of award negotiation.

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

- (1) Applying the Buy America requirements would be inconsistent with the public interest;
- (2) The types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality; or

(3) The inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25%.

If an applicant or recipient is seeking a waiver of the Buy America requirements, it may submit a waiver request after it has been notified of its selection for award negotiations. A waiver request must include:

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

DOE may require additional information before considering the waiver request.

Waiver requests are subject to public comment periods of no less than 15 days and must be reviewed by the Made in America Office. There may be instances where an award qualifies, in whole or in part, for an existing waiver described at [DOE Buy America Requirement Waiver Requests](#).

DOE’s decision concerning a waiver request is not appealable.

APPENDIX D – STATEMENT OF PROJECT OBJECTIVES

Background/Instructions: Prospective recipients of awards funded from Funding Opportunity Announcement DE-FOA-0003195 (FOA 3195) must prepare/submit a detailed statement of project objectives (SOPO) that addresses how the project objectives will be met. The SOPO must contain a clear, concise description of all activities that will be completed during project performance and follow the structure/format outlined below. Since the SOPO may be released (in whole or in part) to the public by the Department of Energy (DOE) after award, it shall not contain proprietary or confidential business information.

The SOPO generally consists of less than five (5) pages to describe the proposed work. Prospective recipients of FOA 3195 funding (FOA 3195 Recipient) shall prepare the SOPO according to the format provided in the SOPO template and in accordance with the application content and form requirements identified in Section IV Of the FOA.

This Background/Instructions section as well as italicized text in the SOPO template is intended to be instructional, is provided as guidance, and should be removed by the FOA 3195 recipient when preparing their SOPO. All other text (shown as normal font within the SOPO template) is to be included in the proposed SOPO.

In writing the Statement of Project Objectives (SOPO), **avoid:** 1) the use of proper nouns to minimize SOPO modifications in the event of changes to the project team, facilities, etc.; 2) figures and equations; 3) references to other documents and publications; and 4) details about past work and discussion of technical background (which should be covered elsewhere in the application narrative).

[***BEGINNING OF SOPO TEMPLATE*****]**

STATEMENT OF PROJECT OBJECTIVES (SOPO)

Title of Project

(Insert the title of the work to be performed. Be concise and descriptive)

A. OBJECTIVES

Clearly and concisely describe the objective(s) of the project. If the project includes multiple phases of work, describe the objective(s) for each phase. This section should not exceed one-half page.

B. SCOPE OF WORK

Summarize the planned effort and approach to achieve the proposed overall project objectives. For projects that involve multiple phases of work, specific scope statement(s) should be defined for each phase. This section should not exceed one-half page.

C. TASKS TO BE PERFORMED

Unless otherwise stated, all SOPOs will include tasks for Project Management Plan, National Environmental Policy Act (NEPA) Compliance, and Cybersecurity Plan (CSP) as instructed below. Further, the applicant should include clear and concise descriptions of their planned tasks (and subtasks if needed). Tasks are to be organized in a logical sequence and grouped into corresponding phases, if applicable.

Task 1.0: Project Management and Planning

Subtask 1.1: Project Management Plan (PMP):

Within 30 days of award, the Recipient shall submit a Project Management Plan (PMP) to the designated Federal Project Officer (FPO). The Recipient shall not proceed beyond Task 1.0 until the PMP has been accepted by the FPO.

The PMP shall be revised and resubmitted as often as necessary, during the course of the project, to capture any major/significant changes to the planned approach, budget, key personnel, major resources, etc.

The Recipient shall manage and direct the project in accordance with the accepted PMP to meet all technical, schedule and budget objectives and requirements. The Recipient will coordinate activities to effectively accomplish the work. The Recipient will ensure that project plans, results, and decisions are appropriately documented, and that project reporting and briefing requirements are satisfied.

Subtask 1.2: National Environmental Policy Act (NEPA) Compliance

As required, the Recipient shall provide the documentation necessary for NEPA compliance.

Subtask 1.3: Cybersecurity Plan (CSP)*

The CSP shall be revised and resubmitted as often as necessary, during the course of the project, to capture any major/significant changes.

**Applicable to Topic Area 2 [Smart Grid Investments (40107)] and Topic Area 3 (Innovative Grid Resilience Program (40103(b)) only*

Subtask 1.4: Continuation Briefing(s):

The Recipient will brief DOE on roughly an annual basis to explain the plans, progress, and results of the technical effort. The briefing shall also describe performance relative

to project success criteria, milestones, and the Go/No-Go Decision point(s) that are documented in the Project Management Plan (PMP).

Recipients shall include additional tasks and subtasks as appropriate using the following format. For projects that involve multiple phases of work, label the start of each phase (such as “Phase 1”, etc.), state the title, and provide a brief narrative describing the objective(s) and scope for the phase.

Task 2.0 - (State title of task and provide description)

Phase 1 - (State the title and provide description)

Subtask 2.1 - (State title of subtask and provide description)

Phase 2 - (State the title and provide description)

Subtask 2.2 - (State the title and provide description)

Task 3.0 - (State title of task and provide description)

Subtask 3.1 - (State title of subtask and provide description)

Task 4.0 - (State title of task and provide description)

Subtask 4.1 - (State title of subtask and provide description)

D. DELIVERABLES

The Recipient shall provide a list of deliverables to be submitted during the project, including:

Subtask 1.1: Project Management Plan

Subtask 2.1: NEPA Compliance (if applicable)

Subtask 1.3: Cybersecurity Plan (for Topic Area 2 and Topic Area 3)

Subtask 1.4: Pre-Continuation Briefing Document(s)

The Recipient shall list additional deliverables as appropriate including any documents that will be delivered to DOE.

In addition to the deliverables listed above, the Recipient shall submit all periodic, topical, final, and other reports in accordance with the Federal Assistance Reporting Checklist and accompanying instructions.

E. BRIEFINGS/TECHNICAL PRESENTATIONS

The Recipient shall prepare, and present periodic briefings, technical presentations and demonstrations as requested by the Federal Project Officer, which may be held at a DOE or the Recipient's facility, other mutually agreeable location, or via webinar. Such meetings may include all or a combination of the following:

Kickoff Briefing - Not more than 30 days after submission of the Project Management Plan, the Recipient shall prepare and present a project summary briefing as part of a Project Kickoff Meeting.

Pre-Continuation Briefing - Not less than 90 days prior to the planned start of a budget period, the Recipient shall brief the DOE on the results to date, and their plans for the subsequent periods of work. The DOE will consider the information from this briefing, as well as the content of deliverables submitted to date, prior to authorizing continuing the project.

Final Project Briefing - Not less than 30 days prior to the end of the project, the Recipient shall prepare and present a Final Project Briefing on the results and accomplishments of the entire project.

Other Briefings – The Recipient shall prepare and present technical, financial, and/or administrative briefings as requested by the DOE. Additionally, the DOE may require Recipients to make technical presentations at national and/or industry conferences.

[***END OF SOPO TEMPLATE*****]**

APPENDIX E – PROJECT DESCRIPTION AND ASSURANCES DOCUMENT TEMPLATE (PDAD)

Project title:

Applicant Name:

Applicant Address:

Names of all team member organizations (if applicable):

Principal Investigator (Name, Address if different than Applicant's, Phone Number, E-mail):

Business Point of Contact (Name, Address if different than Applicant's, Phone Number, E-mail):

Include any statements regarding confidentiality.

Federal Share:

Cost Share:

Total Estimated Project Cost:

Item 1: Specify (mark with "X") the FOA Topic Area and as applicable the Area of Interest (AOI):

_____ Topic Area 1: **Grid Resilience Grants** (BIL section 40101(c))

_____ Topic Area 2: **Smart Grid Grants** (BIL section 40107)

_____ Topic Area 3: **Grid Innovation Program** (BIL section 40103(b))

TOPIC AREA 1 Specific Items:

Item 2: Specify (mark with "X") the entity type of the applicant organization:

_____ electric grid operator

_____ electricity storage operator

_____ electricity generator

_____ transmission owner or operator

_____ distribution provider

_____ fuel supplier

If further description is needed for the specified entity type, please provide below:

Item 3: Please provide the total amount (USD) of qualifying resilience investments (as outlined in DE-FOA-00003195) that has been spent for the previous 3 years. Please also provide the time period utilized for calculation of this amount.

Total Amount:

Time Period for Resilience Investments:

Note: Topic Area 1 applicants must submit as part of their application, a report detailing past, current, and future efforts by the eligible entity to reduce the likelihood and consequences of disruptive events. This report should include efforts over at least the previous 3 years and at least the next 3 years and any broader resilience strategy used by the applicant.

Item 4: Is the eligible entity a Small Utility as defined in DE-FOA-0003195 (sells no more than 4,000,000 MWh of electricity per year)? If NO is selected, skip to Item 7.

_____ Yes

_____ No

Note: If YES, applicant must provide their Form 861 for the last reporting year submitted to the Energy Information Administration (EIA).

Item 5: Per BIL section **40101(e)(2) (C) APPLICATION LIMITATIONS**. —An eligible entity may not submit an application for a grant provided by the Secretary under subsection (c) and a grant provided by a State or Indian Tribe pursuant to subsection (d) during the same application cycle.

Therefore, is the eligible entity a Subawardee/contractor under an application submitted under BIL Section 40101(d), ALRD 2736? If “YES”, please describe the differences between the GRIP FOA 3195 application (40101(c)) and the ALRD 2736 (40101(d)) applications in the box below:

_____ Yes

_____ No

TOPIC AREA 2 Specific Items:

No items

TOPIC AREA 3 Specific Items:

Item 6: Specify (mark with "X") the entity type of the applicant organization:

_____ a State

_____ a combination of 2 or more States

_____ an Indian Tribe

_____ a unit of local government

_____ a public utility commission

If further description is needed for the specified entity type, please provide below:

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Item 7:

Authorized Organizational Representative (AOR): please provide name, address, phone number and e-mail address for the authorized agent to bind the entity.

Authorized Organizational Representative (AOR):

Name:

Address:

Phone:

E-mail:

Item 8: Signature of Authorized Organizational Representative (AOR)
