SPECIAL TERMS AND CONDITIONS

FA-TC-0001-CH   LEGAL AUTHORITY AND EFFECT (DECEMBER 2014)

a. 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. This individual is reflected as the Grants/Agreements Officer on the Assistance Agreement.

b. Recipients are free to accept or reject the award. Acceptance of the award is effected by:
   1. Performance;
   2. Recipient’s submission of a request for payment;
   3. Recipient’s withdrawal of funds obligated; or
   4. Recipient’s signature on the Assistance Agreement.

FA-TC-0001A   RESOLUTION OF CONFLICTING CONDITIONS

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.

FA-TC-0001B-CH   PART 605 AWARD AGREEMENT CONTENTS (APRIL 2017)

This award/agreement consists of the Assistance Agreement cover page, plus the following:

a. Special terms and conditions.

b. Attachments:

<table>
<thead>
<tr>
<th>Attachment No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intellectual Property Provisions</td>
</tr>
<tr>
<td>2</td>
<td>Federal Assistance Reporting Checklist and Instructions</td>
</tr>
<tr>
<td>3</td>
<td>Budget Pages</td>
</tr>
<tr>
<td>4</td>
<td>If the award is for research, the Federal-Wide Research Terms and Conditions and DOE Agency Specific Requirements, available at <a href="https://www.nsf.gov/awards/managing/rtc.jsp">https://www.nsf.gov/awards/managing/rtc.jsp</a></td>
</tr>
</tbody>
</table>

c. Applicable program regulations, 10 CFR 605 at http://www.eCFR.gov.


e. Application/proposal as approved by DOE.


FA-TC-0001C1   AWARD PROJECT PERIOD AND BUDGET PERIODS - RENEWAL

The Project Period for this award is 07/01/2017 through 06/30/2026. The Project Period, as amended by this renewal award, is revised to add the following Budget Periods.

<table>
<thead>
<tr>
<th>Budget Period</th>
<th>Start Date</th>
<th>End Date</th>
<th>Government Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>07/01/2023</td>
<td>06/30/2024</td>
<td>$168,308.00</td>
</tr>
<tr>
<td>2</td>
<td>07/01/2024</td>
<td>06/30/2025</td>
<td>$173,282.00</td>
</tr>
<tr>
<td>3</td>
<td>07/01/2025</td>
<td>06/30/2026</td>
<td>$178,127.00</td>
</tr>
</tbody>
</table>
FA-TC-0002.1 CONFERENCE SPENDING (FEBRUARY 2015)

The recipient shall not expend any funds on a conference not directly and programmatically related to the purpose for which the grant or cooperative agreement was awarded that would defray the cost to the 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.

FA-TC-0003.1 PAYMENT PROCEDURES - ADVANCES THROUGH THE AUTOMATED STANDARD APPLICATION FOR PAYMENTS (ASAP) SYSTEM

a. Method of Payment. Payment will be made by advances through the Department of Treasury's ASAP system.

b. Requesting Advances. Requests for advances must be made through the ASAP system. You may submit requests as frequently as required to meet your needs to disburse funds for the Federal share of project costs. If feasible, you should time each request so that you receive payment on the same day that you disburse funds for direct project costs and the proportionate share of any allowable indirect costs. If same-day transfers are not feasible, advance payments must be as close as is administratively feasible to actual disbursements.

c. Adjusting payment requests for available cash. You must disburse any funds that are available from repayments to and interest earned on a revolving fund, program income, rebates, refunds, contract settlements, audit recoveries, credits, discounts, and interest earned on any of those funds before requesting additional cash payments from DOE.

d. Payments. All payments are made by electronic funds transfer to the bank account identified on the ASAP Bank Information Form that you filed with the U.S. Department of Treasury.

FA-TC-0007.1 REBUDGETING AND RECOVERY OF INDIRECT COSTS - REIMBURSABLE INDIRECT COSTS AND FRINGE BENEFITS

a. If actual allowable indirect costs are less than those budgeted and funded under the award, you may use the difference to pay additional allowable direct costs during the project period. If at the completion of the award the Government's share of total allowable costs (i.e., direct and indirect), is less than the total costs reimbursed, you must refund the difference.

b. Recipients are expected to manage their indirect costs. DOE will not amend an award solely to provide additional funds for changes in indirect cost rates. DOE recognizes that the inability to obtain full reimbursement for indirect costs means the recipient must absorb the underrecovery. Such underrecovery may be allocated as part of the organization's required cost sharing.

FA-TC-0010 STATEMENT OF FEDERAL STEWARDSHIP

DOE 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 correct deficiencies which develop during the project; assuring compliance with terms and conditions; and reviewing technical performance after project completion to ensure that the award objectives have been accomplished.
FA-TC-0012   SITE VISITS

DOE 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. You must provide, and must require your 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.

FA-TC-0013.1   REPORTING REQUIREMENTS (APRIL 2023)

a. Requirements. The reporting requirements for this award are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, 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/technical reporting products. Reporting project results in scientific and technical information (STI) publications/products to the DOE Office of Scientific and Technical Information (OSTI) ensures dissemination of research results to the public as well as preservation of the results. The DOE form F 4600.2, B. Scientific/Technica l Reporting, has instructions for the DOE Energy Link (E-Link) system managed by OSTI. Scientific/technical reports and other STI products submitted under this award will be disseminated publicly on the Web via OSTI.GOV (https://www.osti.gov), unless the STI contains patentable material, protected data, or SBIR/STTR data, which must be indicated per instructions in DOE 4600.2.

c. Restrictions. STI products submitted to the DOE via E-link must not contain any Protected Personally Identifiable Information (PII), limited rights data, classified information, information subject to export control classification, or other information not subject to public release. The Contracting Officer or Technical Project Officer should be contacted with any questions. Limited rights data means data (other than computer software) developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged. SBIR/STTR Protected Data, and other data subject to statutory data protection authorized by the award may be submitted, provided such data is properly marked and identified during submission. Submissions must not contain any “Proprietary”, “Confidential” or “Business Sensitive” markings or similar restrictive markings not authorized by the applicable government agreement.; it is acknowledged that DOE has the right to cancel or ignore such markings.

FA-TC-0014-CH   PUBLICATIONS

a. You are encouraged to publish or otherwise make publicly available the results of the work conducted under the award.

b. An acknowledgment of Federal support and a disclaimer must appear in the publication of any material, whether copyrighted or not, based on or developed under this project, as follows:

   Acknowledgment: "This material is based upon work supported by the U.S. Department of Energy, Office of Science, Office of [Insert the SC Program Office funding the award, e.g., Basic Energy Sciences]. [Add any additional acknowledgements or information requested by the sponsoring SC Program Office] under Award Number(s) [Enter the award number(s)]."

   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."

FA-TC-0015 FEDERAL, STATE, AND MUNICIPAL REQUIREMENTS
You must obtain any required permits and comply with applicable federal, state, and municipal laws, codes, and regulations for work performed under this award.

FA-TC-0016 INTELLECTUAL PROPERTY PROVISIONS AND CONTACT INFORMATION
a. The intellectual property provisions applicable to this award are provided as an attachment to this award or are referenced on the Assistance Agreement Face Page. A list of all intellectual property provisions may be found at http://energy.gov/gc/standard-intellectual-property-ip-provisions-financial-assistance-awards.

b. Questions regarding intellectual property matters should be referred to the DOE Award Administrator and the Patent Counsel designated as the service provider for the DOE office that issued the award. The IP Service Providers List is found at http://energy.gov/gc/downloads/intellectual-property-ip-service-providers-acquisition-and-assistance-transactions.

FA-TC-0017.1-CH NATIONAL SECURITY: CLASSIFIABLE RESULTS ORIGINATING UNDER AN AWARD (DECEMBER 2014)

a. This award is intended for unclassified, publicly releasable research. You will not be granted access to classified information. DOE/NNSA 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. The Department may review research work generated under this award at any time to determine if it requires classification.

b. Executive Order 13526 (75 Fed. Reg. 707 (January 5, 2010)) 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 you originate information during the course of this award that you believe requires classification, you must promptly:

1. Notify the DOE Project Officer and the DOE Award Administrator;
2. Submit the information by registered mail directly to the Director, Office of Classification, Office of Document Reviews, EHSS-63/Germantown Building, US Department of Energy, 1000 Independence Ave, S.W., Washington, DC 20585-1290, for classification review.
3. Restrict access to the information to the maximum extent possible until you are 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 you originate 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, you must:

1. Notify the DOE Project Officer and the DOE Award Administrator;
2. Submit the information by registered mail directly to the Director, Office of Classification, Office of Document Reviews, US Department of Energy, Post Office 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; and
3. Restrict access to the information to the maximum extent possible until you are informed that the information is not classified, but no longer than 90 days after receipt by the Director, Office of
d. If DOE determines any of the information requires classification, you agree that the Government may terminate the award with consent of the recipient in accordance with 2 CFR part 200.340(a)(3). All material deemed to be classified must be forwarded to the DOE, in a manner specified by DOE.

e. If DOE does not respond within the specified time periods, you are under no further obligation to restrict access to the information.

**FA-TC-0018.6-CH CONTINUATION APPLICATION – FULLY FUNDED AWARDS UNDER 10 CFR 605 (FEBRUARY 2015)**

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 days before the end of each budget period, you must submit your continuation application through the Office of Science’s Portfolio Analysis Management System (PAMS) at https://pamspublic.science.energy.gov/webpamsexternal/login.aspx.

Your continuation application must include the following information:

1. A report on your progress towards meeting the objectives of the project, including 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 10 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.

2. A completed budget page and supporting justification for the upcoming budget period when a change (increase or decrease) to anticipated future costs will exceed 25 percent of the original recommended future budget or when a budget for the upcoming budget period was not approved at the time of award.

3. A description of your plans for the conduct of the project during the upcoming budget period, if there are changes from the DOE approved application.

b. Continuation Funding. Approval to use funds already obligated for subsequent budget periods is contingent on (1) substantial progress towards meeting the objectives of your approved application; (2) submittal of required reports; (3) compliance with the terms and conditions of the award and (4) the DOE Contracting Officer’s approval of the continuation application.

**FA-TC-0020A 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.

**FA-TC-0023 ENVIRONMENTAL, SAFETY AND HEALTH (ES&H) 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 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 shall apply this term to its sub-recipients and contractors.

**FA-TC-0024A-CH APPROVAL OF BUDGET PERIODS – FULLY FUNDED AWARDS (FEBRUARY 2015)**

DOE has obligated $569,717.00 for completion of the Project authorized by this agreement, however, only $168,308.00 is available for work performed by the Recipient during Budget Period 1 of the Project. For
Budget Periods 1 and 2, use of the remainder or $351,409.00 will be approved contingent upon the conditions set forth in section b. of FA-TC-0018.6 entitled “CONTINUATION APPLICATION – FULLY FUNDED AWARDS UNDER 10 CFR 605.”

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

**FA-TC-0025A INSURANCE COVERAGE (DECEMBER 2014)**

See 2 CFR 200.310 for insurance requirements for real property and equipment acquired or improved with Federal funds.

**FA-TC-0025C.2-CH EXEMPT PROPERTY (MAY 2023)**

Exempt property means property acquired under a federal award where DOE has chosen to vest title to the property to the non-federal entity without further obligations to the Federal Government, based upon the explicit terms and conditions of the Federal award.

Except items of equipment identified as Federally-owned in FA-TC-0025C.1-CH, Federally-Owned Property, incorporated in this award, if applicable, equipment acquired by the Recipient with funds provided by this financial assistance award are exempt property in accordance with 2 CFR 200.312(c) and Section 6306 of the Federal Grant and Cooperative Agreement Act of 1977, 31 U.S.C. Section 6301 et seq.

Exempt property 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 the Federal awarding agency in the priority order specified in 2 CFR Part 200.313(c)(1)(i) and (ii).

**FA-TC-0025D EQUIPMENT (DECEMBER 2014)**

Subject to the conditions provided in 2 CFR Part 200.313, title to equipment (property) acquired under a Federal award will vest conditionally with the non-Federal entity.

The non-Federal entity cannot encumber this property and must follow the requirements of 2 CFR Part 200.313 before disposing of the property.

States 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 the Federal awarding agency in the priority order specified in 2 CFR Part 200.313(c)(1)(i) and (ii).

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

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

Disposition will be made as follows: (a) 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 the Federal awarding agency;

(b) Non-Federal entity may retain title or sell the equipment after compensating the Federal awarding agency as described in 2 CFR Part 200.313(e)(2); or (c) transfer title to the Federal awarding agency or to an eligible third party as specified in 2 CFR Part 200.313(e)(3).
See 2 CFR Part 200.313 for additional requirements pertaining to equipment acquired under a Federal award.

Also see 2 CFR Part 910.360 for additional requirements for Equipment for For-Profit recipients.

See also 2 CFR Part 200.439 Equipment and other capital expenditures.

**FA-TC-0025E SUPPLIES (DECEMBER 2014)**

See 2 CFR Part 200.314 for requirements pertaining to supplies acquired under a Federal award

See also § 200.453 Materials and supplies costs, including costs of computing devices.

**FA-TC-0025G PROPERTY TRUST RELATIONSHIP (DECEMBER 2014)**

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 Part 200.316 for additional requirements pertaining to real property, equipment, and intangible property acquired or improved under a Federal award.

**FA-TC-0041 REPORTING SUBAWARDS AND EXECUTIVE COMPENSATION**

a. Reporting of first-tier subawards.

1. Applicability. Unless you are exempt as provided in paragraph d. of this award term, you must report each action that equals or exceeds $30,000 in Federal funds for a subaward to a non-Federal entity or Federal agency (see definitions in paragraph e. of this award term).

2. Where and when to report.

   i. The non-Federal entity or Federal agency must report each obligating action described in paragraph a.1. of this award term to [http://www.fsrs.gov](http://www.fsrs.gov).

   ii. 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, 2010, the obligation must be reported by no later than December 31, 2010.)


b. Reporting total compensation of recipient executives for non-Federal entities.

1. Applicability and what to report. You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if -

   i. The total Federal funding authorized to date under this Federal award equals or exceeds $30,000 as defined in 2 CFR 170.320;

   ii. in the preceding fiscal year, you received -

      (A) 80 percent or more of your 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); and,
iii. 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.)

2. Where and when to report. You must report executive total compensation described in paragraph b.1. of this award term:

i. As part of your registration profile at https://www.sam.gov.

ii. 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.

1. Applicability and what to report. Unless you are exempt as provided in paragraph d. of this award term, for each first-tier non-Federal entity subrecipient under this award, you 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 -

i. 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); and

ii. 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.)

2. Where and when to report. You must report subrecipient executive total compensation described in paragraph c.1. of this award term:

i. To the recipient.

ii. By the end of the month following the month during which you make 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), you must report any required compensation information of the subrecipient by November 30 of that year.

d. Exemptions.

If, in the previous tax year, you had gross income, from all sources, under $300,000, you are exempt from the requirements to report:

i. Subawards, and

ii. The total compensation of the five most highly compensated executives of any subrecipient.
Definitions. For purposes of this award term:

1. Federal Agency means a Federal agency as defined at 5 U.S.C. 551(1) and further clarified by 5 U.S.C. 552(f).
2. Non-Federal entity means all of the following, as defined in 2 CFR part 25:
   i. A Governmental organization, which is a State, local government, or Indian tribe;
   ii. A foreign public entity;
   iii. A domestic or foreign nonprofit organization; and,
   iv. A domestic or foreign for-profit organization
3. Executive means officers, managing partners, or any other employees in management positions.
4. Subaward:
   i. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
   ii. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see 2 CFR 200.331).
   iii. A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.
5. Subrecipient means a non-Federal entity or Federal agency that:
   i. Receives a subaward from you (the recipient) under this award; and
   ii. Is accountable to you for the use of the Federal funds provided by the subaward.
6. 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)).

FA-TC-0042.1 SYSTEM FOR AWARD MANAGEMENT AND UNIVERSAL IDENTIFIER REQUIREMENTS

A. Requirement for System for Award Management (SAM)

Unless exempted from this requirement under 2 CFR 25.110, the prime recipient must remain registered and maintain current information in SAM for the entire period of performance of the award. This includes providing information on the prime recipient’s immediate and highest-level owner and subsidiaries, as well as on all of its predecessors that have been awarded a Federal contract or Federal financial assistance agreements within the last three years, if applicable, until the prime recipient submits the final financial report required under this award or receives the final payment, whichever is later. This requires the prime recipient to review its information in SAM at least annually after the initial registration, and to update its information as soon as there are changes. Reviews and updates may be required more frequently due to changes in recipient information or as required by another award term.

B. Requirement for Unique Entity Identifier

If authorized to make subawards under this award, the prime recipient:

1. Must notify potential subrecipients that no entity (see definition in paragraph C of this award term) may receive a subaward until the entity has provided its unique entity identifier to the prime recipient.
2. Must not make a subaward to an entity unless the entity has provided its unique entity identifier to the prime recipient. Subrecipients are not required to obtain an active SAM registration, but must obtain a unique entity identifier.
C. Definitions

For purposes of this term:

1. System for Award Management (SAM) means the Federal repository into which a recipient 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).

2. Unique Entity Identifier means the identifier assigned by SAM to uniquely identify business entities.

3. Entity includes non-Federal entities as defined at 2 CFR 200.1 and also includes all of the following for purposes of this part:
   a. A foreign organization;
   b. A foreign public entity;
   c. A domestic for-profit organization; and
   d. A Federal agency.

4. Subaward has the meaning given in 2 CFR 200.1.

5. Subrecipient has the meaning given in 2 CFR 200.1.

FA-TC-0043-CH PORTFOLIO ANALYSIS AND MANAGEMENT SYSTEM (FEBRUARY 2023)

a. A recipient is required to submit the following actions through DOE’s Portfolio Analysis and Management Systems (PAMS):

   1. A request for a no-cost extension (NCE) or notification of a NCE pursuant to 2 CFR 200.308(e)(2). A request or notification should be submitted as soon as the need for an extension is known but no later than 10 calendar days before the end of the period of performance and must contain the following information:
      i. The reason(s) why the project could not be completed within the existing award schedule.
      ii. An explanation of the work that will be done during the extension including confirmation that all such work is part of the original scope of work selected for funding; and
      iii. Confirmation that DOE funds remain available for the proposed work to continue during the extension.

   2. Principal Investigator (PI) change and/or PI departure. Prior approval is required for a change in the PI in accordance with 2 CFR Part 200.308(c)(2). The request must include the following:
      i. The proposed PI’s name and contact information.
      ii. An explanation for the departure/change.
      iii. A copy of the proposed PI’s biographical sketch.

b. An action as described above must be submitted by an authorized representative of the recipient organization.

c. PAMS is available at https://pamspublic.science.energy.gov. If you have trouble using PAMS, consult the “PAMS Help” link on the PAMS website or contact the PAMS Helpdesk at (855) 818-1846 (toll-free) or (301)903-9610 or sc.pams-helpdesk@science.doe.gov.

FA-TC-0065 LOBBYING RESTRICTIONS (MARCH 2012)

By accepting funds under this award, you agree 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.

FA-TC-0068.1  NONDISCLOSURE AND CONFIDENTIALITY AGREEMENTS ASSURANCES (JUNE 2015)

(1) By entering into this agreement, the undersigned attests that the awardee listed in Block 5 of the Assistance Agreement **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.

(2) The undersigned further attests that the awardee listed in Block 5 of the Assistance Agreement **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:

a. ‘‘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.’’

b. 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.

c. 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.

FA-TC-0070  REPORTING OF MATTERS RELATED TO RECIPIENT INTEGRITY AND PERFORMANCE (DECEMBER 2015)

a. **General Reporting Requirement**

If the total value of your currently active grants, 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 (FAPIIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. 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:

1. Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;

2. Reached its final disposition during the most recent five year period; and

3. Is one of the following:
   
   (A) criminal proceeding that resulted in a conviction, as defined in paragraph 5 of this award term and condition;

   (B) 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;

   (C) An administrative proceeding, as defined in paragraph 5. of this award term and condition, 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

   (D) Any other criminal, civil, or administrative proceeding if:

   (i) It could have led to an outcome described in paragraph b.3.(A), (B), or (C) of this award term and condition;

   (ii) It had a different disposition arrived at by consent or compromise with an acknowledgment of fault on your part; and

   (iii) The requirement in this award term and condition 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 2 of this award term and condition. 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 1 of this award term and condition, 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 contract, grant, and cooperative agreement 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 award term and condition:

1. 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 grant. It does not include audits, site visits, corrective plans, or A. Reporting of Matters Related to Recipient Integrity and Performance.

2. Conviction, for purposes of this award term and condition, 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.

3. Total value of currently active grants, cooperative agreements, and procurement contracts includes—

   (A) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and
(B) The value of all expected funding increments under a Federal award and options, even if not yet exercised.

FA-TC-0072-CH   PROMOTING FREE SPEECH AND RELIGIOUS LIBERTY

States, local governments, or other public entities may not condition sub-awards in a manner that would discriminate, or disadvantage sub-recipients based on their religious character or discourage their freedom of speech.

FA-TC-0073-CH   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 “non-Federal entity” means a State, local government, Indian tribe, Institution of Higher Education, nonprofit organization, or for-profit organization that carries out a DOE award as a recipient or subrecipient. 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 include all financial conflicts of interests (FCOI), i.e., unmanaged and unmanageable, in its initial and ongoing FCOI reports.

Prior to award, the Recipient was required to: 1) ensure all Investigators 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., unmanaged and 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. Failure to comply with this term may result in DOE taking any action identified in section VII of the Interim COI Policy or any other action available under the terms of the financial assistance award or in applicable regulations.

FA-TC-0073.1-CH   ORGANIZATIONAL CONFLICT OF INTEREST

If the Recipient has a parent, affiliate, or subsidiary organization that is not a state, local government, or Indian tribe, the Recipient must also maintain written standards of conduct covering organizational conflicts 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 as discussed in 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 (Interim COI Policy).

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 unless continued performance is determined to be in the best interest of the Federal government.

The Recipient is responsible for ensuring non-Federal subrecipient entities’ compliance with this term.

Failure to comply with this term may result in DOE taking any action identified in section VII of the Interim COI Policy or any other action available under the terms of the financial assistance award or in applicable regulations.

**FA-TC-0076-CH CURRENT AND PENDING SUPPORT**

**Definitions:**

**Current and pending support:** (a) All resources made available, or expected to be made available, to an individual in support of the individual’s RD&D efforts, regardless of (i) whether the source is foreign or domestic; (ii) whether the resource is made available through the entity applying for an award or directly to the individual; or (iii) whether the resource has monetary value; and (b) includes in-kind contributions requiring a commitment of time and directly supporting the individual’s RD&D efforts, such as the provision of office or laboratory space, equipment, supplies, employees, or students. This term has the same meaning as the term Other Support as applied to researchers in NSPM-33: For researchers, Other Support includes all resources made available to a researcher in support of and/or related to all of their professional RD&D efforts, including resources provided directly to the individual or through the organization, and regardless of whether or not they have monetary value (e.g., even if the support received is only in-kind, such as office/laboratory space, equipment, supplies, or employees). This includes resource and/or financial support from all foreign and domestic entities, including but not limited to, gifts provided with terms or conditions, financial support for laboratory personnel, and participation of student and visiting researchers supported by other sources of funding.

**Foreign Government-Sponsored Talent Recruitment Program:** An effort directly or indirectly organized, managed, or funded by a foreign government, or a foreign government instrumentality or entity, to recruit science and technology professionals or students (regardless of citizenship or national origin, or whether having a full-time or part-time position). Some foreign government-sponsored talent recruitment programs operate with the intent to import or otherwise acquire from abroad, sometimes through illicit means, proprietary technology or software, unpublished data and methods, and intellectual property to further the military modernization goals and/or economic goals of a foreign government. Many, but not all, programs aim to incentivize the targeted individual to relocate physically to the foreign state for the above purpose. Some programs allow for or encourage continued employment at U.S. 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.

**Senior/key personnel** – an individual who contributes in a substantive, meaningful way to the scientific development or execution of a RD&D project proposed to be carried out with a DOE award. DOE has designated any individual who meets the definition of senior/key personnel as a covered individual responsible for completing a current and pending support disclosure. DOE may further designate covered individuals during award negotiations or the award period of performance.

Prior to award, the Recipient was required to provide current and pending support disclosure statements and a 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) 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) 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 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 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.
- Identify any overlap, duplication of effort, or synergistic efforts, with 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.

All PIs and senior/key personnel must provide a separate disclosure statement listing the required information above regarding current and pending support. If the current version of the NSF form (January 19, 2023 or later) is not used, 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. §§ 3729-3730 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.

Supporting documents of any identified source of support must be provided to DOE upon 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. 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 or ensure a similar certification is included on the NSF form, i.e., January 19, 2023 version or later).