

EXHIBIT D

ASSISTANCE AGREEMENT

1. Award No. DE-EE0010751	2. Modification No.	3. Effective Date 10/01/2023	4. CFDA No. 81.087
5. Awarded To UNIVERSITY OF CALIFORNIA IRVINE Attn: NANCY LEWIS 160 ALDRICH HALL IRVINE CA 926970001		6. Sponsoring Office Energy Effcy & Renewable Energy EE-1 U.S. Department of Energy 1000 Independence Avenue, S.W. Washington DC 20585	
8. Type of Agreement <input type="checkbox"/> Grant <input checked="" type="checkbox"/> Cooperative Agreement <input type="checkbox"/> Other		9. Authority 109-58 EPACT 2005	
11. Remittance Address UNIVERSITY OF CALIFORNIA IRVINE Attn: UNIVERSITY OF CALIFORNIA, IRVINE 228 ALDRICH HALL IRVINE CA 926971050		12. Total Amount Govt. Share: \$3,003,988.00 Cost Share : \$750,000.00 Total : \$3,753,988.00	13. Funds Obligated This action: \$3,003,988.00 Total : \$3,003,988.00
14. Principal Investigator	15. Program Manager Gregory J. Kleen Phone: 240-562-1672	16. Administrator Golden Field Office U.S. Department of Energy Golden Field Office 15013 Denver West Parkway Golden CO 80401	
17. Submit Payment Requests To Payment - Direct Payment from U.S. Dept of Treasury	18. Paying Office Payment - Direct Payment from U.S. Dept of Treasury	19. Submit Reports To	
20. Accounting and Appropriation Data 05450-2022-31-200835-41010-1009190-0000000-0000000-0000000			
21. Research Title and/or Description of Project Advanced Low-PGM Cathode Catalysts with Self-Healing Properties for High Performing and Highly Durable MEAs			
For the Recipient		For the United States of America	
22. Signature of Person Authorized to Sign		25. Signature of Grants/Agreements Officer 	
23. Name and Title	24. Date Signed	26. Name of Officer Christina M. Dunn	27. Date Signed 09/13/2023

CONTINUATION SHEET		REFERENCE NO. OF DOCUMENT BEING CONTINUED DE-EE0010751	PAGE OF 2 3		
NAME OF OFFEROR OR CONTRACTOR UNIVERSITY OF CALIFORNIA IRVINE					
ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>UEI: MJC5FCYQTPE6</p> <p>1. This is a conditional award, comprised of this Assistance Agreement and the Special Terms and Conditions. Upon successful completion of negotiations, this award will be modified to lift its conditional status, to revise the Special Terms and Conditions, and to add additional attachments, such as Attachment 1, Statement of Project Objectives and Milestone Summary Table; Attachment 2, Federal Assistance Reporting Checklist and Instructions; Attachment 3, Budget Information SF-424A; Attachment 4, Intellectual Property Provisions; and Attachment 5, Community Benefits Plan.</p> <p>2. The award was prepared using the proposed budget information in the Recipient's application. Term 1 of the Special Terms and Conditions states that the Recipient is prohibited from spending Federal funds at this time. DOE will not release the funding obligated by this award until successful completion of negotiations are reached to the satisfaction of the Contracting Officer. Performance against this award is, therefore, at the Recipient's own risk, and payments for costs incurred for Recipient's project will not be made until the parties complete negotiations and the Contracting Officer issues a modification to this award.</p> <p>3. A representative of the DOE office will contact the Recipient to request additional and/or revised information needed to supplement and clarify the Recipient's application, to complete the negotiations of an amended award.</p> <p>In Block 7 of the Assistance Agreement, the Period of Performance reflects the beginning of the Project Period through the end of the current Budget Period.</p> <p>Additional future DOE funding and additional budget periods are not contemplated under this award. Funding for all awards and future budget periods is contingent upon the availability of funds appropriated by Congress for the purpose of this program and the availability of future-year budget authority.</p> <p>DOE Award Administrator: Caitlin Galarneau</p> <p>Continued ...</p>				

CONTINUATION SHEET		REFERENCE NO. OF DOCUMENT BEING CONTINUED DE-EE0010751	PAGE OF 3 3		
NAME OF OFFEROR OR CONTRACTOR UNIVERSITY OF CALIFORNIA IRVINE					
ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>E-mail: caitlin.galarneau@ee.doe.gov Phone: 702-241-4257</p> <p>DOE Project Officer: Greg Kleen E-mail: gregory.kleen@ee.doe.gov Phone: 240-562-1672</p> <p>Recipient Business Officer: Joshua Hernandez Valle E-mail: jvalle1@uci.edu Phone: 949-824-3029</p> <p>Recipient Principal Investigator: Vojislav Stamenkovic E-mail: vrstamen@uci.edu Phone: 510-326-9565</p> <p>"Electronic signature or signatures as used in this document means a method of signing an electronic message that-</p> <ul style="list-style-type: none"> (A) Identifies and authenticates a particular person as the source of the electronic message; (B) Indicates such person's approval of the information contained in the electronic message; and, (C) Submission via FedConnect constitutes electronically signed documents." <p>ASAP: YES Extent Competed: COMPETED Davis-Bacon Act: NO PI: Stamenkovic, Vojisla Fund: 05450 Appr Year: 2022 Allottee: 31 Report Entity: 200835 Object Class: 41010 Program: 1009190 Project: 0000000 WFO: 0000000 Local Use: 0000000</p>				



Special Terms and Conditions

The Recipient, which is identified in Block 5 of the Assistance Agreement, and the Office of Energy Efficiency and Renewable Energy (“EERE”), an office within the United States Department of Energy (“DOE”), enter into this Award, referenced in Block 1 of the Assistance Agreement.

This Award consists of the Assistance Agreement and the Special Terms and Conditions. When the parties have completed negotiations for this Award, the Contracting Officer will issue an award modification, and the following documents will be added to the Award:

	Assistance Agreement
	Special Terms and Conditions
Attachment 1	Statement of Project Objectives and Milestone Summary Table
Attachment 2	Federal Assistance Reporting Checklist and Instructions
Attachment 3	Budget Information SF-424A
Attachment 4	Intellectual Property Provisions
Attachment 5	Diversity, Equity, and Inclusion Plan

The following are incorporated into this Award by reference:

- DOE Assistance Regulations, 2 CFR Part 200 as amended by 2 CFR Part 910 at <http://www.eCFR.gov>.
- Research Terms & Conditions (November 12, 2020) and the DOE Agency Specific Requirements (November 2020) at <http://www.nsf.gov/awards/managing/rtc.jsp> (Applicable if the Award is for research and development).
- National Policy Requirements (November 12, 2020) at <http://www.nsf.gov/awards/managing/rtc.jsp>.
- Public Law 117-58, also known as the Bipartisan Infrastructure Law (BIL).
- Public Law 117-169, also known as the Inflation Reduction Act (IRA).
- The Recipient’s application/proposal as approved by EERE.
- Applicable program regulations at <http://www.eCFR.gov>.

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Subpart A. General Provisions

Term 1. Conditional Availability of Funds

Notwithstanding the obligation of funds shown on the Assistance Agreement, the parties hereby agree that the availability of funds to the Recipient for payment of costs incurred by the Recipient is conditioned upon the Contracting Officer's review and approval of the Recipient's application and the completion of negotiations. The Recipient is prohibited from spending federal funds at this time. No funds shall be made available to the Recipient for payment and DOE does not guarantee or assume any obligation to reimburse costs incurred by the Recipient during the negotiation process.

When the parties have completed negotiations for this award, the Contracting Officer will issue a modification to this award making available the obligated amount for payment in accordance with the payment terms contained in the Special Terms and Conditions of this award. The Recipient may then receive payment for allowable incurred costs or recognize incurred costs toward cost share requirements, as applicable, in accordance with the negotiated payment terms.

Many of the terms and conditions that appear herein will appear in the same form in the fully executed award terms and conditions, but are not necessarily applicable until the award is fully negotiated and executed by the Contracting Officer. They are provided in order to allow the applicant to begin reviewing them in furtherance of understanding the obligations and duties applicable to the Federal award. Some terms reference attachments; however, Attachments 1-6 will not be included in the Award unless and until the parties successfully complete negotiations. Upon execution of the award, some of the terms that appear herein may be superseded by updated terms applicable to the particular applicant or award; some terms—such as this “Conditional Availability of Funds” term—may be removed; and others may be added, depending on the specific circumstances pertaining to the particular applicant or award.

Failure by the Recipient to provide an application with supporting documentation acceptable to the Contracting Officer, or failure to complete negotiations, may be deemed noncompliance pursuant to 2 CFR 200.338 or 2 CFR 910.120 and 2 CFR 910.128 and subject to the remedies for noncompliance contained in 2 CFR 200.338. Based on such noncompliance, the Contracting Officer may unilaterally terminate or suspend this award and deobligate the amounts obligated. In such case, the Recipient shall not be reimbursed for costs incurred at the Recipient's risk, as described above.

Term 2. Legal Authority and Effect

A DOE financial assistance award is valid only if it is in writing and is signed, either in writing or electronically, by a DOE Contracting Officer.

The Recipient may accept or reject the Award. A request to draw down DOE funds or acknowledgement of award documents by the Recipient's authorized representative through electronic systems used by DOE, specifically FedConnect, constitutes the Recipient's acceptance of the terms and conditions of this Award. Acknowledgement via FedConnect by the

Recipient's authorized representative constitutes the Recipient's electronic signature.

Term 3. Flow Down Requirement

The Recipient agrees to apply the terms and conditions of this Award, as applicable, including the Intellectual Property Provisions, to all subrecipients (and subcontractors, as appropriate), as required by 2 CFR 200.101, and to require their strict compliance therewith. Further, the Recipient must apply the Award terms as required by 2 CFR 200.327 to all subrecipients (and subcontractors, as appropriate), and to require their strict compliance therewith.

Term 4. Compliance with Federal, State, and Municipal Law

The Recipient is required to comply with applicable federal, state, and local laws and regulations for all work performed under this Award. The Recipient is required to obtain all necessary federal, state, and local permits, authorizations, and approvals for all work performed under this Award.

Term 5. Inconsistency with Federal Law

Any apparent inconsistency between federal statutes and regulations and the terms and conditions contained in this Award must be referred to the DOE Award Administrator for guidance.

Term 6. Federal Stewardship

EERE will exercise normal federal stewardship in overseeing the project activities performed under this Award. Stewardship activities include, but are not limited to, conducting site visits; reviewing performance and financial reports; providing technical assistance and/or temporary intervention in unusual circumstances to address 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.

Term 7. Substantial Involvement

EERE has substantial involvement in work performed under this Award. EERE does not limit its involvement to the administrative requirements of this Award. Instead, EERE has substantial involvement in the direction and redirection of the technical aspects of the project as a whole. Substantial involvement includes the following:

- EERE shares responsibility with the Recipient for the management, control, direction, and performance of the Project.
- EERE 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.
- EERE may redirect or discontinue funding the Project based on the outcome of EERE's evaluation of the Project at the Go/No Go decision point.
- EERE participates in major project decision-making processes.

Term 8. Federal Involvement

A. Review Meetings

The Recipient, including but not limited to, the principal investigator (or, if applicable, co-principal investigators), is required to participate in periodic review meetings with EERE. Review meetings enable EERE to assess the work performed under this Award and determine whether the Recipient has timely achieved the technical milestones and deliverables stated in Attachment 1 to this Award.

EERE shall determine the frequency of review meetings and select the day, time, and location of each review meeting and shall do so in a reasonable and good faith manner. EERE will provide the Recipient with reasonable notice of the review meetings.

For each review meeting, the Recipient is required to provide a comprehensive overview of the project, including:

- The Recipient's technical progress compared to the Milestone Summary Table stated in Attachment 1 to this Award.
- The Recipient's actual expenditures compared to the approved budget in Attachment 3 to this Award.
- Other subject matter specified by the DOE Technology Manager/Project Officer.

B. Project Meetings

The Recipient is required to notify EERE in advance of scheduled tests and internal project meetings that would entail discussion of topics that could result in major changes to the baseline project technical scope/approach, cost, or schedule. Upon request by EERE, the Recipient is required to provide EERE with reasonable access (by telephone, webinar, or otherwise) to the tests and project meetings. The Recipient is not expected to delay any work under this Award for the purpose of government insight.

C. Site Visits

EERE's authorized representatives have the right to make site visits at reasonable times to review project accomplishments and management control systems and to provide technical assistance, if required. The Recipient must provide, and must require subrecipients to provide, reasonable access to facilities, office space, resources, and assistance for the safety and convenience of the government representatives in the performance of their duties. All site visits and evaluations must be performed in a manner that does not unduly interfere with or delay the work.

D. Go/No Go Decisions

Attachment 1 to this Award establishes Go/No Go decision points. For each Go/No Go decision point, EERE must determine whether the Recipient has fully and

satisfactorily completed the work described in Attachment 1 to this Award. As a result of a Go/No Go review, in its discretion, EERE may take one of the following actions:

- Authorize federal funding for the next budget period for the Project.
- Recommend redirection of work under the Project.
- Place a hold on the federal funding for the Project, pending further supporting data.
- Discontinue providing federal funding for the Project beyond the current budget period as the result of insufficient progress, change in strategic direction, or lack of available funding.

E. Technical Milestones and Deliverables

Attachment 1 to this Award establishes technical milestones and deliverables. If the Recipient fails to achieve two or more technical milestones and deliverables, EERE may renegotiate the Statement of Project Objectives and/or Milestone Summary Table in Attachment 1 to this Award. In the alternative, EERE may deem the Recipient's failure to achieve these technical milestones and deliverables to be material noncompliance with the terms and conditions of this Award and take action to suspend or terminate the Award.

F. EERE Access

The Recipient must provide any information, documents, site access, or other assistance requested by EERE for the purpose of its federal stewardship or substantial involvement.

Term 9. NEPA Requirements

DOE must comply with the National Environmental Policy Act (NEPA) prior to authorizing the use of federal funds. Based on information available, DOE has not issued a final NEPA determination for this project.

Notwithstanding the obligation of funds shown on the Assistance Agreement, the parties hereby agree that the availability of funds to the Recipient for payment of costs incurred by the Recipient is conditioned upon the final NEPA determination. The Recipient is prohibited from spending federal funds at this time. No funds, therefore, shall be made available to the Recipient for payment, and DOE does not guarantee or assume any obligation to reimburse costs incurred by the Recipient prior to written authorization from the Contracting Officer.

Should the Recipient elect to undertake activities or change locations prior to authorization from the Contracting Officer, the Recipient does so at risk of not receiving federal funding for those activities and such costs may not be recognized as allowable cost share.

Term 10. Performance of Work in United States

A. Requirement

All work performed under this Award must be performed in the United States unless

the Contracting Officer provides a waiver. This requirement does not apply to the purchase of supplies and equipment; however, the Recipient should make every effort to purchase supplies and equipment within the United States. The Recipient must flow down this requirement to its subrecipients.

B. Failure to Comply

If the Recipient fails to comply with the Performance of Work in the United States requirement, the Contracting Officer may deny reimbursement for the work conducted outside the United States and such costs may not be recognized as allowable Recipient cost share regardless of if the work is performed by the Recipient, subrecipients, vendors or other project partners.

C. Waiver for Work Outside the U.S.

All work performed under this Award must be performed in the United States. However, the Contracting Officer may approve the Recipient to perform a portion of the work outside the United States under limited circumstances. The Recipient must obtain a waiver from the Contracting Officer prior to conducting any work outside the U.S. To request a waiver, the Recipient must submit a written waiver request to the Contracting Officer, which includes the information as required in the FOA that the Award was selected under.

For the rationale, the Recipient must demonstrate to the satisfaction of the Contracting Officer that the performance of work outside the United States would further the purposes of the FOA that the Award was selected under and is in the economic interests of the United States. The Contracting Officer may require additional information before considering such request.

Term 11. Foreign National Participation

A “foreign national” is defined as any person who is not a U.S. citizen by birth or naturalization.

If the Recipient (including any of its subrecipients and contractors) anticipates involving foreign nationals in the performance of the Award, the Recipient must, upon DOE’s request, provide DOE with specific information about each foreign national to ensure compliance with the requirements for participation and access approval. The volume and type of information required may depend on various factors associated with the Award. The DOE Contracting Officer will notify the Recipient if this information is required.

DOE may elect to deny a foreign national’s participation in the Award. Likewise, DOE may elect to deny a foreign national’s access to a DOE sites, information, technologies, equipment, programs, or personnel. DOE’s determination to deny participation or access is not appealable.

Term 12. Post-Award Due Diligence Reviews

During the period of performance of the Award, DOE may conduct ongoing due diligence reviews, through Government resources, to identify potential risks of undue foreign influence. In the event, a risk is identified, DOE may require risk mitigation measures, including but not limited to, requiring an individual or entity not participate in the Award.

Term 13. Notice Regarding the Purchase of American-Made Equipment and Products – Sense of Congress

It is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available under this Award should be American-made.

Term 14. Reporting Requirements

A. Requirements

The reporting requirements for this Award are identified on the Federal Assistance Reporting Checklist, attached to this Award. Failure to comply with these reporting requirements is considered a material noncompliance with the terms of the Award. Noncompliance may result in withholding of future payments, suspension, or termination of the current award, and withholding of future awards. A willful failure to perform, a history of failure to perform, or unsatisfactory performance of this and/or other financial assistance awards, may also result in a debarment action to preclude future awards by federal agencies.

B. Dissemination of Scientific and Technical Information

Scientific and Technical Information (STI) generated under this Award will be submitted to DOE via the Office of Scientific and Technical Information's Energy Link ([E-Link](#)) system. STI submitted under this Award will be disseminated via DOE's [OSTI.gov](#) website subject to approved access limitations. Citations for journal articles produced under the Award will appear on the [DOE PAGES](#) website.

C. Restrictions

Scientific and Technical Information submitted to E-Link must not contain any Protected Personal Identifiable Information (PII), limited rights data (proprietary data), classified information, information subject to export control classification, or other information not subject to release.

Term 15. Lobbying

By accepting funds under this Award, the 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.

Term 16. Publications

The Recipient is required to include the following acknowledgement in publications arising out of, or relating to, work performed under this Award, whether copyrighted or not:

- *Acknowledgment:* "This material is based upon work supported by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) under Award Number DE-_____."

- *Full Legal Disclaimer:* “This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.”

Abridged Legal Disclaimer: “The views expressed herein do not necessarily represent the views of the U.S. Department of Energy or the United States Government.”

Recipients should make every effort to include the full Legal Disclaimer. However, in the event that recipients are constrained by formatting and/or page limitations set by the publisher, the abridged Legal Disclaimer is an acceptable alternative.

The Award may be subject to a Data Management Plan as part of the Intellectual Property clause set that explains how data generated in the course of the work performed under this Award will be shared or preserved or, when justified, explains why data sharing or preservation is not possible or scientifically appropriate.

Term 17. No-Cost Extension

As provided in 2 CFR 200.308, the Recipient must provide the Contracting Officer with notice in advance if it intends to utilize a one-time, no-cost extension of this Award. The notification must include the supporting reasons and the revised period of performance. The Recipient must submit this notification in writing to the Contracting Officer and DOE Technology Manager/ Project Officer at least 30 days before the end of the current budget period.

Any no-cost extension will not alter the project scope, milestones, deliverables, or budget of this Award.

Term 18. Property Standards

The complete text of the Property Standards can be found at 2 CFR 200.310 through 200.316. Also see 2 CFR 910.360 for additional requirements for real property and equipment for For-Profit recipients.

Term 19. Insurance Coverage

See 2 CFR 200.310 for insurance requirements for real property and equipment acquired or improved with federal funds. Also see 2 CFR 910.360(d) for additional requirements for real property and equipment for For-Profit recipients.

Term 20. Real Property

Subject to the conditions set forth in 2 CFR 200.311, title to real property acquired or improved under a federal award will conditionally vest upon acquisition in the non-federal entity. The non-federal entity cannot encumber this property and must follow the requirements of 2 CFR 200.311 before disposing of the property.

Except as otherwise provided by federal statutes or by the federal awarding agency, real property will be used for the originally authorized purpose as long as needed for that purpose. When real property is no longer needed for the originally authorized purpose, the non-federal entity must obtain disposition instructions from DOE or pass-through entity. The instructions must provide for one of the following alternatives: (1) retain title after compensating DOE as described in 2 CFR 200.311(c)(1); (2) Sell the property and compensate DOE as specified in 2 CFR 200.311(c)(2); or (3) transfer title to DOE or to a third party designated/approved by DOE as specified in 2 CFR 200.311(c)(3).

See 2 CFR 200.311 for additional requirements pertaining to real property acquired or improved under a federal award. Also see 2 CFR 910.360 for additional requirements for real property for For-Profit recipients.

Term 21. Federally-Owned Property (Government-Furnished)

Title to federally-owned property remains vested in the federal government. Federally-owned property shall be managed in accordance with 2 CFR 200.312 and reported as prescribed in the Federal Assistance Reporting Checklist and Instructions.

Term 22. Equipment

Subject to the conditions provided in 2 CFR 200.313, title to equipment (property) acquired under a federal award will conditionally vest upon acquisition with the non-federal entity. The non-federal entity cannot encumber this property and must follow the requirements of 2 CFR 200.313 before disposing of the property.

A state must use equipment acquired under a federal award by the state in accordance with state laws and procedures.

Equipment must be used by the non-federal entity in the program or project for which it was acquired as long as it is needed, whether or not the project or program continues to be supported by the federal award. When no longer needed for the originally authorized purpose, the equipment may be used by programs supported by DOE in the priority order specified in 2 CFR 200.313(c)(1)(i) and (ii).

Management requirements, including inventory and control systems, for equipment are provided in 2 CFR 200.313(d).

When equipment acquired under a federal award is no longer needed, the non-federal entity must obtain disposition instructions from DOE or pass-through entity.

Disposition will be made as follows: (1) items of equipment with a current fair market value of \$5,000 or less may be retained, sold, or otherwise disposed of with no further obligation to DOE; (2) non-federal entity may retain title or sell the equipment after compensating DOE as described in 2 CFR 200.313(e)(2); or (3) transfer title to DOE or to an eligible third party as specified in 2 CFR 200.313(e)(3).

See 2 CFR 200.313 for additional requirements pertaining to equipment acquired under a federal award. Also see 2 CFR 910.360 for additional requirements for equipment for For-Profit recipients. See also 2 CFR 200.439 Equipment and other capital expenditures.

Term 23. Supplies

See 2 CFR 200.314 for requirements pertaining to supplies acquired under a federal award. See also 2 CFR 200.453 Materials and supplies costs, including costs of computing devices.

Term 24. Property Trust Relationship

Real property, equipment, and intangible property, that are acquired or improved with a federal award must be held in trust by the non-federal entity as trustee for the beneficiaries of the project or program under which the property was acquired or improved. See 2 CFR 200.316 for additional requirements pertaining to real property, equipment, and intangible property acquired or improved under a federal award.

Term 25. Record Retention

Consistent with 2 CFR 200.334 through 200.338, the Recipient is required to retain records relating to this Award.

Term 26. Audits

A. Government-Initiated Audits

The Recipient must provide any information, documents, site access, or other assistance requested by EERE, DOE or federal auditing agencies (e.g., DOE Inspector General, Government Accountability Office) for the purpose of audits and investigations. Such assistance may include, but is not limited to, reasonable access to the Recipient's records relating to this Award.

Consistent with 2 CFR Part 200 as amended by 2 CFR Part 910, DOE may audit the Recipient's financial records or administrative records relating to this Award at any time. Government-initiated audits are generally paid for by DOE.

DOE may conduct a final audit at the end of the project period (or the termination of the Award, if applicable). Upon completion of the audit, the Recipient is required to refund to DOE any payments for costs that were determined to be unallowable. If the audit has not been performed or completed prior to the closeout of the award, DOE retains the right to recover an appropriate amount after fully considering the recommendations on disallowed costs resulting from the final audit.

DOE will provide reasonable advance notice of audits and will minimize interference with ongoing work, to the maximum extent practicable.

B. Annual Independent Audits (Single Audit or Compliance Audit)

The Recipient must comply with the annual independent audit requirements in 2 CFR 200.500 through .521 for institutions of higher education, nonprofit organizations, and state and local governments (Single audit), and 2 CFR 910.500 through .521 for for-profit entities (Compliance audit).

The annual independent audits are separate from Government-initiated audits discussed in part A. of this Term and must be paid for by the Recipient. To minimize expense, the Recipient may have a Compliance audit in conjunction with its annual audit of financial statements. The financial statement audit is **not** a substitute for the Compliance audit. If the audit (Single audit or Compliance audit, depending on Recipient entity type) has not been performed or completed prior to the closeout of the award, DOE may impose one or more of the actions outlined in 2 CFR 200.339, Remedies for Noncompliance.

Term 27. Indemnity

The Recipient shall indemnify DOE and its officers, agents, or employees for any and all liability, including litigation expenses and attorneys' fees, arising from suits, actions, or claims of any character for death, bodily injury, or loss of or 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 DOE officers, agents or employees, or to the extent such liability may be covered by applicable allowable costs provisions.

Subpart B. Financial Provisions

Term 28. Maximum Obligation

The maximum obligation of DOE for this Award is the total "Funds Obligated" stated in Block 13 of the Assistance Agreement to this Award.

Term 29. Funding of Budget Periods

EERE has obligated funding as shown in Block 13 of the Assistance Agreement for completion of the Project. However, only the federal share of costs associated with the current Period of Performance is available for work performed by the Recipient. The federal share of costs is shown on Attachment 3. The current Period of Performance is shown in Block 7 of the Assistance Agreement.

The remainder of 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 to this Award; (4) Recipient's submittal of required reports; (5) Recipient's compliance with the terms and conditions of the Award; (6) EERE's Go/No-Go decision; (7) the

Recipient's submission of a continuation application; and (8) written approval of the continuation application by the Contracting Officer.

In the event that the Recipient does not submit a continuation application for subsequent Budget Periods, or EERE disapproves a continuation application for subsequent Budget Periods, the maximum EERE liability to the Recipient is the funds that are available for the current approved Budget Period(s). In such event, EERE reserves the right to deobligate any remaining federal funds.

Term 30. Continuation Application and Funding

A. Continuation Application

A continuation application is a non-competitive application for an additional budget period within a previously approved project period. At least 90 calendar days before the end of each budget period, the Recipient must submit its continuation application as required in Attachment 2, Federal Assistance Reporting Checklist, with written notification to the DOE Technology Manager/Project Officer and the DOE Award Administrator that it has been submitted. The continuation application includes the following information:

- i. A report on the Recipient's progress towards meeting the milestones and objectives of the project set forth in the SOPO and the Community Benefits Plan, any 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. The report must also address the Recipient's progress towards meeting the objectives and milestones set forth in the Community Benefits Plan.
- 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 negotiated Statement of Project Objectives and/or Milestone Summary Table.

B. Continuation Funding

Continuation funding is contingent on (1) the availability of 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 to this Award; (4) Recipient's submittal of required reports; (5) Recipient's compliance with the terms and conditions of the Award; (6) EERE's Go/No-Go decision; (7) the Recipient's submission of a continuation application; and (8) written approval of the continuation application by the

Contracting Officer.

- C. EERE waives prior written approval requirements to carry forward unobligated balances to subsequent periods of performance, in accordance with 2 CFR 200.308(e)(2).

Term 31. Cost Sharing

A. Cost Sharing Obligations

The Recipient must provide the “Cost Share” amount stated in Block 12 of the Assistance Agreement to this Award. EERE and the Recipient’s cost share for the total estimated project costs are listed below.

Table 1

EERE Cost Share \$ / %	Recipient Cost Share \$ / %	Total Estimated Project Costs
\$	\$	\$

The Recipient must provide its required “Cost Share” amount as a percentage of the total project costs in each invoice period for the duration of the project period. Specifically, the cumulative cost share percentage provided to date on each invoice received must reflect, at a minimum, the cost sharing percentage specified in the Award.

B. Cost Share Obligation If Award Terminated or Discontinued

If the Award is terminated or is otherwise not funded to completion, the Recipient is not required to provide the entire “Cost Share” amount stated in Block 12 of the Assistance Agreement to this Award; however, the Recipient must provide its share (i.e., percentage as shown in Table 1 above) of the total project cost reimbursed as of the date of the termination or discontinuation.

C. Source of Cost Share

The Recipient may not use federal funds to meet its cost sharing obligations, unless otherwise allowed by federal law.

D. Inability to Comply with Cost Sharing Obligations

If the Recipient determines that it is unable to meet its cost sharing obligations, the Recipient must notify the DOE Award Administrator in writing immediately. The notification must include the following information: (1) whether the Recipient intends to continue or phase out the project, and (2) if the Recipient intends to continue the project, how the Recipient will pay (or secure replacement funding for) the Recipient’s share of the total project cost.

If the Recipient fails to meet its cost sharing obligations, EERE may recover some or all of the financial assistance provided under this Award. The amount EERE would seek to recover under this Term would be predicated on EERE’s analysis of the

Recipient's compliance with their cost sharing obligation under the Award.

Term 32. Refund Obligation

The Recipient must refund any excess payments received from EERE, including any costs determined unallowable by the Contracting Officer. Upon the end of the project period (or the termination of the Award, if applicable), the Recipient must refund to EERE the difference between (1) the total payments received from EERE, and (2) the federal share of the costs incurred. Refund obligations under this Term do not supersede the annual reconciliation or true up process if specified under the Indirect Costs Term.

Term 33. Allowable Costs

EERE determines the allowability of costs through reference to 2 CFR Part 200 as amended by 2 CFR Part 910. All project costs must be allowable, allocable, and reasonable. The Recipient must document and maintain records of all project costs, including, but not limited to, the costs paid by federal funds, costs claimed by its subrecipients and project costs that the Recipient claims as cost sharing, including in-kind contributions. The Recipient is responsible for maintaining records adequate to demonstrate that costs claimed have been incurred, are reasonable, allowable and allocable, and comply with the cost principles. Upon request, the Recipient is required to provide such records to EERE. Such records are subject to audit. Failure to provide EERE adequate supporting documentation may result in a determination by the Contracting Officer that those costs are unallowable.

The Recipient is required to obtain the prior written approval of the Contracting Officer for any foreign travel costs.

Term 34. Decontamination and/or Decommissioning (D&D) Costs

Notwithstanding any other provisions of this Award, the Government shall not be responsible for or have any obligation to the Recipient for (1) Decontamination and/or Decommissioning (D&D) of any of the Recipient's facilities, or (2) any costs which may be incurred by the Recipient in connection with the D&D of any of its facilities due to the performance of the work under this Award, whether said work was performed prior to or subsequent to the effective date of the Award.

Term 35. Payment Procedures

A. Method of Payment

The method of payment will be determined by the Contracting Officer upon completion of negotiations.

B. Unauthorized Drawdown of Federal Funds

For each budget period, the Recipient may not spend more than the federal share authorized to that particular budget period, without specific written approval from the Contracting Officer. The Recipient must immediately refund EERE any amounts spent or drawn down in excess of the authorized amount for a budget period. The Recipient and subrecipients shall promptly, but at least quarterly, remit to DOE

interest earned on advances drawn in excess of disbursement needs and shall comply with the procedure for remitting interest earned to the federal government per 2 CFR 200.305, as applicable.

Term 36. Budget Changes

A. Budget Changes Generally

The Contracting Officer has reviewed and approved the SF-424A in Attachment 3 to this Award.

Any increase in the total project cost, whether DOE share or Cost Share, which is stated as "Total" in Block 12 to the Assistance Agreement of this Award, must be approved in advance and in writing by the Contracting Officer.

Any change that alters the project scope, milestones or deliverables requires prior written approval of the Contracting Officer. EERE may deny reimbursement for any failure to comply with the requirements in this term.

B. Transfers of Funds Among Direct Cost Categories

The Recipient is required to obtain the prior written approval of the Contracting Officer for any transfer of funds among direct cost categories where the cumulative amount of such transfers exceeds or is expected to exceed 10 percent of the total project cost, which is stated as "Total" in Block 12 to the Assistance Agreement of this Award.

The Recipient is required to notify the DOE Technology Manager/Project Officer of any transfer of funds among direct cost categories where the cumulative amount of such transfers is equal to or below 10 percent of the total project cost, which is stated as "Total" in Block 12 to the Assistance Agreement of this Award.

C. Transfer of Funds Between Direct and Indirect Cost Categories

The Recipient is required to obtain the prior written approval of the Contracting Officer for any transfer of funds between direct and indirect cost categories. If the Recipient's actual allowable indirect costs are less than those budgeted in Attachment 3 to this Award, the Recipient may use the difference to pay additional allowable direct costs during the project period so long as the total difference is less than 10% of total project costs and the difference is reflected in actual requests for reimbursement to DOE.

Subpart C. Miscellaneous Provisions

Term 37. Environmental, Safety and Health Performance of Work at DOE Facilities

With respect to the performance of any portion of the work under this Award which is performed at a DOE-owned or controlled site, the Recipient agrees to comply with all State and Federal Environmental, Safety and Health (ES&H) regulations and with all other ES&H requirements of the operator of such site.

Prior to the performance on any work at a DOE-owned or controlled site, the Recipient shall contact the site facility manager for information on DOE and site-specific ES&H requirements.

The Recipient is required apply this provision to its subrecipients and contractors.

Term 38. Corporate Felony Conviction and Federal Tax Liability Assurances

This term applies to Recipients that are organized as corporations. A corporation includes any 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.

By entering into this Award, the Recipient attests that its corporation has not been convicted of a felony criminal violation under federal law in the 24 months preceding the date of signature.

The Recipient further attests that its corporation does not have 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.

Term 39. Insolvency, Bankruptcy or Receivership

- A. The Recipient shall immediately, but no later than five days, notify EERE of the occurrence of any of the following events: (1) the Recipient or the Recipient's parent's filing of a voluntary case seeking liquidation or reorganization under the Bankruptcy Act; (2) the Recipient's consent to the institution of an involuntary case under the Bankruptcy Act against the Recipient or the Recipient's parent; (3) the filing of any similar proceeding for or against the Recipient or the Recipient's parent, or the Recipient's consent to the dissolution, winding-up or readjustment of its debts, appointment of a receiver, conservator, trustee, or other officer with similar powers over the Recipient, under any other applicable state or federal law; or (4) the Recipient's insolvency due to its inability to pay debts generally as they become due.
- B. Such notification shall be in writing and shall (1) specifically set out the details of the occurrence of an event referenced in paragraph A; (2) provide the facts surrounding that event; and (3) provide the impact such event will have on the project being funded by this Award.

- C. Upon the occurrence of any of the four events described in paragraph A. of this term, EERE reserves the right to conduct a review of the Recipient's Award to determine the Recipient's compliance with the required elements of the Award (including such items as cost share, progress towards technical project objectives, and submission of required reports). If the EERE review determines that there are significant deficiencies or concerns with the Recipient's performance under the Award, EERE reserves the right to impose additional requirements, as needed, including (1) change of payment method; or (2) institute payment controls.
- D. Failure of the Recipient to comply with this term may be considered a material noncompliance of this Award by the Contracting Officer.

Term 40. Reporting Subawards and Executive Compensation

A. Reporting of first-tier subawards

- i. *Applicability.* Unless the Recipient is exempt as provided in paragraph D. of this award term, the Recipient must report each action that equals or exceeds \$30,000 in federal funds for a subaward to an entity (see definitions in paragraph E. of this award term).
- ii. *Where and when to report.*
 - 1. The Recipient must report each obligating action described in paragraph A.i. of this award term to <https://www.fsrs.gov>.
 - 2. For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, the obligation must be reported no later than December 31 of the same year.)
- iii. *What to report.* The Recipient must report the information about each obligating action that the submission instructions posted at <https://www.fsrs.gov> specify.

B. Reporting Total Compensation of Recipient Executives

- i. *Applicability and what to report.* The Recipient must report total compensation for each of its five most highly compensated executives for the preceding completed fiscal year, if:
 - 1. The total federal funding authorized to date under this Award equals or exceeds \$30,000 as defined in 2 CFR 170.320;

2. In the preceding fiscal year, the Recipient received:
 - a. 80 percent or more of the Recipient's annual gross revenues from federal procurement contracts (and subcontracts) and federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
 - b. \$25,000,000 or more in annual gross revenues from federal procurement contracts (and subcontracts) and federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards).
3. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>).

ii. *Where and when to report.* The Recipient must report executive total compensation described in paragraph B.i. of this award term:

1. As part of the Recipient's registration profile at <https://www.sam.gov>.
2. By the end of the month following the month in which this award is made, and annually thereafter.

C. Reporting of Total Compensation of Subrecipient Executives

- i. *Applicability and what to report.* Unless the Recipient is exempt as provided in paragraph D. of this award term, for each first-tier subrecipient under this award, the Recipient shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if:
 1. In the subrecipient's preceding fiscal year, the subrecipient received:
 - a. 80 percent or more of its annual gross revenues from federal procurement contracts (and subcontracts) and federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
 - b. \$25,000,000 or more in annual gross revenues from federal procurement contracts (and subcontracts), and federal financial assistance subject to the Transparency Act (and

subawards).

2. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>).
- ii. *Where and when to report.* The Recipient must report subrecipient executive total compensation described in paragraph C.i. of this award term:
 1. To the recipient.
 2. By the end of the month following the month during which the Recipient makes the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (i.e., between October 1 and 31), the Recipient must report any required compensation information of the subrecipient by November 30 of that year.

D. Exemptions

If, in the previous tax year, the Recipient had gross income, from all sources, under \$300,000, it is exempt from the requirements to report:

- i. Subawards; and
- ii. The total compensation of the five most highly compensated executives of any subrecipient.

E. Definitions

For purposes of this Award term:

- i. Entity means all of the following, as defined in 2 CFR Part 25:
 1. A Governmental organization, which is a State, local government, or Indian tribe.
 2. A foreign public entity.
 3. A domestic or foreign nonprofit organization.
 4. A domestic or foreign for-profit organization.
 5. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.
- ii. Executive means officers, managing partners, or any other employees in management positions.

iii. Subaward:

1. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which the Recipient received this award and that the recipient awards to an eligible subrecipient.
2. The term does not include the Recipient's procurement of property and services needed to carry out the project or program (for further explanation, see 2 CFR 200.501 Audit requirements, (f) *Subrecipients and Contractors* and/or 2 CFR 910.501 Audit requirements, (f) *Subrecipients and Contractors*).
3. A subaward may be provided through any legal agreement, including an agreement that the Recipient or a subrecipient considers a contract.

iv. Subrecipient means an entity that:

1. Receives a subaward from the Recipient under this award; and
2. Is accountable to the Recipient for the use of the federal funds provided by the subaward.

v. Total compensation means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):

1. Salary and bonus.
2. Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.
3. Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives and are available generally to all salaried employees.
4. Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.
5. Above-market earnings on deferred compensation which is not tax-

qualified.

6. Other compensation, if the aggregate value of all such other compensation (e.g., severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.

Term 41. System for Award Management and Universal Identifier Requirements

A. Requirement for Registration in the System for Award Management (SAM)

Unless the Recipient is exempted from this requirement under 2 CFR 25.110, the Recipient must maintain the currency of its information in SAM until the Recipient submits the final financial report required under this Award or receive the final payment, whichever is later. This requires that the Recipient reviews and updates the information at least annually after the initial registration, and more frequently if required by changes in its information or another award term.

B. Unique Entity Identifier (UEI)

SAM automatically assigns a UEI to all active SAM.gov registered entities. Entities no longer have to go to a third-party website to obtain their identifier. This information is displayed on SAM.gov.

If the Recipient is authorized to make subawards under this Award, the Recipient:

- i. Must notify potential subrecipients that no entity (see definition in paragraph C of this award term) may receive a subaward from the Recipient unless the entity has provided its UEI number to the Recipient.
- ii. May not make a subaward to an entity unless the entity has provided its UEI number to the Recipient.

C. Definitions

For purposes of this award term:

- i. System for Award Management (SAM) means the federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the SAM Internet site (currently at <https://www.sam.gov>).
- ii. Unique Entity Identifier (UEI) is the 12-character, alpha-numeric identifier that will be assigned by SAM.gov upon registration.
- iii. Entity, as it is used in this award term, means all of the following, as defined at 2 CFR Part 25, subpart C:

1. A Governmental organization, which is a State, local government, or Indian Tribe.
2. A foreign public entity.
3. A domestic or foreign nonprofit organization.
4. A domestic or foreign for-profit organization.
5. A federal agency, but only as a subrecipient under an award or subaward to a non-federal entity.

iv. Subaward:

1. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which the Recipient received this Award and that the Recipient awards to an eligible subrecipient.
2. The term does not include the Recipient's procurement of property and services needed to carry out the project or program (for further explanation, see 2 CFR 200.501 Audit requirements, (f) *Subrecipients and Contractors* and/or 2 CFR 910.501 Audit requirements, (f) *Subrecipients and Contractors*).
3. A subaward may be provided through any legal agreement, including an agreement that the Recipient considers a contract.

v. Subrecipient means an entity that:

1. Receives a subaward from the Recipient under this Award; and
2. Is accountable to the Recipient for the use of the federal funds provided by the subaward.

Term 42. Nondisclosure and Confidentiality Agreements Assurances

- A. By entering into this agreement, the Recipient attests that 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. The Recipient further attests that 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:

- i. *"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."*
- ii. The limitation above shall not contravene requirements applicable to Standard Form 312, Form 4414, or any other form issued by a federal department or agency governing the nondisclosure of classified information.
- iii. Notwithstanding 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 United States Government, may contain provisions appropriate to the particular 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 in the course of such activity unless specifically authorized to do so by the United States 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 Department of Justice, that are essential to reporting a substantial violation of law.

Term 43. National Security: Classifiable Results Originating Under an Award

- A. This Award is intended for unclassified, publicly releasable research. The Recipient will not be granted access to classified information. EERE does not expect that the results of the research project will involve classified information. Under certain circumstances, however, a classification review of information originated under the award may be required. DOE may review research work generated under this Award at any time to determine if it requires classification.
- B. Executive Order 12958 (60 Fed. Reg. 19,825 (1995)) states that basic scientific research information not clearly related to the national security shall not be classified. Nevertheless, some information concerning (among other things) scientific, technological, or economic matters relating to national security or cryptology may require classification. If the Recipient originates information during the course of this Award that the Recipient believes requires classification, the Recipient must promptly:

- i. Notify the DOE Technology Manager/Project Officer and the DOE Award Administrator.
- ii. Submit the information by registered mail directly to the Director, Office of Classification and Information Control, SO-10.2; U.S. Department of Energy; P.O. Box A; Germantown, MD 20875-0963, for classification review.
- iii. Restrict access to the information to the maximum extent possible until the Recipient is informed that the information is not classified, but no longer than 30 days after receipt by the Director, Office of Classification and Information Control.

C. If the Recipient originates information concerning the production or utilization of special nuclear material (*i.e.*, plutonium, uranium enriched in the isotope 233 or 235, and any other material so determined under section 51 of the Atomic Energy Act) or nuclear energy, the Recipient must:

- i. Notify the DOE Technology Manager/Project Officer and the DOE Award Administrator.
- ii. Submit the information by registered mail directly to the Director, Office of Classification and Information Control, SO-10.2; U.S. Department of Energy; P. O. Box A; Germantown, MD 20875-0963 for classification review within 180 days of the date the Recipient first discovers or first has reason to believe that the information is useful in such production or utilization.
- iii. Restrict access to the information to the maximum extent possible until the Recipient is informed that the information is not classified, but no longer than 90 days after receipt by the Director, Office of Classification and Information Control.

D. If EERE determines any of the information requires classification, the Recipient agrees that the Government may terminate the Award with consent of the Recipient in accordance with 2 CFR 200.339(a)(3). All material deemed to be classified must be forwarded to EERE, in a manner specified by EERE.

- If EERE does not respond within the specified time periods, the Recipient is under no further obligation to restrict access to the information.

Term 44. Subrecipient and Vendor Approvals

The Recipient must obtain written approval by the Contracting Officer for reimbursement of costs associated with subrecipients and vendors.

Term 45. Subrecipient Change Notification

Except for subrecipients specifically proposed as part of the Recipient's Application for award, the Recipient must notify the Contracting Officer and Project Manager in writing 30 days prior to the execution of new or modified subrecipient agreements, including naming any To Be Determined subrecipients. This notification does not constitute a waiver of the prior approval requirements outlined in 2 CFR Part 200 as amended by 2 CFR Part 910, nor does it relieve the Recipient from its obligation to comply with applicable federal statutes, regulations, and executive orders.

In order to satisfy this notification requirement, the Recipient documentation must, at a minimum, include the following:

- A description of the research to be performed, the service to be provided, or the equipment to be purchased.
- Cost share commitment letter if the subrecipient is providing cost share to the Award.
- An assurance that the process undertaken by the Recipient to solicit the subrecipient complies with their written procurement procedures as outlined in 2 CFR 200.317 through 200.327.
- An assurance that no planned, actual or apparent conflict of interest exists between the Recipient and the selected subrecipient and that the Recipient's written standards of conduct were followed.¹
- A completed Environmental Questionnaire, if applicable.
- An assurance that the subrecipient is not a debarred or suspended entity.
- An assurance that all required award provisions will be flowed down in the resulting subrecipient agreement.

The Recipient is responsible for making a final determination to award or modify subrecipient agreements under this agreement, but the Recipient may not proceed with the subrecipient agreement until the Contracting Officer determines, and provides the Recipient written notification, that the information provided is adequate.

Should the Recipient not receive a written notification of adequacy from the Contracting Officer within 30 days of the submission of the subrecipient documentation stipulated above, the Recipient may proceed to award or modify the proposed subrecipient agreement.

Term 46. Conference Spending

The Recipient shall not expend any funds on a conference not directly and programmatically

¹ It is DOE's position that the existence of a "covered relationship" as defined in 5 CFR 2635.502(a)&(b) between a member of the Recipient's owners or senior management and a member of a subrecipient's owners or senior management creates at a minimum an apparent conflict of interest that would require the Recipient to notify the Contracting Officer and provide detailed information and justification (including, for example, mitigation measures) as to why the subrecipient agreement does not create an actual conflict of interest. The Recipient must also notify the Contracting Officer of any new subrecipient agreement with: (1) an entity that is owned or otherwise controlled by the Recipient; or (2) an entity that is owned or otherwise controlled by another entity that also owns or otherwise controls the Recipient, as it is DOE's position that these situations also create at a minimum an apparent conflict of interest.

related to the purpose for which the grant or cooperative agreement was awarded that would defray the cost to the United States Government of a conference held by any Executive branch department, agency, board, commission, or office for which the cost to the United States Government would otherwise exceed \$20,000, thereby circumventing the required notification by the head of any such Executive Branch department, agency, board, commission, or office to the Inspector General (or senior ethics official for any entity without an Inspector General), of the date, location, and number of employees attending such conference.

Term 47. Recipient Integrity and Performance Matters

A. General Reporting Requirement

If the total value of your currently active financial assistance awards, including grants and cooperative agreements, and procurement contracts from all federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of this federal award, then you as the Recipient during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of this term. This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for federal procurement contracts, will be publicly available.

B. Proceedings About Which You Must Report

Submit the information required about each proceeding that:

- i. Is in connection with the award or performance of a Financial Assistance, cooperative agreement, or procurement contract from the federal government;
- ii. Reached its final disposition during the most recent five-year period; and
- iii. Is one of the following:
 - 1. A criminal proceeding that resulted in a conviction, as defined in paragraph E of this award term and condition;
 - 2. A civil proceeding that resulted in a finding of fault and liability and payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more;
 - 3. An administrative proceeding, as defined in paragraph E of this term, that resulted in a finding of fault and liability and your payment of either a monetary fine or penalty of \$5,000 or more or reimbursement, restitution, or damages in excess of \$100,000; or
 - 4. Any other criminal, civil, or administrative proceeding if:
 - a. It could have led to an outcome described in paragraph B.iii.1, 2, or 3 of this term;
 - b. It had a different disposition arrived at by consent or

- compromise with an acknowledgment of fault on your part; and
- c. The requirement in this term to disclose information about the proceeding does not conflict with applicable laws and regulations.

C. Reporting Procedures

Enter in the SAM Entity Management area the information that SAM requires about each proceeding described in paragraph B of this term. You do not need to submit the information a second time under assistance awards that you received if you already provided the information through SAM because you were required to do so under federal procurement contracts that you were awarded.

D. Reporting Frequency

During any period of time when you are subject to the requirement in paragraph A of this term, you must report proceedings information through SAM for the most recent five-year period, either to report new information about any proceeding(s) that you have not reported previously or affirm that there is no new information to report. Recipients that have federal contracts and financial assistance awards with a cumulative total value greater than \$10,000,000, must disclose semiannually any information about the criminal, civil, and administrative proceedings.

E. Definitions

For purposes of this term:

- i. Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative proceedings, Civilian Board of Contract Appeals proceedings, and Armed Services Board of Contract Appeals proceedings). This includes proceedings at the federal and state level but only in connection with performance of a federal contract or financial assistance awards. It does not include audits, site visits, corrective plans, or inspection of deliverables.
- ii. Conviction means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of *nolo contendere*.
- iii. Total value of currently active financial assistance awards, including grants and cooperative agreements, and procurement contracts includes:
 - 1. Only the federal share of the funding under any federal award with a recipient cost share or match; and
 - 2. The value of all expected funding increments under a federal award and options, even if not yet exercised.

Term 48. Export Control

The United States government regulates the transfer of information, commodities, technology, and software considered to be strategically important to the U.S. 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.”

The Recipient is 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 this award, at the recipient or subrecipient level, and provide the corrective action(s) to prevent future violations.

Term 49. Current and Pending Support

A. Definitions

For purposes of this term, the following definitions are applicable:

- i. **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.
- ii. **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 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.

- iii. **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 DOE award.²

B. Disclosure Requirements

Prior to award, the Recipient was required to provide current and pending support disclosure statements and a Curriculum Vitae (CV) or Biosketch for each principal investigator (PI) and senior/key personnel, at the recipient and subrecipient level, regardless of funding source. In accordance with the Federal Assistance Reporting Checklist, throughout the life of the award, the Recipient must submit current and pending support disclosure statements and a CV or Biosketch for any new PI and senior/key personnel at the recipient and subrecipient level, added to the project funded under this Award within thirty (30) calendar days of the individual joining the project. In addition, if there are any changes to current and pending support disclosure statements previously submitted to DOE, the Recipient must submit updated current and pending disclosure statements within thirty (30) calendar days of the change. The Recipient must ensure all PIs and senior/key personnel at the recipient and subrecipient level, are aware of the requirement to submit updated current and pending support disclosure statements to DOE.

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. All PIs and senior/key personnel at the recipient 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

² 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.

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 involvement with foreign government-sponsored talent recruitment programs must be identified in current and pending support.

For every activity, list the following items:

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

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. Currently, the federal research agencies, including DOE, are working on a common disclosure form for current and pending support. At such time that the common disclosure form is published for use, the information may be provided in the common form.

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

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. If the online version is used in SciENcv, a signature, date, and a certification statement must be attached until the SciENcv website automatically attaches a certification statement.

Term 50. Interim Conflict of Interest Policy for Financial Assistance

The DOE interim Conflict of Interest Policy for Financial Assistance (COI Policy) can be found at <https://www.energy.gov/management/department-energy-interim-conflict-interest-policy-requirements-financial-assistance>. This policy is applicable to all non-federal entities applying for, or that receive, DOE funding by means of a financial assistance award (e.g., a grant, cooperative agreement, or technology investment agreement) and, through the implementation of this policy by the entity, to each Investigator who is planning to participate in, or is participating in, the project funded wholly or in part under this 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.

The Recipient must flow down the requirements of the interim COI Policy to any subrecipient non-federal entities, with the exception of DOE National Laboratories. Further, the Recipient must identify all financial conflicts of interests (FCOI), i.e., managed and unmanaged/unmanageable, in its initial and ongoing FCOI reports.

Prior to award, the Recipient was required to: 1) ensure all Project Director(s)/Principal investigator(s) on this Award completed their significant financial disclosures; 2) review the disclosures; 3) determine whether a FCOI exists; 4) develop and implement a management plan for FCOIs; and 5) provide DOE with an initial FCOI report that includes all FCOIs (i.e., managed and unmanaged/unmanageable). Within 180 days of the date of the Award, the Recipient must be in full compliance with the other requirements set forth in DOE's interim COI Policy.

Term 51. Organizational Conflict of Interest

Organizational conflicts of interest are those where, because of relationships with a parent company, affiliate, or subsidiary organization, the Recipient is unable or appears to be unable to be impartial in conducting procurement action involving a related organization (2 CFR 200.318(c)(2)).

The Recipient must disclose in writing any potential or actual organizational conflict of interest to the DOE Contracting Officer. The Recipient must provide the disclosure prior to engaging in a procurement or transaction using project funds with a parent, affiliate, or subsidiary organization that is not a state, local government, or Indian tribe. For a list of the information that must be included the disclosure, see Section VI. of the DOE interim Conflict of Interest Policy for Financial Assistance at <https://www.energy.gov/management/department-energy-interim-conflict-interest-policy-requirements-financial-assistance>.

If the effects of the potential or actual organizational conflict of interest cannot be avoided, neutralized, or mitigated, the Recipient must procure goods and services from other sources when using project funds. Otherwise, DOE may terminate the Award in accordance with 2 CFR 200.340 unless continued performance is determined to be in the best interest of the federal government.

The Recipient must flow down the requirements of the interim COI Policy to any subrecipient non-federal entities, with the exception of DOE National Laboratories. The Recipient is responsible for ensuring subrecipient compliance with this term.

If the Recipient has a parent, affiliate, or subsidiary organization that is not a state, local government, or Indian tribe, the Recipient must maintain written standards of conduct covering organizational conflicts of interest.

Term 52. 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 non-federal funds) to:

- (1) Procure or obtain;
- (2) Extend or renew a contract to procure or obtain; or
- (3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses 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 Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
 - (i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
 - (ii) Telecommunications or video surveillance services provided by such entities or using such equipment.

(iii) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

See Public Law 115-232, section 889 for additional information.

Term 53. Participants and Other Collaborating Organizations

Prior to award, the Recipient was required to provide the following information on participants and other collaborating organizations. If there are any changes to Participants and Collaborating Organizations information previously submitted to DOE, the Recipient must submit updated information within 30 calendar days after the end of the quarterly reporting period in which the change occurred:

A. What individuals have worked on the project

List of (1) Project director(s)/Principal investigator(s) (PDs/PIs); and (2) each person who has worked or is expected to work at least one person month per year on the project regardless of the source of compensation (a person month equals approximately 160 hours of effort).

i. Name and role the person played in the project

The total number of months (including partial months) (Calendar, Academic, Summer) that the individual worked on this project and it what role, using the project roles identified below.

ii. Project Roles

PD/PI

Co PD/PI

Faculty

Community College Faculty

Technical School Faculty

K-12 Teacher

Postdoctoral (scholar, fellow or other postdoctoral position)

Other Professional

Technician

Staff Scientist (doctoral level)

Statistician

Graduate Student (research assistant)

Non-Student Research Assistant

Undergraduate Student

Technical School Student

High School Student

Consultant

Research Experience for Undergraduates (REU) Participant

Other (specify)

iii. How the person contributed to the project

iv. The person's state, U.S. territory, and/or country of residence

The location from which the person collaborated (internationally or U.S.-based).

Whether this person collaborated internationally with an individual located in a foreign country and whether the person traveled to the foreign country as part of that collaboration, and, if so, where and what the duration of stay was.

If the participant was not U.S.-based, whether this person traveled to the U.S. or another country as part of a collaboration, and, if so, where and what the duration of stay was.

B. Other organizations involved as partners

Partner organizations – academic institutions, other nonprofits, industrial or commercial firms, state or local governments, schools or school systems, or other organizations (foreign or domestic) – that have been involved with the project.

C. Other collaborators or contacts involved

Significant collaborators or contacts within the recipient's organization that may not be covered by "What people have worked on the project?" Likewise, some significant collaborators or contacts outside the recipient's organization may not be covered under "What other organizations have been involved as partners?"

Identify the state(s), U.S. territory(ies), or country(ies) of collaborations or contacts.

Term 54. Community Benefits Plan

The Recipient must meet the stated objectives and milestones set forth in its Community Benefits Plan, which is incorporated into the Award as Attachment 5. A report on the Recipient's progress towards meeting the objectives and milestones set forth in the Community Benefits Plan must be included in the continuation application.

Term 55. Human Subjects Research

Research involving human subjects, biospecimens, or identifiable private information conducted with Department of Energy (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.

Federal regulation and the DOE Order require review by an Institutional Review Board (IRB) of all proposed human subjects research projects. The IRB is an interdisciplinary ethics board responsible for ensuring that the proposed research is sound and justifies the use of human subjects or their data; the potential risks to human subjects have been minimized; participation is voluntary; and clear and accurate information about the study, the benefits and risks of

participating, and how individuals' data/specimens will be protected/used, is provided to potential participants for their use in determining whether or not to participate.

The Recipient shall provide the Federal Wide Assurance number identified in item 1 below and the certification identified in item 2 below to DOE prior to initiation of any project that will involve interactions with humans in some way (e.g., through surveys); analysis of their identifiable data (e.g., demographic data and energy use over time); asking individuals to test devices, products, or materials developed through research; and/or testing of commercially available devices in buildings/homes in which humans will be present. Note: This list of examples is illustrative and not all inclusive.

No DOE funded research activity involving human subjects, biospecimens, or identifiable private information shall be conducted without:

- 1) A registration and a Federal Wide Assurance of compliance accepted by the Office of Human Research Protection (OHRP) in the Department of Health and Human Services; and
- 2) Certification that the research has been reviewed and approved by an Institutional Review Board (IRB) provided for in the assurance. IRB review may be accomplished by the awardee's institutional IRB; by the Central DOE IRB; or if collaborating with one of the DOE national laboratories, by the DOE national laboratory IRB.

The Recipient is responsible for ensuring all subrecipients comply and for reporting information on the project annually to the DOE Human Subjects Research Database (HSRD) at <https://science.osti.gov/HumanSubjects/Human-Subjects-Database/home>. Note: If a DOE IRB is used, no end of year reporting will be needed.

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

Term 56. Fraud, Waste and Abuse

The mission of the DOE Office of Inspector General (OIG) is to strengthen the integrity, economy and efficiency of DOE'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 Department of Energy 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, the Recipient 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 (currently FAPIIS). Failure to make required disclosures can result in any of the remedies described in § 200.339. (See also 2 CFR part 180, 31 U.S.C. 3321, and 41 U.S.C. 2313.)

Term 57. Buy American Requirement for Infrastructure Projects

A. Definitions

Components are defined as the articles, materials, or supplies incorporated directly into the end manufactured product(s).

Construction Materials are an article, material, or supply—other than an item primarily of iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives—that is used in an infrastructure project and 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, drywall, coatings (paints and stains), optical fiber, clay brick; composite building materials; or engineered wood products.

Domestic Content Procurement Preference Requirement means a requirement that no amounts made available through a program for federal financial assistance may be obligated for an infrastructure project unless:

- (A) all iron and steel used in the project are produced in the United States;
- (B) the manufactured products used in the project are produced in the United States; or
- (C) the construction materials used in the project are produced in the United States.

Also referred to as the **Buy America Requirement**.

Infrastructure includes, at a minimum, the structures, facilities, and equipment located in the United States, for: 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; and generation, transportation, and distribution of energy -including electric vehicle (EV) charging.

The term “infrastructure” should be interpreted broadly, and the definition provided above should be considered as illustrative and not exhaustive.

Manufactured Products are items used for an infrastructure project made up of components that are not primarily of iron or steel; construction materials; cement and cementitious materials’ aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

Primarily of iron or steel means greater than 50% iron or steel, measured by cost.

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

Public: The Buy America Requirement does not apply to non-public infrastructure. For purposes of this guidance, infrastructure should be considered “public” if it is: (1) publicly owned or (2) privately owned but utilized primarily for a public purpose. Infrastructure should be considered to be “utilized primarily for a public purpose” if it is privately operated on behalf of the public or is a place of public accommodation.

B. Buy America Requirement

None of the funds provided under this award (federal share or recipient cost-share) may be used for a project for infrastructure unless:

1. **All iron and steel used in the project is produced in the United States** 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** 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 materials are manufactured in the United States** means that all manufacturing processes for the construction material occurred in the United States.

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

infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

Recipients are responsible for administering their award in accordance with the terms and conditions, including the Buy America Requirement. The recipient must ensure that the Buy America Requirement flows down to all subawards and that the subawardees and subrecipients comply with the Buy America Requirement. The Buy America Requirement term and condition must be included all subawards, contracts, subcontracts, and purchase orders for work performed under the infrastructure project.

C. Certification of Compliance

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

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

D. Waivers

When necessary, the Recipient may apply for, and DOE may grant, a waiver from the Buy America Requirement. Requests to waive the application of the Buy America Requirement must be in writing to the Contracting Officer. Waiver requests are subject to review by DOE and the Office of Management and Budget, as well as a public comment period of no less than 15 calendar days.

Waivers must be based on one of the following justifications:

1. Public Interest: Applying the Buy America Requirement would be inconsistent with the public interest;
2. Non-Availability: 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. Unreasonable Cost: The inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent.

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

- Waiver type (Public Interest, Non-Availability, or Unreasonable Cost);
- Recipient name and Unique Entity Identifier (UEI);
- Award information (Federal Award Identification Number, Assistance Listing number);
- A brief description of the project, its location, and the specific infrastructure involved;
- Total estimated project cost, with estimated federal share and recipient cost share breakdowns;
- Total estimated infrastructure costs, with estimated federal share and recipient cost share breakdowns;
- List and description of iron or steel item(s), manufactured goods, and/or construction material(s) the recipient seeks to waive from the Buy America Preference, including name, cost, quantity(ies), country(ies) of origin, and relevant Product Service Codes (PSC) and North American Industry Classification System (NAICS) codes for each;
- A detailed justification as to how the non-domestic item(s) is/are essential to the project;
- A certification that the recipient made a good faith effort to solicit bids for domestic products supported by terms included in requests for proposals, contracts, and non-proprietary communications with potential suppliers;
- A justification statement—based on one of the applicable justifications outlined above—as to why the listed items cannot be procured domestically, including the due diligence performed (e.g., market research, industry outreach, cost analysis, cost-benefit analysis) by the recipient to attempt to avoid the need for a waiver. This justification may cite, if applicable, the absence of any Buy America-compliant bids received for domestic products in response to a solicitation; and
- Anticipated impact to the project if no waiver is issued.

The Recipient should consider using the following principles as minimum requirements contained in their waiver request:

- Time-limited: Consider a waiver constrained principally by a length of time, rather than by the specific project/award to which it applies. Waivers of this type may be appropriate, for example, when an item that is “non-available” is widely used in the project. When requesting such a waiver, the Recipient should identify a reasonable, definite time frame (e.g., no more than one to two years) designed so that the waiver is reviewed to ensure the condition for the waiver (“non-availability”) has not changed (e.g., domestic supplies have become more available).
- Targeted: Waiver requests should apply only to the item(s), product(s), or material(s) or category(ies) of item(s), product(s), or material(s) as necessary

and justified. Waivers should not be overly broad as this will undermine domestic preference policies.

- Conditional: The Recipient may request a waiver with specific conditions that support the policies of IIJA/BABA and Executive Order 14017.

DOE may request, and the Recipient must provide, additional information for consideration of this waiver. DOE may reject or grant waivers in whole or in part depending on its review, analysis, and/or feedback from OMB or the public. DOEs final determination regarding approval or rejection of the waiver request may not be appealed. Waiver requests may take up to 90 calendar days to process.

Term 58. 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 this Award.

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 owner of the Recipient or subrecipient or individual on the project team is or is believed to be participating in a *Foreign Government-Sponsored 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.

Term 59. Affirmative Action and Pay Transparency Requirements

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

- (1) Recipients, subrecipients, and contractors 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.

The Department of Labor's (DOL) Office of Federal Contractor Compliance Programs (OFCCP) uses a neutral process to schedule contractors for compliance evaluations. OFCCP's Technical Assistance Guide should be consulted to gain an understanding of the requirements and possible actions the recipients, subrecipients, contractors, and subcontractors must take. See OFCCP's Technical Assistance Guide at:

<https://www.dol.gov/sites/dolgov/files/ofccp/Construction/files/ConstructionTAG.pdf?msclkid=9e397d68c4b111ec9d8e6fecb6c710ec>.

Additionally, for construction projects valued at \$35 million or more and lasting more than one year, recipients, subrecipients, contractors, and subcontractors may be selected by 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>.

Term 60. Potentially Duplicative Funding Notice

If the Recipient or subrecipients have or receive any other award of federal funds for activities that potentially overlap with the activities funded under this Award, the Recipient must promptly notify DOE in writing of the potential overlap and state whether project funds (i.e., recipient cost share and federal 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 this 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.

Term 61. Transparency of Foreign Connections

The Recipient must notify the DOE Contracting Officer within fifteen (15) business days of learning of the following circumstances in relation to the Recipient and subrecipients:

1. 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;
2. 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 country of risk or foreign entity based in a country of risk;
3. Any current or pending change in ownership structure of the Recipient or subrecipients that increases foreign ownership related to a country of risk;
4. Any current or pending 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;
5. Any current or pending technology licensing or intellectual property sales to a foreign country of risk; and
6. Any current or pending foreign business entity, offshore entity, or entity outside the United States related to the Recipient or subrecipient.

Term 62. Foreign Collaboration Considerations

- a. Consideration of new collaborations with foreign entities, organizations, and governments. The Recipient must provide DOE with advanced written notification of any potential collaboration with foreign entities, organizations, or governments in connection with its DOE-funded award scope. The Recipient must await further guidance from DOE prior to contacting the proposed foreign entity, organization or government regarding the potential collaboration or negotiating the terms of any potential agreement.
- b. Existing collaborations with foreign entities, organizations, and governments. The Recipient must provide DOE with a written list of all existing foreign collaborations,

organizations, and governments in which has entered in connection with its DOE-funded award scope.

- c. 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 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 Award but resulting in provision of a thing of value from or to the 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.