GENERAL TERMS AND CONDITIONS FOR DOE SBIR AND STTR PHASE I AND PHASE II AWARDS

SBIR/STTR-GTC-0001-CH EXPLANATION

- a. These general terms and conditions do not restate all the provisions of applicable statutes and regulations, nor do they represent an exhaustive listing of all requirements applicable to this Assistance Agreement. Rather, they highlight and are consistent with those requirements which are especially pertinent to research awards in general. They are emphasized by inclusion here because:
 - (1) they are invoked with high frequency; and
 - (2) their violation is a matter of especially serious concern.
- b. In addition to these general terms and conditions, the recipient must comply with all governing requirements, including those identified in block 9 of the Assistance Agreement face page and those included in the "Special Terms and Conditions for Use in SBIR/STTR Awards" attached to this Assistance Agreement package.

SBIR/STTR-GTC-0003-CH DEFINITIONS

- a. <u>Grants/Agreements Officer</u>. This may be any Contracting Officer of the awarding office. The terms, "the Contracting Officer named on the face page of this award," "the Contracting Office," "a DOE Contracting Officer," "Grants Officer," and "Agreements Officer" refer to this person as well. The address to be used in corresponding with the Grants/Agreements Officer appears in block 16 of the Assistance Agreement.
- b. <u>Grant Administrator/Assistance Agreement Administrator</u>. The individual named as the DOE Assistance Agreement Administrator on the Continuation Sheet of the Assistance Agreement.
- c. <u>Principal Investigator</u>. As used herein, the scientist or other programmatic expert named in block 14 of the Assistance Agreement, designated by the recipient organization to direct the scientific/technical efforts being supported.
- d. <u>Prior Approval</u>. A written or electronically-transmitted statement from a DOE Contracting Officer that a cost may be incurred or an action may be taken. The approval may take the form of a letter, e-mail message, or a modification to the Assistance Agreement.
- e. <u>Director, SBIR/STTR Programs Office</u>. The DOE Headquarters manager in charge of the SBIR/STTR programs. The Program Director's address is:

U.S. Department of Energy SC-29/Germantown Building 1000 Independence Avenue, SW Washington, DC 20585-1290

SBIR/STTR-GTC-0004-CH REVISION OF BUDGET AND PROGRAM PLANS (FEBRUARY 2023)

The Recipient must obtain prior approval from a DOE Contracting Officer for the following:

- (1) budget revisions as described in 2 CFR 200.308 Revision of Budget and Program Plans to include the transfer of funds among direct cost categories, functions, and activities for awards in which the Federal share of the project exceeds the simplified acquisition threshold (as defined at 48 C.F.R. 2.101), and the cumulative amount of such transfers exceeds or is expected to exceed 10 percent of the total budget as last approved by DOE (does not apply to Phase I awards made on a fixed obligation basis).
- (2) change in scope or the objectives of the project,
- (3) the need for additional funding,
- (4) a change in the approved principal investigator or other senior/key personnel and proposed graduate students and postdoctoral associates specified in the application or the award agreement,
- (5) the addition or identification of previously unnamed senior/key personnel and proposed graduate students and postdoctoral associates,
- (6) an absence of more than 3 months or a reduction of 25 percent, or more, in the approved Principal Investigator's time devoted to the project,
- (7) the inclusion of pre-award costs for periods greater than 90 calendar days from the official project

- start date (not applicable to Phase I awards),
- (8) a "no-cost" extension of the period of performance per SBIR/STTR-GTC-0009-CH EXTENSIONS,
- (9) any subaward, transfer, or contracting out of substantive program performance under the award, that was not described in the application and funded in the approved award,
- (10) the purchase of real property or equipment, not described in the application and funded in the approved award.

All requests for prior approval must be submitted in sufficient time to allow DOE to process the request. Requests for prior approval of previously unnamed senior/key personnel, including graduate students and postdoctoral associates, must be submitted at least 60 days prior to the individual joining the project.

SBIR/STTR-GTC-0005-CH ALLOWABLE COSTS/APPLICABLE COST PRINCIPLES

- a. In accordance with the applicable cost principles cited below, the allowable costs of this award shall consist of the actual allowable direct costs incident to performance of the project, plus the allocable portion of the allowable indirect costs, if any, of the organization, less applicable credits. The allowable costs shall not exceed the amount shown on the face page of this Assistance Agreement for the total approved budget for the current budget period (Block 13, Funds Obligated) or as otherwise stipulated in the award Special Terms and Conditions.
- b. The allowability of costs for work performed under this award and any subsequent subaward will be determined in accordance with the Federal cost principles applicable to the recipient or subrecipient in effect on the date of award or the date of the subaward, except as modified by other provisions of this award or subaward. The recipient or subrecipient shall specify in any cost-reimbursement contract under the award or subaward the applicable cost principles cited in this provision that apply to the contractor.
- c. The Federal cost principles applicable to specific types of recipients, subrecipients, and contractors under awards and subawards are stated in 2 CFR 910.352 Cost Principles.

SBIR/STTR-GTC-0006-CH AUDITS (MARCH 2025)

Recipients that expend \$1,000,000.00 or more during their fiscal year under DOE awards are subject to the audit requirements of 2 CFR 910.501 Audit Requirements in accordance with a class deviation to 2 CFR 910 titled, <u>FINDINGS AND DETERMINATION for CLASS DEVIATION to 2 CFR 910.501 AUDIT REQUIREMENTS FOR FOR-PROFIT ORGANIZATIONS</u>.

SBIR/STTR-GTC-0007-CH PRE-AWARD COSTS

Recipients may incur pre-award costs up to ninety (90) calendar days prior to the effective date of an award. Pre-award costs for periods preceding ninety (90) calendar days prior to the effective date of the award are allowable only if approved in writing, prior to incurrence, by a DOE Contracting Officer (not applicable to Phase I awards). Any pre-award expenditures (including those made after DOE approval) are made at the recipient's risk and do not impose any obligation on the DOE.

SBIR/STTR-GTC-0009-CH EXTENSIONS

In accordance with 2 CFR part 200.308(g)(2)(i), a recipient is prohibited from granting itself an extension to the period of performance of this award. A recipient must instead request approval from a DOE Contracting Officer for any extension. All such requests must be submitted through the Portfolio Analysis and Management System (PAMS). Requests should be submitted as soon as the need for an extension is known and should be submitted sufficiently in advance of the end date of the period of performance to allow sufficient time for the request to be processed prior to the expiration of the award. PAMS is available at https://pamspublic.science.energy.gov.

SBIR/STTR-GTC-0010-CH MAXIMUM DEPARTMENTAL OBLIGATION

DOE's maximum obligation to the recipient is the amount shown in block 13, Funds Obligated. DOE shall not be obligated to make any additional, supplemental, continuation, renewal or other award for the same or any other purpose.

SBIR/STTR-GTC-0011-CH PROPERTY (MARCH 2025)

Real Property, Equipment and Supplies

- (1) No real property may be acquired under this Assistance Agreement.
- (2) Equipment and supplies acquired by the recipient with Federal funds: Equipment

The recipient shall be accountable for equipment under the award with an acquisition cost per unit of \$10,000.00 or more, in accordance with a class deviation to 2 CFR 910 titled, FINDINGS AND DETERMINATION for CLASS DEVIATION to 2 CFR 910.360 REAL PROPERTY AND EQUIPMENT and 2 CFR 910.510 FINANCIAL STATEMENTS FOR FOR-PROFIT ORGANIZATIONS. The recipient shall not encumber or permit any encumbrance on the equipment without the prior written approval of a DOE Contracting Officer.

Supplies

Any unused supplies that exceed an aggregate fair market value of \$10,000.00 must be accounted for during closeout of the award. The recipient may retain these supplies under the following conditions:

- Supplies are needed for other Federally sponsored projects or programs.
- The recipient compensates DOE for its share for those supplies that are sold or used on non-Federally sponsored activities.
- (3) Management Policy and Procedures. Recipient shall follow property management policies and procedures that provide for adequate control of the acquisition and use of the assets acquired under the award as required in 2 CFR 200.313(d).
- (4) Insurance. In accordance with 2 CFR 910.360(e), the recipient must, at a minimum, provide the equivalent insurance coverage for equipment acquired or improved with Federal funds as provided to property owned by the recipient.
- (5) Additional Uses During and After the Project: Equipment may be made available for use on other projects or programs as authorized by 2 CFR 910.360(f).
- (6) Disposition. In addition to the disposition procedures of 2 CFR 910.360, title to personal property may be transferred to the recipient where the DOE determines such transfer would be more cost effective than recovery of the property by the government.

SBIR/STTR-GTC-0012-CH PRINCIPAL INVESTIGATOR (DECEMBER 2024)

- a. The principal investigator is named in Block 14 of the Assistance Agreement.
- b. Because the DOE decision to fund a project is based, to a significant extent, on the qualifications and level of participation of the principal investigator, a change of principal investigator or of the level of effort of the principal investigator is considered a change in the approved project. There shall be only one principal investigator at any one time during the performance of this award. Approval from a DOE Contracting Officer must be obtained prior to any change of the principal investigator.
- c. The recipient represents that either it or, if this is a STTR award, the research institution (as defined in the Notice of Funding Opportunity) is the source of primary employment of the principal investigator at the time of the award of this grant/cooperative agreement, and agrees it or, if this is a STTR award, the research institution, will continue to be such during the project period of the award.

SBIR/STTR-GTC-0015-CH RESEARCH EFFORT (MAY 2024)

For both SBIR and STTR, there are requirements on the amount of the funded research or analytical effort that must be performed by the small business. The research or analytical effort is defined as the total requested funding minus the cost of any work performed by a consultant, a DOE National Laboratory contractor, and any other subcontractor, including TABA. These requirements are:

a. SBIR:

- (1) Phase I: A minimum of two-thirds or 67% of the funded research or analytical effort must be performed by the recipient; a maximum of one-third or 33% of the effort may be performed by consultants or subcontractors. Budget period 1 serves as Phase I for Fast-Track awards.
- (2) Phase II: A minimum of one-half or 50% of the research and analytical effort of Phase II must be performed by the recipient; up to one-half or 50% of the effort may be performed by consultants or subcontractors. Budget periods 2 and 3 serve as Phase II for Fast-Track awards.

b. STTR:

- (1) Phase I: A minimum of 40% of the funded research or analytical effort must be performed by the recipient and a minimum of 30% of the effort must be performed by a single non-profit research institution partner. Up to 30% of the effort may be performed by consultants or subcontractors other than the partnered non-profit research institution. Budget period 1 serves as Phase I for Fast-Track awards.
- (2) Phase II: The same as STTR Phase I. Budget periods 2 and 3 serve as Phase II for Fast-Track awards.

SBIR/STTR-GTC-0016-CH FOREIGN TRAVEL

Foreign travel is not authorized except as identified in the approved budget.

SBIR/STTR-GTC-0017-CH CONSULTANT SERVICES

Costs of consultant services are allowable in accordance with the applicable cost principles. These principles include the requirement that the consultant not be an employee of the recipient organization.

SBIR/STTR-GTC-0021-CH PUBLIC ACCESS TO INFORMATION

The Freedom of Information Act, as amended, and the DOE implementing regulations (10 CFR 1004), require DOE to release certain documents and records regarding awards to any person who provides a written request. The intended use of the information will not be a criterion for release. These requirements apply to information held by DOE and do not require recipients, their subrecipients, or their contractors to permit public access to their records.

SBIR/STTR-GTC-0022-CH TERMINATION (FEBRUARY 2023)

Under the provisions of 2 CFR 200.339, Remedies for noncompliance and 2 CFR 200.340 Termination, DOE may terminate the award, in whole or in part:

- (1) If the Recipient fails to comply with the terms and conditions of the award;
- (2) To the greatest extent authorized by law, if an award no longer effectuates the program goals or agency priorities;
- (3) With the consent of the Recipient, in which case the two parties must agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated;
- (4) Upon receiving written notification from the Recipient, setting forth the reasons for such termination, the effective date, and, in the case of a partial termination, the portion to be terminated. If it is determined, in the case of a partial termination, that the reduced or modified portion of the award will not accomplish the purposes in which the award was made, DOE may terminate the award in its entirety; or
- (5) By DOE pursuant to termination provisions included in the Federal award.

SBIR/STTR-GTC-0023-CH INTEREST

The requirements of this paragraph are not applicable when a DOE Contracting Officer affirmatively determines that its inclusion would not be in the best interests of the Government.

a. Notwithstanding any other term or condition of the award, all amounts that become payable by the recipient to the Government under the award shall bear simple interest from the date due until paid unless

paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury (Secretary) as provided in Section 11 of the Debt Collection Act of 1982 (31 U.S.C. 3717), 2 CFR 200.346 Collection of Amounts Due, which is applicable to the period in which the amount becomes due, as provided in paragraph b. below, and then at the rate applicable for each 3-month period as fixed by the Secretary until the amount is paid.

- b. Amounts shall be due at the earliest of the following dates:
 - (1) The date fixed under the award.
 - (2) The date of mailing or hand-delivery of the first written demand for payment consistent with the award, including any demand resulting from a termination.
 - (3) The date the Government transmits to the recipient a proposed agreement to confirm completed negotiations establishing the amount of debt.
- c. The interest charge made under this provision may be reduced in accordance with the procedures prescribed in 4 CFR 102.13 Interest, Penalties, and Administrative Costs or in accordance with agency regulations in effect on the date of original award of the grant/cooperative agreement.

SBIR/STTR-GTC-0024-CH PATENT RIGHTS

*the standard patent rights clause at 37 CFR 401.14 has been modified to (1) reflect DOE required subcontracting instructions pursuant to 37 CFR 401.5(a) as well as the deletion of the definition of contractor that does not apply based on the subcontracting instructions; (2) change acquisition terms of contractor, contract and subcontract to financial assistance terms of recipient, award, subaward or agreement pursuant to 37 CFR 401.5(c); and (3) include paragraph (n) U.S. competitiveness provision pursuant to the Determination of Exceptional Circumstances under the Bayh-Dole Act to Further Promote Domestic Manufacture of DOE Science and Energy Technologies executed by DOE on June 7,2021.

(a) Definitions

- (1) Invention means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).
- (2) Subject invention means any invention of the Recipient conceived or first actually reduced to practice in the performance of work under this agreement, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) must also occur during the period of agreement performance.
- (3) Practical Application means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or government regulations, available to the public on reasonable terms.
- (4) Made when used in relation to any invention means the conception or first actual reduction to practice of such invention.
- (5) Small Business Firm means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, will be used.
- (6) Nonprofit Organization means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c) and exempt from taxation under section 501(a) of the

- Internal Revenue Code (25 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.
- (7) Statutory period means the one-year period before the effective filing date of a claimed invention in a patent application during which exceptions to prior art exist per 35 U.S.C. 102(b) as amended by the Leahy- Smith America Invents Act, Public Law 112-29.

(b) Allocation of Principal Rights

The Recipient may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to any subject invention in which the Recipient retains title, the Federal government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.

(c) Invention Disclosure, Election of Title and Filing of Patent Application by Recipient

- (1) The Recipient will disclose each subject invention to the Federal agency within two months after the inventor discloses it in writing to Recipient personnel responsible for patent matters. The disclosure to the agency shall be in the form of a written report and shall identify the agreement under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention, and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the agency, the Recipient will promptly notify the agency of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Recipient. If required by the Federal agency, the Recipient will provide periodic (but no more frequently than annual) listings of all subject inventions which were disclosed to the agency during the period covered by the report, and will provide a report prior to the close-out of a funding agreement listing all subject inventions or stating that there were none.
- (2) The Recipient will elect in writing whether or not to retain title to any such invention by notifying the Federal agency within two years of disclosure to the Federal agency. However, in any case where a patent, a printed publication, public use, sale, or other availability to the public has initiated the one year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period.
- (3)(i) The Recipient will file its initial patent application on a subject invention to which it elects to retain title within one year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use.
 - (ii) If the Recipient files a provisional application as its initial patent application, it shall file a non-provisional application within 10 months of the filing of the provisional application. So long as there is a pending patent application for the subject invention and the statutory period wherein valid patent protection can be obtained in the United States has not expired, additional provisional applications may be filed within the initial 10 months or any extension period granted under paragraph (c)(5) of this clause. If an extension(s) is granted under paragraph (c)(5) of this clause, the Recipient shall file a nonprovisional patent application prior to the expiration of the extension(s) or notify the agency of any decision not to file a nonprovisional application prior to the

- expiration of the extension(s), or if earlier, 60 days prior to the end of any statutory period wherein valid patent protection can be obtained in the United States.
- (iii) The Recipient will file patent applications in additional countries or international patent offices within either ten months of the first filed patent application or six months from the date permission is granted by the Commissioner of Patents to file foreign patent applications where such filing has been prohibited by a Secrecy Order.
- (iv) If required by the Federal agency, the Recipient will provide the filing date, patent application number and title; a copy of the patent application; and patent number and issue date for any subject invention in any country in which the Recipient has applied for a patent.
- (4) For any subject invention with Federal agency and Recipient co-inventors, where the Federal agency employing such co-inventor determines that it would be in the interest of the government, pursuant to 35 U.S.C. 207(a)(3), to file an initial patent application on the subject invention, the Federal agency employing such co- inventor, at its discretion and in consultation with the Recipient, may file such application at its own expense, provided that the Recipient retains the ability to elect title pursuant to 35 U.S.C. 202(a).
- (5) Requests for extension of the time for disclosure, election, and filing under paragraphs (1), (2), and (3) of this clause may, at the discretion of the Federal agency, be granted. When a Recipient has requested an extension for filing a non-provisional application after filing a provisional application, a one-year extension will be granted unless the Federal agency notifies the Recipient within 60 days of receiving the request.
- (6) In the event a subject invention is made under funding agreements of more than one agency, at the request of the Recipient or on their own initiative the agencies shall designate one agency as responsible for administration of the rights of the government in the invention.

(d) Conditions When the Government May Obtain Title

- (1) A Federal agency may require the Recipient to convey title to the Federal agency, of any subject invention -
 - (i) If the Recipient fails to disclose or elect title to the subject invention within the times specified in paragraph (c) of this clause, or elects not to retain title.
 - (ii) In those countries in which the Recipient fails to file patent applications within the times specified in paragraph (c) of this clause; provided, however, that if the Recipient has filed a patent application in a country after the times specified in paragraph (c) of this clause, but prior to its receipt of the written request of the Federal agency, the Recipient shall continue to retain title in that country.
 - (iii) In any country in which the Recipient decides not to continue the prosecution of any non-provisional patent application for, to pay a maintenance, annuity or renewal fee on, or to defend in a reexamination or opposition proceeding on, a patent on a subject invention.
 - (iv) Upon breach of paragraph (n) U.S. Competitiveness of this Patent Rights clause.
- (2) A Federal agency at its discretion, may waive the requirement for the Recipient to convey title to any subject invention.

(e) Minimum Rights to Recipient and Protection of the Recipient Right to File

- (1) The Recipient will retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the Recipient fails to disclose the invention within the times specified in (c), above. The Recipient's license extends to its domestic subsidiary and affiliates, if any, within the corporate structure of which the Recipient is a party and includes the right to grant sublicenses of the same scope to the extent the Recipient was legally obligated to do so at the time the agreement was awarded. The license is transferable only with the approval of the Federal agency except when transferred to the successor of that party of the Recipient's business to which the invention pertains.
- (2) The Recipient's domestic license may be revoked or modified by the funding Federal agency to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR part 404 and agency licensing regulations (if any). This license will not be revoked in that field of use or the geographical areas in which the Recipient has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of the funding Federal agency to the extent the Recipient, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.
- (3) Before revocation or modification of the license, the funding Federal agency will furnish the Recipient a written notice of its intention to revoke or modify the license, and the Recipient will be allowed thirty days (or such other time as may be authorized by the funding Federal agency for good cause shown by the Recipient) after the notice to show cause why the license should not be revoked or modified. The Recipient has the right to appeal, in accordance with applicable regulations in 37 CFR part 404 and agency regulations (if any) concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of the license.

(f) Recipient Action to Protect the Government's Interest

- (1) The Recipient agrees to execute or to have executed and promptly deliver to the Federal agency all instruments necessary to (i) establish or confirm the rights the Government has throughout the world in those subject inventions to which the Recipient elects to retain title, and (ii) convey title to the Federal agency when requested under paragraph (d) above and to enable the government to obtain patent protection throughout the world in that subject invention.
- (2) The Recipient agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Recipient each subject invention made under agreement in order that the Recipient can comply with the disclosure provisions of paragraph (c) of this clause, to assign to the Recipient the entire right, title and interest in and to each subject invention made under agreement, and to execute all papers necessary to file patent applications on subject inventions and to establish the government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by paragraph (c)(1) of this clause. The Recipient shall instruct such employees through employee agreements or other suitable educational programs on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

- (3) For each subject invention, the Recipient will, no less than 60 days prior to the expiration of the statutory deadline, notify the Federal agency of any decision: Not to continue the prosecution of a non-provisional patent application; not to pay a maintenance, annuity or renewal fee; not to defend in a reexamination or opposition proceeding on a patent, in any country; to request, be a party to, or take action in a trial proceeding before the Patent Trial and Appeals Board of the U.S. Patent and Trademark Office, including but not limited to post-award review, review of a business method patent, inter partes review, and derivation proceeding; or to request, be a party to, or take action in a non-trial submission of art or information at the U.S. Patent and Trademark Office, including but not limited to a pre-issuance submission, a post-issuance submission, and supplemental examination.
- (4) The Recipient agrees to include, within the specification of any United States patent applications and any patent issuing thereon covering a subject invention, the following statement, "This invention was made with government support under (identify the contract) awarded by U.S. Department of Energy. The government has certain rights in the invention."

(g) Subaward/Contract

- (1) The Recipient will include this clause, suitably modified to identify the parties, in all subawards/contracts, regardless of tier, for experimental, developmental, or research work to be performed by a domestic small business firm or nonprofit organization. The subrecipient/contractor will retain all rights provided for the Recipient in this clause, and the Recipient will not, as part of the consideration for awarding the subaward/ contract, obtain rights in the subrecipient's/contractor's subject inventions.
- (2) The above requirement in (g)(1) does not apply for any agreement with a DOE laboratory. The Recipient and the DOE laboratory shall use a technology transfer agreement (e.g., Strategic Partnership Project (SPP), Cooperative Research and Development Agreement (CRADA)) that is executed by the Recipient and the DOE laboratory and approved by DOE. The technology transfer agreement will provide the applicable patent rights clause for the work to be performed by the DOE laboratory.
- (3) The Recipient will include in all other subawards/contracts, regardless of tier, for experimental, developmental, or research work the patent rights clause directed by a DOE Contracting Officer.

(h) Reporting on Utilization of Subject Inventions

The Recipient agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Recipient or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Recipient, and such other data and information as the agency may reasonably specify. The Recipient also agrees to provide additional reports as may be requested by the agency in connection with any march-in proceeding undertaken by the agency in accordance with paragraph (j) of this clause. As required by 35 U.S.C. 202(c)(5), the agency agrees it will not disclose such information to persons outside the government without permission of the Recipient.

(i) Preference for United States Industry

Notwithstanding any other provision of this clause, the Recipient agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject inventions in the United States unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by the Federal agency upon a showing by the Recipient or its assignee that reasonable but unsuccessful efforts have been made to

grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

(j) March-in Rights

The Recipient agrees that with respect to any subject invention in which it has acquired title, the Federal agency has the right in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of the agency to require the Recipient, an assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if the Recipient, assignee, or exclusive licensee refuses such a request the Federal agency has the right to grant such a license itself if the Federal agency determines that:

- (1) Such action is necessary because the Recipient or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use.
- (2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Recipient, assignee or their licensees;
- (3) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Recipient, assignee or licensees; or
- (4) Such action is necessary because the agreement required by paragraph (i) of this clause has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

(k) Special Provisions for Agreements with Nonprofit Organizations

If the Recipient is a nonprofit organization, it agrees that:

- (1) Rights to a subject invention in the United States may not be assigned without the approval of the Federal agency, except where such assignment is made to an organization which has as one of its primary functions the management of inventions, provided that such assignee will be subject to the same provisions as the Recipient;
- (2) The Recipient will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when the agency deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;
- (3) The balance of any royalties or income earned by the Recipient with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, will be utilized for the support of scientific research or education; and
- (4) It will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms and that, when appropriate, it will give a preference to a small business firm when licensing a subject invention;
- (5) The Federal agency may review the Recipient's licensing program and decisions regarding small business applicants, and the Recipient will negotiate changes to its licensing policies, procedures, or practices with the Federal agency when the Federal agency's review discloses that the Recipient could take reasonable steps to more effectively implement the requirements of paragraph (k)(4) of this clause; and
- (6) The Federal agency may take into consideration concerns presented by small

businesses in making such determinations in paragraph (k)(5) of this clause.

(1) Communication

Unless otherwise directed by DOE Patent Counsel, all reports and notifications required by this clause shall be submitted in accordance with the instructions provided in the Federal Assistance Reporting Checklist (FARC) of this agreement.

(m) Electronic Filing.

- (1) Unless otherwise requested or directed by the Federal agency --
 - The written disclosure required in (c)(1) of this clause shall be electronically filed;
 - (ii) The written election required in (c)(2) of this clause shall be electronically filed; and;
 - (iii) If required by the agency to be submitted, the close-out report in paragraph (c)(1) of this clause and the patent information and periodic reporting identified in paragraph (c)(3) of this clause shall be electronically filed.
- (2) Other written notices required in this clause may be electronically delivered to the agency or the contractor through an electronic database used for reporting subject inventions, patents, and utilization reports to the funding agency.

(n) U.S. Competitiveness

The Recipient agrees that any products embodying any subject invention or produced through the use of any subject invention will be manufactured substantially in the United States unless the Recipient can show to the satisfaction of DOE that it is not commercially feasible. In the event DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., alternative binding commitments to provide an overall net benefit to the U.S. economy. The Recipient agrees that it will not license, assign or otherwise transfer any subject invention to any entity, at any tier, unless that entity agrees to these same requirements. In the event that the Recipient or other such entity receiving rights in the Subject Invention undergoes a change in ownership amounting to a controlling interest, the Recipient or other such entity receiving rights shall ensure continual compliance with the requirements of this paragraph (n) and shall inform DOE, in writing, of the change in ownership within six months of the change. The Recipient and any successor assignee will convey to DOE, upon written request from DOE, title to any subject invention, upon a breach of this paragraph (n). The Recipient will include this paragraph (n) in all subawards/contracts, regardless of tier, for experimental, developmental or research work.

- (o) The requirements, rights and administration of paragraph (n) are further clarified as follows:
 - (1) Waivers. The Recipient (or any entity subject to paragraph (n)) may request a waiver or modification of paragraph (n). Such waivers or modifications may be granted when DOE determines that (1) the Recipient (or any entity subject to paragraph (n)) has demonstrated, with quantifiable data, that manufacturing in the United States is not commercially feasible and (2) a waiver or modification would best serve the interests of the United States and the general public.
 - (2) Final determination of breach of paragraph (n). If DOE determines the Recipient is in breach of paragraph (n), the Department may issue a final written determination of such breach. If such determination includes a demand for title to the subject inventions under the award, the demand for title will cause an immediate

conveyance and assignment of all rights to all subject inventions under the award to the United States Government, including all pending U.S. and foreign patent applications and all U.S. and foreign patents that cover any subject invention, without compensation. Any such final determination shall be signed by a DOE Contracting Officer with the concurrence of the Assistant General Counsel for Technology Transfer & Intellectual Property. Advanced notice will be provided for comment to the Recipient before any final written determination by DOE is issued.

- (3) Pursuant to Recipient's agreement in paragraph (n) to not license, assign or otherwise transfer rights to subject inventions at any tier unless the entity agrees to paragraph (n): any such license, assignment, or other transfer of right to any subject invention developed under the award shall contain paragraph (n) suitably modified to properly identify the parties. If a licensee, assignee, or other transferee of rights to any subject invention is finally determined by DOE in writing to be in breach of paragraph (n), the applicable license, assignment or other transfer shall be deemed null and void. Advanced notice will be provided for comment to the noncomplying party before any final written determination by DOE is made.
- (4) For clarity, if the forfeiture of title to any subject invention is due to a breach of paragraph (n), the Recipient shall not be entitled to any compensation, or to a license to the subject invention including the reserved license in section (e)(1), unless DOE grants a license through a separately agreed upon licensing agreement.

Authority. The requirements and administration of paragraph (n) is in accordance with the Determination of Exceptional Circumstances (DEC) under the Bayh-Dole Act to Further Promote Domestic Manufacture of DOE Science and Energy Technologies executed by DOE on June 7, 2021. A copy of the DEC is available at https://www.energy.gov/sites/default/files/2021-07/DEC%20for%20Science%20and%20Energy%20Technologies%20signed%206-7-2021.pdf. By accepting or acknowledging the award, the Recipient is also acknowledging that it has received a copy of the DEC through the foregoing link. As set forth in 37 CFR 401.4, any nonprofit organization or small business firm as defined by 35 U.S.C. 201 affected by any DEC has the right to appeal the imposition of the DEC within thirty (30) working days from the Recipient's acceptance or acknowledgment of this award.

SBIR/STTR-GTC-0025-CH RIGHTS IN DATA – SBIR/STTR PROGRAM

* In the event of a conflict between the following Data Rights clause and the Data Management Plan, the following Data Rights clause takes precedence.

(a) Definitions

- (1) Computer Software. Computer programs, source code, source code listings, object code listings, design details, algorithms, processes, flow charts, formulae, and related material that would enable the software to be reproduced, recreated, or recompiled. Computer Software does not include Computer Databases or Computer Software Documentation.
- (2) Data. All recorded information, regardless of the form or method of recording or the media on which it may be recorded. The term does not include information incidental to contract or grant/cooperative agreement administration, such as financial, administrative, cost or pricing or management information.
- (3) Form, Fit, and Function Data. Data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, and data identifying source, size, configuration, mating and attachment characteristics, functional characteristics, and performance requirements. For Computer Software it means data identifying source, functional characteristics, and performance requirements, but

- specifically excludes the source code, algorithms, processes, formulas, and flow charts of the software.
- (4) Operations, Maintenance, Installation, or Training Purposes (OMIT) Data. Data that is necessary for operation, maintenance, installation, or training purposes (but not including detailed manufacturing or process data).
- (5) SBIR/STTR Computer Software Rights. The Federal Government's rights during the SBIR/STTR Protection Period in specific types of SBIR/STTR Data that are Computer Software.
 - (A) The Federal Government may use, modify, reproduce, release, perform, display, or disclose SBIR/STTR Data that are Computer Software within the Government. The Federal Government may exercise SBIR/STTR Computer Software Rights within the Government for:
 - (i) Use in Federal Government computers;
 - (ii) Modification, adaptation, or combination with other Computer Software, provided that the Data incorporated into any derivative software are subject to the SBIR/STTR Computer Software Rights described herein and that the derivative software is marked as containing SBIR/STTR Data;
 - (iii) Archive or backup; or
 - (iv) Distribution of a computer program to another Federal agency, without further permission of the Awardee, if the Awardee is notified of the distribution and the identity of the recipient prior to the distribution, and a copy of the SBIR/STTR Computer Software Rights included in the Funding Agreement is provided to the recipient.
 - (B) The Federal Government shall not release, disclose, or permit access to SBIR/STTR Data that is Computer Software for commercial, manufacturing, or procurement purposes without the written permission of the Awardee. The Federal Government shall not release, disclose, or permit access to SBIR/STTR Data outside the Government without the written permission of the Awardee unless:
 - (i) The non-Governmental entity has entered into a non-disclosure agreement with the Government that complies with the terms for such agreements outlined in § 8 of the U.S. Small Business Administration's SBIR/STTR Program Policy Directive; and
 - (ii) The release or disclosure is—
 - I) To a Federal Government support service contractor or their subcontractor for purposes of supporting Government internal use or activities, including evaluation, diagnosis and correction of deficiencies, and adaptation, combination, or integration with other Computer Software provided that SBIR/STTR Data incorporated into any derivative software are subject to the SBIR/STTR Computer Software Rights described herein; or

- (II) Necessary to support certain narrowly-tailored essential Government activities for which law or regulation permits access of a non-Government entity to a contractors' data developed exclusively at private expense, non-SBIR/STTR Data, such as for emergency repair and overhaul.
- (6) SBIR/STTR Data. All Data developed or generated in the performance of an SBIR or STTR award, including Technical Data and Computer Software developed or generated in the performance of an SBIR or STTR award. The term does not include information incidental to contract or grant/cooperative agreement administration, such as financial, administrative, cost or pricing or management information.
- (7) SBIR/STTR Data Rights. The Federal Government's license rights in properly marked SBIR/STTR Data during the SBIR/STTR Protection Period are as follows: SBIR/STTR Technical Data Rights in SBIR/STTR Data that are Technical Data or any other type of Data other than Computer Software; and SBIR/STTR Computer Software Rights in SBIR/STTR Data that is Computer Software. Upon expiration of the protection period for SBIR/STTR Data, the Federal Government shall have Unlimited Rights and is relieved of all disclosure prohibitions and assumes no liability for unauthorized use of these data by third parties. The Federal Government receives Unlimited Rights in Form Fit, and Function Data, OMIT Data, and all unmarked SBIR/STTR Data.
- (8) SBIR/STTR Protection Period. The period of time during which the Federal Government is obligated to protect SBIR/STTR Data against unauthorized use and disclosure in accordance with SBIR/STTR Data Rights. The SBIR/STTR Protection Period begins at award of an SBIR/STTR Funding Agreement and ends twenty years from that date.
- (9) SBIR/STTR Technical Data Rights. The Federal Government's rights during the SBIR/STTR Protection Period in SBIR/STTR Data that are Technical Data or any other type of Data other than Computer Software.
 - (A) The Federal Government may, use, modify, reproduce, perform, display, release, or disclose SBIR/STTR Data that are Technical Data within the Government; however, the Government shall not use, release, or disclose the data for procurement, manufacturing, or commercial purposes; or release or disclose the SBIR/STTR Data outside the Government except as permitted by paragraph (B) below or by written permission of the Awardee.
 - (B) SBIR/STTR Data that are Technical Data may be released outside the Federal Government without any additional written permission of the Awardee only if the non-Governmental entity or foreign government has entered into a non-disclosure agreement with the Federal Government that complies with the terms for such agreements outlined in § 8 of the SBIR/STTR Policy Directive and the release is:
 - (i) Necessary to support certain narrowly-tailored essential Government activities for which law or regulation permits access of a non-Government entity to a contractors' data developed exclusively at private expense, non- SBIR/STTR Data, such as for emergency repair and overhaul;
 - (ii) To a Government support services contractor in the performance of a Government support services contract for internal Government use or activities, including evaluation, diagnosis or modification, provided that SBIR/STTR Technical Data incorporated into any derivative Data

- are subject to the SBIR/STTR Technical Data Rights, and the release is not for commercial purposes or manufacture;
- (iii) To a foreign government for purposes of information and evaluation if required to serve the interests of the U.S. Government; or
- (iv) To non-Government entities or individuals for purposes of evaluation.
- (10) Technical Data. Recorded information, regardless of the form or method of the recording, of a scientific or technical nature (including Computer Software Documentation and Computer Databases). The term does not include Computer Software or financial, administrative, cost or pricing, or management information, or other data incidental to contract or grant/cooperative agreement administration. The term includes recorded Data of a scientific or technical nature that is included in Computer Databases.
- (11) Unlimited Rights. The Government's rights to access, use, modify, prepare derivative works, reproduce, release, perform, display, disclose, or distribute Data in whole or in part, in any manner and for any purpose whatsoever, and to have or authorize others to do so.

(b) Allocation of SBIR/STTR Data Rights.

- (1) The Awardee retains ownership of all SBIR/STTR Data it develops or generates in the performance of an SBIR/STTR award. The Awardee retains all rights in SBIR/STTR Data that are not granted to the Federal Government in accordance with the SBIR/STTR Policy Directive. These rights of the Awardee do not expire.
- (2) During the SBIR/STTR Protection Period, the Federal Government receives SBIR/STTR Technical Data Rights in appropriately marked SBIR/STTR Data that is Technical Data or any other type of Data other than Computer Software; and SBIR/STTR Computer Software Rights in appropriately marked SBIR/STTR Data that is Computer Software.
- (3) After the protection period, the Federal Government shall have Unlimited Rights.
- (4) The Federal Government receives Unlimited Rights in Form Fit, and Function Data, OMIT Data, and all unmarked SBIR/STTR Data.

(c) Identification and Delivery of SBIR/STTR Data.

Any SBIR/STTR Data delivered by the Awardee, and in which the Awardee intends to limit the Federal Government's rights to SBIR/STTR Data Rights, must be delivered with restrictive markings. The Federal Government assumes no liability for the access, use, modification, reproduction, release, performance, display, disclosure, or distribution of SBIR/STTR Data without markings or data submitted with an identified distribution other than SBIR/STTR Data. The Awardee or its subcontractors or suppliers shall conspicuously and legibly mark all such SBIR/STTR Data with the appropriate legend and appropriately identify in all submissions to the Federal Government including proper identification as "20 YEAR SBIR/STTR DATA RIGHTS (2019)" in all submissions to Office of Scientific and Technical Information (OSTI).

(1) The authorized legend shall be placed on the first page or cover page of the document containing SBIR/STTR Data. Subsequent pages shall also include the authorized legend or simply "SBIR/STTR Protected Data". If only portions of a page are subject to the asserted restrictions, the SBIR/STTR Awardee shall identify the restricted portions (e.g., by circling or underscoring with a note or other appropriate identifier). With respect to SBIR/STTR Data embodied in Computer Software, the legend shall be placed on:

- (i) The printed material or media containing the Computer Software; or
- (ii) The transmittal document or storage container
- (2) The legend shall read as follows:

20 YEAR SBIR/STTR DATA RIGHTS (2019)

Funding Agreement No _	(e.g. DE-SC000nnnn)
Award Date	(Block 27 on the Assistance Agreement)
SBIR/STTR Protection Period: Twenty years from Award Date	
SBIR/STTR Awardee	

This report contains SBIR/STTR Data to which the Federal Government has received SBIR/STTR Technical Data Rights or SBIR/STTR Computer Software Rights during the SBIR/STTR Protection Period and Unlimited Rights afterwards, as defined in the Funding Agreement. Any reproductions of SBIR/STTR Data must include this legend.

(End of Legend)

(3) Data submitted without correct or appropriate markings may be corrected within 6 months from the date the data is delivered.

(d) Relation to patents

Nothing regarding SBIR/STTR Data Rights in this clause shall imply a license to or imply a requirement to license to the Federal Government any patent to a Subject Invention (as defined under the Bayh-Dole Act implemented at 37 CFR 401) made under an SBIR/STTR award. (End of Clause)

(e) Copyright.

- (1) Data first produced in the performance of this contract.
 - (A) Except as otherwise specifically provided in this contract, the Awardee may assert copyright subsisting in any data first produced in the performance of this contract.
 - (B) When asserting copyright, the Awardee shall affix the applicable copyright notice of 17 U.S.C. 401 or 402 and an acknowledgment of Government sponsorship (including award number).
 - (C) For data other than computer software, the Awardee grants to the Government, and others acting on its behalf, a paid-up nonexclusive, irrevocable, worldwide license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government. For computer software, the Awardee grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly, by or on behalf of the Government.
- (2) Data not first produced in the performance of this contract. The Awardee shall not, without prior written permission of a DOE Contracting Officer, incorporate in any data that are not first produced in the performance of this award unless the Awardee (i) identifies such data and (ii) grants to the Government, or acquires on its behalf, a license of the same scope as set forth in paragraph (c)(1) of this clause.

(3) Removal of copyright notices. The Government will not remove any copyright notices placed on data pursuant to this paragraph (c), and will include such notices on all reproductions of the data.

(f) Protection of limited rights data and restricted computer software.

The Awardee may withhold from delivery qualifying limited rights data and restricted computer software that are not identified in paragraphs (b)(1), (b)(2), (b)(3), and (b)(4) of this clause. As a condition to this withholding, the Awardee shall identify the data being withheld, and furnish form, fit, and function data instead.

(g) Subcontracting.

The Awardee shall obtain from its subcontractors all data and rights therein necessary to fulfill the Contractor's obligations to the Government under this contract. If a subawardee refuses to accept terms affording the Government those rights, the Awardee shall promptly notify a DOE Contracting Officer of the refusal and not proceed with the subaward award without further authorization in writing from the DOE Contracting Officer. SBIR/STTR rights apply to all SBIR/STTR awards, including subawards to such awards, that fall within the statutory definition of Phase I, II, or III of the SBIR/STTR Program, as described in the SBIR/STTR Policy Directive.

(h) Relationship to patents.

Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

SBIR/STTR-GTC-0029-CH FEE

SBIR/STTR recipients may be paid a fee or profit as stated in the approved budget.

SBIR/STTR-GTC-0040-CH MERGER OR ACQUISITION OF THE RECIPIENT (MAY 2024)

In the case of a merger or acquisition of the Recipient, the Recipient must, within 30 days of the transaction becoming final, recertify its small business size status to DOE or inform DOE that it is other than small for the SBIR/STTR programs. The Recipient must immediately revise all applicable Federal contract and grant databases to reflect the new size status. See also 13 CFR § 121.704 When does SBA [the U.S. Small Business Administration] determine the size and eligibility status of a business concern? For information on the SBA's treatment of an agreement in principle and affiliation, see 13 CFR § 121.103 How does SBA determine affiliation?

If the Recipient is other than small for the SBIR/STTR programs due to the merger or acquisition after DOE issuance of the Phase I award, the Recipient may complete the Phase I award, but the Recipient is not eligible for a Phase II award.

If the Recipient is other than small for the SBIR/STTR programs due to the merger or acquisition after DOE issuance of the Fast-Track or Phase II award, but before DOE issuance of the continuation of the award, i.e. the second or, if applicable, third budget period, DOE cannot issue the continuation and the Recipient is not eligible for a subsequent Phase II award. If the Recipient is other than small for the SBIR/STTR programs due to the merger or acquisition after DOE issuance of the continuation of the award, i.e. the second or, if applicable, third budget period, the Recipient may complete the budget period issued by DOE, but the Recipient is neither eligible for a further continued budget period, if applicable, nor a subsequent Phase II award.

A novation to recognize a successor-in-interest may be required for a merger of the Recipient. See also 2 CFR § 910.370 Novation of financial assistance agreements.

SBIR/STTR-GTC-0041-CH REPORTING OF THE DISCLOSURE OF FOREIGN RELATIONSHIPS (APRIL 2024)

With the application for this award, the Recipient submitted a Disclosure of Foreign Relationships. The Recipient has a responsibility to update the disclosures in the Disclosure of Foreign Relationships during the period of performance of the award on: (i) any change to a disclosure required under the Disclosure of Foreign Relationships, (ii) any material misstatement that DOE could determine poses a risk to national security, and (iii) a change in ownership, change to entity structure, or other substantial change in the circumstances of the small business concern that DOE could determine poses a risk to national security. (15 U.S.C. § 638(g), (o)). The Disclosure of Foreign Relationships is located at https://science.osti.gov/sbir/Applicant-Resources/Grant-Application. All updated Disclosures of Foreign Relationships, i.e., other than the Disclosure of Foreign Relationships submitted with the application, must be submitted by the Recipient to a DOE Contracting Officer and the U.S. Small Business Administration (1) within 30 days of a change and/or potential risk to national security as described in (i), (ii), and/or (iii) above; and (2) with the submission of the Funding Agreement Certification – Life Cycle Certification as set forth in the Federal Assistance Reporting Checklist and Instructions.

If there is a material misstatement that DOE determines poses a risk to national security, or there is a change in ownership, change to entity structure, or other substantial change in the circumstances of the small business concern that DOE determines poses a risk to national security, the Recipient will be required to repay all amounts received under the award (15 U.S.C. § 638(g), (o)).

Further, the Recipient may be subject to the remedies established by 2 CFR 200.339 Remedies for noncompliance which may include termination under 2 CFR 200.400 Termination as set forth in SBIR/STTR-GTC-0042-CH and SBIR/STTR-GTC-0022-CH, respectively, for failure to comply with the statutory requirements described in this award term.

SBIR/STTR-GTC-0042-CH REMEDIES FOR NONCOMPLIANCE (FEBRUARY 2023)

If the Recipient fails to comply with the U.S. Constitution, Federal statutes, regulations or the terms and conditions of this award, DOE may impose additional conditions, as described in 2 CFR § 200.208. If DOE determines that noncompliance cannot be remedied by imposing additional conditions, DOE may take one or more of the following actions, as appropriate in the circumstances:

- (a) Temporarily withhold cash payments pending correction of the deficiency by the non-Federal entity or more severe enforcement action by the Federal awarding agency or pass-through entity.
- (b) Disallow (that is, deny both use of funds and any applicable matching credit for) all or part of the cost of the activity or action not in compliance.
- (c) Wholly or partly suspend or terminate the Federal award.
- (d) Initiate suspension or debarment proceedings as authorized under <u>2 CFR part 180</u> and Federal awarding agency regulations (or in the case of a pass-through entity, recommend such a proceeding be initiated by a Federal awarding agency).
- (e) Withhold further Federal awards for the project or program.
- (f) Take other remedies that may be legally available.

SBIR/STTR-GTC-0043-CH PORTFOLIO ANALYSIS AND MANAGEMENT SYSTEM (DECEMBER 2024)

- a. The 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). 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.
- iii. Confirmation that DOE funds remain available for the proposed work to continue during the extension.

A no-cost extension of the period of performance requires the prior approval of a DOE Grants/Agreements Officer pursuant to SBIR/STTR-GTC-0009-CH EXTENSIONS and SBIR/STTR-GTC-0004-CH, REVISION OF BUDGET AND PROGRAM PLANS.

- 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(f)(2) and SBIR/STTR-GTC-0004-CH, REVISION OF BUDGET AND PROGRAM PLANS. The request must include the following:
 - i. The proposed PI's name and contact information.
 - ii. An explanation for the departure/change.
 - iii. The proposed PI's certified Current and Pending Support Disclosure statement and curriculum vitae (CV) or Biographical Sketch (per SBIR/STTR-GTC-0074-CH CURRENT AND PENDING SUPPORT).
- 3. Senior/Key Personnel, Graduate Student, and Postdoctoral Associate Changes. In accordance with 2 CFR Part 200.308 and SBIR/STTR-GTC-0004-CH, REVISION OF BUDGET AND PROGRAM PLANS, prior approval is required for changes in senior/key personnel, graduate students and postdoctoral associates, to include the addition of previously unnamed individuals proposed for these positions. The request must include the following for each individual:
 - i. The proposed individual's name and contact information.
 - ii. The proposed individual's certified Current and Pending Support Disclosure statement and curriculum vitae (CV) or Biographical Sketch (per SBIR/STTR-GTC-0074-CH CURRENT AND PENDING SUPPORT).
- 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" page which is accessible from any screen 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.

SBIR/STTR-GTC-0074-CH CURRENT AND PENDING SUPPORT (MARCH 2024)

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 research, development, and demonstration (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 National Security Presidential Memorandum-33 (see definition below): 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.

National Security Presidential Memorandum 33 (NSPM-33): The Presidential Memorandum on United States Government-Supported Research and Development National Security Policy issued on January 14, 2021. "Guidance For Implementing National Security Presidential Memorandum 33 (NSPM-33) On National Security Strategy For United States Government-Supported Research And Development" is located at https://www.whitehouse.gov/wp-content/uploads/2022/01/010422-NSPM-33-Implementation-Guidance.pdf

Senior/key personnel – an individual who contributes in a substantive, meaningful way to the scientific development or execution of an 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. For prior approval and current and pending support disclosure requirements purposes, graduate students and postdoctoral associates are considered senior/key personnel under this award.

Current and Pending Support:

Prior to award, the Recipient was required to provide current and pending support disclosure statements and a CV/Biosketch for each Principal Investigator (PI) and senior/key personnel, graduate students and postdoctoral associates, at the recipient and subrecipient level, regardless of funding source. In accordance with the Federal Assistance Reporting Checklist and Instructions, throughout the life of the award, the Recipient must submit current and pending support disclosure statements and a CV/Biosketch for any new PI and/or previously unnamed senior/key personnel, graduate students and postdoctoral associates, at the recipient and subrecipient level, proposed to be added to the project funded under this Award at least sixty (60) days prior to the individual joining the project. Pursuant to the award term SBIR/STTR-GTC-0004-CH Revision of Budget and Program Plans, and 2 CFR 200.308(f)(2), prior approval is required for new PIs and senior/key personnel, graduate students and postdoctoral associates. 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. However, if there is a change related to participation in a Foreign Government-Sponsored Talent Recruitment Program, this change must be communicated to DOE at least thirty (30) days prior to the proposed change. The Recipient must ensure all PIs and senior/key personnel, graduate students and postdoctoral associates, 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, graduate students and postdoctoral associates, 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 contributions; 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. For inkind contributions, the U.S. dollar value of the in-kind contribution. If the dollar value is not readily ascertainable, reasonable estimates should be provided.
- The award or contribution 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, graduate students, and postdoctoral associates, at the recipient and subrecipient level, must provide a separate certified disclosure statement listing the required information above regarding current and pending support: (1) at least sixty (60) days prior to the individual joining the project; (2) in the event of changes, within thirty (30) days of the change; and (3) at least thirty (30) days prior to a proposed change related to participation in a Foreign Government-Sponsored Talent Recruitment Program.

Current and pending support disclosure statements and Biosketches may be provided using the most current format approved by the National Science Foundation (NSF), generated by the Science Experts Network Curriculum Vitae (SciENcv), a cooperative venture maintained at https://www.ncbi.nlm.nih.gov/sciencv/. If a disclosure statement and a Biosketch generated by SciENcv are not used, the individual must sign and date their respective disclosure statement and CV/Biosketch with the following Certification statement included:

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 or CV/Biosketch] is current, accurate and complete. 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. §§287, 1001, and 1031, and 31 U.S.C. §§ 3729-3733 and 3802). 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.

GENERAL TERMS AND CONDITIONS APPLICABLE TO PHASE I ONLY

SBIR/STTR-GTC-0032-CH PHASE I OBLIGATIONS (DECEMBER 2024)

If this award is less than or equal to \$500,000.00, then this is a fixed amount award in accordance with 2 CFR 200.201 Use of Grant Agreements (Including Fixed Amount Awards), Cooperative Agreements, and Contracts. Awards greater than \$500,000.00 are not fixed amount awards. The unobligated balance of Federal funds at the end of the Phase I project or budget period shall not be applied to any Phase II effort and shall be de-obligated by DOE.

SBIR/STTR-GTC-0033-CH PRE-AWARD COSTS FOR PHASE I AWARDS

Notwithstanding clauses SBIR/STTR-GTC-0007-CH PRE-AWARD COSTS and SBIR/STTR-GTC-0004-CH REVISION OF BUDGET AND PROGRAM PLANS, DOE Contracting Officer approval of Phase I pre-award expenditures is not required per 2 CFR 200.308 Revision of budget and program plans.

GENERAL TERMS AND CONDITIONS APPLICABLE TO PHASE II ONLY

SBIR/STTR-GTC-0034-CH PHASE II OBLIGATIONS (DECEMBER 2024)

The unobligated balance of Federal funds at the end of the Phase II project period shall not be applied to any follow-on Phase IIA, Phase IIB, or Phase IIC Sequential efforts and shall be de-obligated by DOE.

SBIR/STTR-GTC-0035-CH REPORTING NON-FEDERAL SUPPORT

The recipient agrees to provide the SBIR/STTR Program Manager an annual report during Phase II and for five years after completion of this project detailing the sources and amounts of non-Federal funding used to continue support or commercialization of the research funded under this award.

SBIR/STTR-GTC-0044-CH IMPLEMENTATION OF DOE CYBERSECURITY PERFORMANCE GOALS (MAY 2025)

For the purpose of conducting the DOE Cybersecurity Self-Assessment, each Awardee of a Phase II or Fast-Track award is required to complete the DOE SBIR/STTR Cybersecurity Self-Assessment. The full implementation of the Cybersecurity Performance Goals (CPGs) listed in the DOE SBIR/STTR Cybersecurity Self-Assessment is deemed essential to the award.

A Phase II or Fast-Track Awardee that does not possess an active Level 2/3 Cybersecurity Maturity Model Certification (CMMC) or did not fully implement the CPGs listed in the DOE SBIR/STTR Cybersecurity Self-Assessment at time of application is required to submit an updated Cybersecurity Self-Assessment demonstrating the full implementation of the CPGs. A Phase II Awardee must submit the updated Cybersecurity Self-Assessment with the first progress report, which is due four (4) months after the start date of the award; a Fast-Track Awardee must submit the updated Cybersecurity Self-Assessment with the second progress report, which is due ten (10) months after the start date of the award. Failure to document the full implementation of the CPGs will be considered inadequate progress in the performance of the Awardee's Phase II or Fast-Track award and DOE may elect (1) not to award funding for the next budget period or (2) to take action pursuant to 2 CFR 200.339 Remedies for noncompliance and/or 2 CFR 200.340 Termination.

In accordance with Special Term and Condition FA-TC-0012 Site Visits, DOE's authorized representatives may conduct onsite reviews to evaluate the implementation of the CPGs and to ensure an Awardee is accurately reporting its cybersecurity practices.