

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1 1
2. AMENDMENT/MODIFICATION NO. 0180	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY NNSA M&O Contracting Branch NA-PAS-211 Albuquerque Complex P.O. Box 5400 Albuquerque NM 87185-5400	CODE 05115	7. ADMINISTERED BY (If other than Item 6) NNSA Nevada Field OFC NA-00-NV P.O. Box 98518 Las Vegas NV 89193-8518	CODE 05002
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Mission Support And Test Services LLC Attn: Paul Spickard PO Box 98521 M/S NLV019 Las Vegas NV 891938421		(x)	9A. AMENDMENT OF SOLICITATION NO.
CODE 080083514			9B. DATED (SEE ITEM 11)
FACILITY CODE		x	10A. MODIFICATION OF CONTRACT/ORDER NO. DE-NA0003624
			10B. DATED (SEE ITEM 13) 05/12/2017

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) DEAR 970.5204-2 Laws, Regs & DOE Directives & Agreement of the Parties

E. IMPORTANT: Contractor is not is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

UEI: YSYZHPCG4XB3

The purpose of this modification is to revise various clauses under Section I - Contract Clauses and modify Section J Appendices D - Sensitive Foreign Nations Control and F - List of Applicable Laws, Regulations, and DOE Directives as set forth in Attachment 1.

Payment:

Period of Performance: 06/07/2017 to 11/30/2027

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) Roger Rocha, on behalf of Garrett Harencak	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Darby A. Dieterich
15B. CONTRACTOR/OFFEROR <i>(Signature of person authorized to sign)</i>	16B. UNITED STATES OF AMERICA <i>(Signature of Contracting Officer)</i>
15C. DATE SIGNED	16C. DATE SIGNED

Previous edition unusable

I. PART II – CONTRACT CLAUSES, SECTION I – CONTRACT CLAUSES, is modified as follows:

A. The TABLE OF CONTENTS is modified as follows:

1. Revise the entry for Clause I-2 as set forth below to reflect the removal of this clause from the Federal Acquisition Regulation per Federal Acquisition Circular 2023-03.

I-2 RESERVED

2. Revise the entries for the clauses below reflecting the incorporation of updated clauses into the contract.

I-20A Technology Transfer Mission (AUG 2002) (Deviation)

I-21 Patent Rights-Management and Operating Contracts, For-Profit Contractor, Patent Waiver (DEC 2000) (DEVIATION)

B. PARAGRAPH A. – FAR CLAUSES INCORPORATED BY REFERENCE, is modified by revising the “DATE OF CLAUSE” for the clauses set forth in the table below to reflect the incorporation of updated clause into the contract.

FAR NUMBER	CLAUSE TITLE <i>(Any insertions appear below the title in italics)</i>	DATE OF CLAUSE
52.232-40	Providing Accelerated Payments to Small Business Subcontractors	MAR 2023
52.244-6	Subcontracts for Commercial Products and Commercial Services	MAR 2023

C. PARAGRAPH C. – FAR AND DEAR CLAUSES INCORPORATED IN FULL TEXT, is modified as follows:

1. Delete Clause I-2 – FAR 52.208-8 *REQUIRED SOURCES FOR HELIUM AND HELIUM USAGE DATA (Aug 2018)* and mark it RESERVED.
2. Delete the text for Clause I-20A – DEAR 970.5227-3, *TECHNOLOGY TRANSFER MISSION (AUG 2002) (DEVIATION) ALTERNATE II (DEC 2002) (See – DOE AL-2021-04)*, and insert the revised clause set forth in Attachment 2.
3. Delete the text for Clause I-21 – DEAR 970.5227-12, *PATENT RIGHTS-MANAGEMENT AND OPERATING CONTRACTS, FOR-PROFIT CONTRACTOR, PATENT WAIVER (DEC 2000) (DEVIATION) (See DOE AL-2021-04)*, and insert the revised clause set forth in Attachment 3.

II. PART III – LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS, SECTION J – LIST OF ATTACHMENTS, is modified as follows:

- A. APPENDIX D – Sensitive Foreign Nations Control, paragraph 1. is modified by deleting the list of “sensitive foreign nations” and adding the list below.

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|---|--|--|
| <ul style="list-style-type: none"> • Afghanistan • Armenia • Azerbaijan • Belarus • China (to include Hong Kong and Macau) • Cuba • Georgia • India • Iran • Iraq | <ul style="list-style-type: none"> • Israel • Kazakhstan • Kyrgyzstan • Lebanon • Libya • Mali • Moldova • North Korea • Pakistan • Russia • Saudi Arabia | <ul style="list-style-type: none"> • Somalia • South Sudan • Sudan • Syria* • Taiwan • Tajikistan • Turkmenistan • Ukraine • Uzbekistan • Venezuela • Yemen |
|---|--|--|

B. APPENDIX F – LIST OF APPLICABLE LAWS, REGULATIONS, AND DOE DIRECTIVES, is modified as follows:

1. Delete the directive set forth in the table below.

DIRECTIVE NUMBER		DATE	DOE DIRECTIVE TITLE
DOE	O	474.2 Chg. 4 6/27/2011 Chg. 2 dated 11/19/2012 Chg. 3 dated 5/15/2015 Chg. 4 dated 09/13/2016	Nuclear Material Control and Accountability

2. Add the directive set forth in the table below.

DIRECTIVE NUMBER		DATE	DOE DIRECTIVE TITLE	MOD #	
DOE	O	474.2A	2-7-2023	Nuclear Material Control and Accountability	0180

3. Update the “Directive Number” and “Date” for the directives set forth in the table below.

DIRECTIVE NUMBER		DATE	DOE DIRECTIVE TITLE	MOD #	
DOE	O	440.2C, Chg. 1 Chg. 2 (Ltd Chg) Chg 3 (Ltd Chg)	6/22/2011 9/15/2020 3/21/2023	Aviation Management and Safety	0180

4. Correct the title of directive DOE O 153.1A to read as set forth in the table below. The directive title was not updated when the revised directive was incorporated into the contract under Modification 0175

DIRECTIVE NUMBER		DATE	DOE DIRECTIVE TITLE	MOD #	
DOE	O	153.1A	11/17/2022	Departmental Nuclear Emergency Support Team Capabilities	0180

5. Correct the “Date” for Chg 1 (Admin Chg) from 5/02/2022 to 5/03/2022 for the directive set forth in the table below.

DIRECTIVE NUMBER			DATE	DOE DIRECTIVE TITLE	MOD #
DOE	O	226.1B Chg 1 (Admin Chg)	4/25/2011 5/03/2022	Implementation of Department of Energy Oversight Policy	0180

6. Remove the references to revision implementation for the directives identified below. Implementation has been completed for these directives and the entries are revised to read as follows:

DIRECTIVE NUMBER			DATE	DOE DIRECTIVE TITLE	MOD #
DOE	O	144.1 Admin Chg 1	11/5/2009	Department of Energy American Indian Tribal Government Interactions and Policy	0180
DOE	O	206.2 Chg 1 (LtdChg)	2/19/2013 9/02/2022	Identity, Credential, and Access Management (ICAM)	0180
NNSA	SD	206.2	4/20/2018	Implementation of Personal Identity Verification for Uncleared Contractors	0180
DOE	O	420.1C Chg. 1(PgChg) Chg. 2 (Min Chg) Chg. 3 (Ltd Chg)	12/4/2012 2/27/2015 7/26/2018 11/14/2019	Facility Safety Reference: NFO Letter AMNS:KDL-13010, dated 11-06-2012 – APPROVAL OF THE REQUEST FOR PERMANENT EXEMPTION FROM THE FIRE PROTECTION REQUIREMENTS DESIGNATED IN DOE O 420.1B ANDDOE-STD 1066-99 FOR THE U1A COMPLEX IN AREA 1 OF THE NEVADA NATIONAL SECURITY SITE (NNS)	0180
NFO	O	421.X1 Rev 2	5/4/2020	Nuclear Facility Safety Management	0180
DOE	O	452.2F	7/27/2020	Nuclear Explosive Safety	0180

No other changes are made as a result of this modification. All other terms and conditions remain unchanged.

(END OF MODIFICATION)

970.5227-3 Technology Transfer Mission (AUG 2002) (Deviation)

(a) *Authority.*

(1) In order to ensure the full use of the results of research and development efforts of, and the capabilities of, the Laboratory, technology transfer, including Cooperative Research and Development Agreements (CRADAs), is established as a mission of the Laboratory consistent with the policy, principles and purposes of Sections 11(a)(l) and 12(g) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a); Section 3132(b) of Pub. L. 101-189, Sections 3134 and 3160 of Pub. L. 103-160, and of Chapter 38 of the Patent Laws (35 U.S.C. 200 et seq.); Section 152 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2182); Section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5908); Section 102 of the Laboratory Modernization and Technology Transfer Act (Public Law 115-246) and Executive Order 12591 of April 10, 1987.

(2) In pursuing the technology transfer mission, the Contractor is authorized to conduct activities including but not limited to: identifying and protecting intellectual property made, created or acquired at or by the Laboratory; negotiating licensing agreements and assignments for intellectual property made, created or acquired at or by the Laboratory that the Contractor controls or owns; bailments; negotiating all aspects of and entering into CRADAs; providing technical consulting and personnel exchanges; conducting science education activities and reimbursable Strategic Partnership Projects (SPP); providing information exchanges; and making available laboratory or weapon production user facilities. It is fully expected that the Contractor shall use all of the mechanisms available to it to accomplish this technology transfer mission, including, but not limited to, CRADAs, user facilities, SPP, science education activities, consulting, personnel exchanges, assignments, and licensing in accordance with this clause.

(3) *Trademarks and service marks.* The Contractor, with notification to DOE Patent Counsel, is authorized to protect goods/services resulting from work at the Laboratory through Trademark and Service Mark protection. The Laboratory name and associated logos are owned by the Department of Energy unless an exception is allowed by the DOE Patent Counsel, and shall be protected by DOE Patent Counsel. In furtherance of the technology transfer mission, should the Contractor want to assert trademark or service mark protection for any word, phrase, symbol, design, or combination thereof that includes or is associated with the Laboratory name, the Contractor must first notify and obtain permission from the Department of Energy Patent Counsel. All marks, whether or not registered with the United States Patent and Trademark Office, are to be included in the "Intellectual property rights" paragraph (i) of this clause, below, regarding transfer to successor contractor, DOE reserves the right to require the Contractor to cancel registration of the mark or cease use of the mark.

(b) *Definitions.*

Assignment means any agreement by which the Contractor transfers ownership of Laboratory Intellectual Property, subject to the Government's retained rights.

Bailment means any agreement in which the Contractor permits the commercial or non-commercial transfer of custody, access or use of Laboratory Biological Materials or Laboratory Tangible Research Product for a specified purpose of technology transfer or

research and development, including without limitation evaluation, and without transferring ownership to the bailee.

Contractor's Laboratory Director means the individual who has supervision over all or substantially all of the Contractor's operations at the Laboratory.

Cooperative Research and Development Agreement (CRADA) means any agreement entered into between the Contractor as operator of the Laboratory, and one or more parties including at least one non-Federal party under which the Government, through its laboratory, provides personnel, services, facilities, equipment, intellectual property, or other resources with or without reimbursement (but not funds to non-Federal parties) and the non-Federal parties provide funds, personnel, services, facilities, equipment, intellectual property, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the Laboratory; except that such term does not include a procurement contract, grant, or cooperative agreement as those terms are used in sections 6303, 6304, and 6305 of Title 31 of the United States Code.

Department of Energy (DOE), as used in this clause, includes the National Nuclear Security Administration (NNSA), unless otherwise identified or indicated.

Intellectual property means data, inventions, patents, patent applications, trademarks, service marks, copyrights, mask works, protected CRADA information, and other forms of comparable property rights protected by Federal Law and other foreign counterparts.

Joint Work Statement (JWS) means a proposal for a CRADA prepared by the Contractor, signed by the Contractor's Laboratory Director or designee which describes the project.

Laboratory biological materials means biological materials capable of replication or reproduction, such as plasmids, deoxyribonucleic acid molecules, ribonucleic acid molecules, living organisms of any sort and their progeny, including viruses, prokaryote and eukaryote cell lines, transgenic plants and animals, and any derivatives or modifications thereof or products produced through their use or associated biological products, made under this contract by Laboratory employees or through the use of Laboratory research facilities.

Laboratory tangible research product means tangible material results of research which--

- (1) Are provided to permit replication, reproduction, evaluation or confirmation of the research effort, or to evaluate its potential commercial utility;
- (2) Are not materials generally commercially available; and
- (3) Were made under this contract by Laboratory employees or through the use of Laboratory research facilities.

Patent Counsel means the DOE or NNSA Patent Counsel assisting the contracting activity. The Patent Counsel is the first and primary point of contact for activities described in this clause.

Strategic Partnership Projects (SPP) means any agreement pursuant to the SPP clause, if included in this M&O contract, entered into between the Contractor as operator of the Laboratory and a non-Federal party under which the Government, through its laboratory, provides personnel, services, facilities, equipment, intellectual property, only when such work does not interfere with DOE-funded activities conducted as authorized by other parts of this M&O contract and on a fully reimbursable basis.

(c) *Allowable costs.*

(1) The Contractor shall establish and carry out its technology transfer efforts through appropriate organizational elements consistent with the requirements for an Office of Research and Technology Applications (ORTA) pursuant to paragraphs (b) and (c) of Section 11 of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710). The costs associated with the conduct of technology transfer through the ORTA including activities associated with obtaining, maintaining, licensing, and assigning intellectual property rights, increasing the potential for the transfer of technology, widespread notice of technology transfer opportunities, and early stage and precommercial technology demonstration to remove barriers that limit private sector interest and demonstrate potential commercial applications of any research and technologies arising from Laboratory activities, shall be deemed allowable provided that such costs meet the other requirements of the allowable costs provisions of this contract.

(2) The Contractor's participation in litigation to enforce or defend intellectual property claims incurred in its technology transfer efforts shall be as provided in the clause entitled "Insurance- Litigation and Claims" of this contract.

(d) *Conflicts of interest-technology transfer.* The Contractor shall have implementing procedures that seek to avoid employee and organizational conflicts of interest, or the appearance of conflicts of interest, in the conduct of its technology transfer activities. These procedures shall apply to all persons participating in Laboratory research or related technology transfer activities. Such implementing procedures shall be provided to the Contracting Officer for review and approval within sixty (60) days after execution of this contract. The Contracting Officer shall have thirty (30) days thereafter to approve or require specific changes to such procedures. Such implementing procedures shall include procedures to:

- (1) Inform employees of and require conformance with standards of conduct and integrity in connection with research involving non-federal sponsors in accordance with the provisions of paragraph (n)(5) of this clause;
- (2) Review and approve employee activities so as to avoid conflicts of interest arising from commercial utilization activities relating to contractor-developed intellectual property;
- (3) Conduct work performed using royalties so as to avoid interference with or adverse effects on ongoing DOE projects and programs;
- (4) Conduct activities relating to commercial utilization of contractor-developed intellectual property so as to avoid interference with or adverse effects on user facility or SPP activities of the Contractor;
- (5) Conduct DOE-funded projects and programs so as to avoid the appearance of conflicts of interest or actual conflicts of interest with non-Government funded work;
- (6) Notify the Contracting Officer with respect to any new work to be performed or proposed to be performed under the contract for DOE or other Federal agencies where the new work or proposal involves intellectual property in which the Contractor has obtained or intends to request or elect title;
- (7) Except as provided elsewhere in this contract, obtain the approval of the Contracting Officer for any licensing of or assignment of title to Intellectual Property rights by the Contractor to any business or corporate affiliate of the Contractor;

(8) Obtain the approval of the Contracting Officer prior to any assignment, exclusive licensing, or option for exclusive licensing, of intellectual property to any individual who is a current or has been a Laboratory employee within the previous two years or to the company in which the individual is a principal and the Contractor's request should include notice of any technology transfer agreements (e.g., SPP and CRADA) associated with the intellectual property;

(9) Notify non-Federal sponsors of SPP activities, or non-Federal users of user facilities, of any relevant intellectual property interest of the Contractor prior to execution of SPP or user agreements; and

(10) Notify the Contracting Officer and DOE funding program prior to evaluating a proposal by a third party for DOE, when (a) the evaluator is an inventor of a Contractor invention that is the subject matter of the proposal or (b) the evaluator is a principal or has financial interest in the third party or (c) the third party is a licensee of the Contractor.

(e) *Fairness of opportunity.* In conducting its technology transfer activities, the Contractor shall prepare procedures and take all reasonable measures to ensure widespread notice of availability of technologies suited for transfer and opportunities for exclusive licensing and joint research arrangements. The requirement to widely disseminate the availability of technology transfer opportunities does not apply to a specific application originated outside of the Laboratory and by entities other than the Contractor.

(f) *U.S. industrial competitiveness for licensing and assignments of intellectual property.*

(1) In the interest of enhancing U.S. Industrial Competitiveness, the Contractor shall, in its licensing and assignments of intellectual property, give preference in such a manner as to enhance the accrual of economic and technological benefits to the U.S. domestic economy. The Contractor shall consider the following factors in all of its licensing and assignment decisions involving Laboratory intellectual property where the Laboratory obtains rights during the course of the Contractor's operation of the Laboratory under this contract--

(i) Whether any resulting design and development will be performed in the United States and whether resulting products, embodying parts, including components thereof, will be substantially manufactured in the United States; and

(ii)

(A) Whether the proposed licensee or assignee has a business unit located in the United States and whether significant economic and technical benefits will flow to the United States as a result of the license or assignment agreement;

(B) In licensing or assigning any entity subject to the control of a foreign company or government, whether such foreign government permits United States agencies, organizations or other persons to enter into cooperative research and development agreements and licensing agreements, and has policies to protect United States intellectual property rights;

(C) If the proposed licensee, assignee, or parent of either type of entity is subject to the control of a foreign company or government, the Contractor, with the assistance of the Contracting Officer, in considering the factors set forth in paragraph (B) of this clause, may rely upon the following information –

- (1) U.S. Trade Representative Inventory of Foreign Trade Barriers;
- (2) U.S. Trade Representative Special 301 Report; and
- (3) Such other relevant information available to the Contracting Officer; and

(D) The Contractor should review the U.S. Trade Representative web site at: <http://www.ustr.gov> for the most current versions of these reports and other relevant information. The Contractor is encouraged to utilize other available resources, as necessary, to allow for a complete and informed decision.

(2) If the Contractor determines that neither of the conditions in paragraphs (f)(1)(i) or (ii) of this clause are likely to be fulfilled, the Contractor, prior to entering into such an agreement, must obtain the approval of the Contracting Officer. The Contracting Officer shall act on any such requests for approval within thirty (30) days.

(3) The Contractor agrees to be bound by the provisions of 35 U.S.C. 204 (Preference for United States industry).

(4) The Contractor agrees to be bound by paragraph (t) U.S. Competitiveness in its Patent Rights provision (e.g., 48 CFR 970.5227-10 or 48 CFR 970.5227-12 as may be modified) as applicable.

(g) *Indemnity-product liability.* In entering into written technology transfer agreements, including but not limited to, research and development agreements, licenses, assignments and CRADAs, the Contractor agrees to include in such agreements a requirement that the U.S. Government and the Contractor, except for any negligent acts or omissions of the Contractor, be indemnified for all damages, costs, and expenses, including attorneys' fees, arising from personal injury or property damage occurring as a result of the making, using or selling of a product, process or service by or on behalf of the Participant, its assignees or licensees which was derived from the work performed under the agreement. Except for CRADA and SPP where the guidance is already provided elsewhere, the Contractor shall identify and obtain the approval of the Contracting Officer for any proposed exceptions to this requirement such as where State or local law expressly prohibit the Participant from providing indemnification or where the research results will be placed in the public domain.

(h) *Disposition of income.*

(1) Royalties or other income earned or retained by the Contractor as a result of performance of authorized technology transfer activities herein shall be used by the Contractor for scientific research, development, technology transfer, and education at the Laboratory, consistent with the research and development mission and objectives of the Laboratory and subject to Section 12(b)(5) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a(b)(5)) and Chapter 38 of the Patent Laws (35 U.S.C. 200 et seq.) as amended through the effective date of this contract award

or modification. If the net amounts of such royalties and income received from patent licensing after payment of patenting costs, licensing costs, payments to inventors and other expenses incidental to the administration of Subject Inventions during any fiscal year exceed 5 percent of the Laboratory's budget for that fiscal year, 15 percent of such excess amounts shall be paid to the Treasury of the United States, and the remaining amount of such excess shall be used by the Contractor for the purposes as described above in this paragraph. Any inventions arising out of such scientific research and development activities shall be deemed to be Subject Inventions under the contract.

(2) The Contractor shall include as a part of its annual Laboratory Institutional Plan or other such annual document a plan setting out those uses to which royalties and other income received as a result of performance of authorized technology transfer activities herein will be applied at the Laboratory, and at the end of the year, provide a separate accounting for how the funds were actually used. Under no circumstances shall these royalties and income be used for any purpose inconsistent with DOE mission direction.

(3) The Contractor shall establish subject to the approval of the Contracting Officer a policy for making awards or sharing of royalties with Contractor employees, other coinventors and coauthors, including Federal employee coinventors when deemed appropriate by the Contracting Officer. The Contractor shall notify the Contracting Officer of any changes to that policy, and such changes, shall be subject to the approval of the Contracting Officer.

(i) *Transfer to successor contractor.* In the event of termination or upon the expiration of this contract, any unexpended balance of income received for use at the Laboratory shall be transferred, at the Contracting Officer's request, to a successor contractor, or in the absence of a successor contractor, to such other entity as designated by the Contracting Officer. The Contractor shall transfer title, as one or several packages, if necessary, to the extent the Contractor retains title, in all patents and patent applications, licenses, accounts containing royalty revenues from such license agreements, including equity positions in third party entities, and other intellectual property rights which arose at the Laboratory, to the successor contractor or to the Government as directed by the Contracting Officer.

(j) *Technology transfer affecting the national security.*

(1) The Contractor shall notify and obtain the approval of the Contracting Officer, prior to entering into any technology transfer arrangement, when such technology or any part of such technology is classified or sensitive under Section 148 of the Atomic Energy Act (42 U.S.C. 2168), as amended. Such notification shall include sufficient information to enable DOE to determine the extent that commercialization of such technology would enhance or diminish security interests of the United States, or diminish communications within DOE's nuclear weapon production complex. DOE shall use its best efforts to complete its determination within sixty (60) days of the Contractor's notification, and provision of any supporting information, and DOE shall promptly notify the Contractor as to whether the technology is transferable.

(2) The Contractor shall include in all of its technology transfer agreements with third parties, including, but not limited to, CRADAs, licensing agreements and assignments, notice to such third parties that the export of goods and/or technical data from the United States may require some form of export control license or other authority from the U.S. Government and that failure to obtain such export control license may result in criminal liability under U.S. laws.

(3) For other than fundamental research as defined in National Security Decision Directive 189, the Contractor is responsible to conduct internal export control reviews and assure that technology is transferred in accordance with applicable law.

(k) *Records.* The Contractor shall maintain records of its technology transfer activities in a manner and to the extent satisfactory to the DOE and specifically including, but not limited to, the licensing agreements, assignments and the records required to implement the requirements of paragraphs (e), (f), and (h) of this clause and shall provide reports to the Contracting Officer to enable DOE to maintain the reporting requirements of Section 12(c)(6) of the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a(c)(6)). Such reports shall be made annually in a format to be agreed upon between the Contractor and DOE and in such a format which will serve to adequately inform DOE of the Contractor's technology transfer activities while protecting any data not subject to disclosure under the Rights in Technical Data clause and paragraph (n) of this clause. Such records shall be made available in accordance with the clauses of this contract pertaining to inspection, audit and examination of records.

(1) *Reports to Congress.* To facilitate DOE's reporting to Congress, the Contractor is required to submit annually to DOE a technology transfer plan for conducting its technology transfer function for the upcoming year, including plans for securing intellectual property rights in Laboratory innovations with commercial promise and plans for managing such innovations so as to benefit the competitiveness of United States industry. This plan, which may be included in the Annual Laboratory Plan, shall be provided to the Contracting Officer on or before October 1st of each year.

(m) *Oversight and appraisal.* The Contractor is responsible for developing and implementing effective internal controls for all technology transfer activities consistent with the audit and record requirements of this contract. Laboratory Contractor performance in implementing the technology transfer mission and the effectiveness of the Contractor's procedures will be evaluated by the Contracting Officer as part of the annual appraisal process, with input from the cognizant Secretarial Officer or program office.

(n) *Technology transfer through technology transfer Agreements.* Upon approval of the Contracting Officer and as provided in DOE approved guidance, the Laboratory Director, or designee, may enter into technology transfer agreements on behalf of the DOE subject to the requirements set forth in this paragraph.

(1) *Review and approval of CRADAs.*

(i) Except as otherwise directed in writing by the Contracting Officer, each JWS or MSW shall be submitted to the Contracting Officer for approval. The Contractor's Laboratory Director or designee shall provide a program mission impact statement and shall include an impact statement regarding related intellectual property rights known by the Contractor to be owned by the Government to assist the Contracting Officer in the approval determination.

(ii) The Contractor shall also include (specific to the proposed CRADA), a statement of compliance with the fairness of opportunity requirements of paragraph (e) of this clause.

(iii) Within thirty (30) days after submission of a JWS, MSW or proposed CRADA, the Contracting Officer shall approve, disapprove or request modification

to the JWS, MSW or CRADA. The Contracting Officer shall provide a written explanation to the Contractor's Laboratory Director or designee of any disapproval or requirement for modification of a JWS or proposed CRADA.

(iv) Except as otherwise directed in writing by the Contracting Officer, the Contractor shall not enter into, or begin work under, a CRADA until approval of the CRADA or relevant MSW has been granted by the Contracting Officer. The Contractor may submit its proposed CRADA to the Contracting Officer at the time of submitting its proposed JWS, relevant MSW or any time thereafter.

(2) *Selection of participants.* The Contractor's Laboratory Director or designee in deciding what CRADA to enter into shall:

(i) Give special consideration to small business firms, and consortia involving small business firms;

(ii) Give preference to business units located in the United States which agree that products or processes embodying intellectual property will be substantially manufactured or practiced in the United States and, in the case of any industrial organization or other person subject to the control of a foreign company or government, take into consideration whether or not such foreign government permits United States agencies, organizations, or other persons to enter into cooperative research and development agreements and licensing agreements. The Contractor, in considering these factors, may rely upon the following information:

(A) U.S. Trade Representative Inventory of Foreign Trade Barriers,

(B) U.S. Trade Representative Special 301 Report, and

(C) Such other relevant information available to the Contracting Officer. The Contractor should review the U.S. Trade Representative web site at <http://www.ustr.gov> for the most current versions of these reports and other relevant information. The Contractor is encouraged to utilize other available resources, as necessary, to allow for a complete and informed decision;

(iii) Provide fairness of opportunity in accordance with the requirements of paragraph (e) of this clause; and

(iv) Give consideration to the conflicts of interest requirements of paragraph (d) of this clause.

(3) *Withholding of data.*

(i) Data that is first produced as a result of research and development activities conducted under a CRADA and that would be a trade secret or commercial or financial data that would be privileged or confidential, if such data had been obtained from a non-Federal third party, may be protected from disclosure under the Freedom of Information Act as provided in the Stevenson-Wydler Technology Innovation Act of 1980, as amended (15 U.S.C. 3710a(c)(7)) for a period as agreed in the CRADA of up to five (5) years from the time the data is first produced or otherwise as delineated in Stevenson-Wydler, as amended. The DOE shall cooperate with the Contractor in protecting such data.

(ii) Unless otherwise expressly approved by the Contracting Officer in advance for a specific CRADA, the Contractor agrees, at the request of the Contracting Officer, to transmit such data to other DOE facilities for use by DOE or its Contractors by or on behalf of the Government. When data protected pursuant to paragraph (n)(3)(i) of this clause is so transferred, the Contractor shall clearly mark the data with a legend setting out the restrictions against private use and further dissemination, along with the expiration date of such restrictions.

(iii) A final technical report, upon completion of a CRADA, shall be provided to DOE's Office of Scientific and Technical Information; reports marked as Protected CRADA Information will not be released to the public for a period in accordance with the terms of the CRADA.

(iv) In addition to its authority to license intellectual property, the Contractor may enter into licensing agreements with third parties for data developed by the Contractor under a CRADA subject to other provisions of this contract. However, the Contractor shall neither use the protection against dissemination nor the licensing of data as an alternative to the submittal of invention disclosures which include data protected pursuant to paragraph (n)(3)(i) of this clause.

(4) *SPP and user facility programs.*

(i) SPP and User Facility Agreements (UFAs) may be available for use by the Contractor in addition to CRADAs. The Contractor agrees to inform prospective CRADA participants, which are intending to substantially pay full cost recovery for the effort under a proposed CRADA, of the availability of alternative forms of agreements, i.e., SPP and UFA, and of the Class Patent Waiver provisions associated therewith.

(ii) Where the Contractor believes that the transfer of technology to the U.S. domestic economy will benefit from, or other equity considerations dictate, an arrangement other than the Class Waiver of patent rights to the sponsor in SPP and UFAs, a request may be made to the Contracting Officer for an exception to the Class Waivers.

(iii) Rights to inventions made under agreements other than funding agreements with third parties shall be governed by the appropriate provisions incorporated, with DOE approval, in such agreements, and the provisions in such agreements take precedence over any disposition of rights contained in this contract. Disposition of rights under any such agreement shall be in accordance with any DOE class waiver (including SPP and User Class Waivers) or individually negotiated waiver which applies to the agreement.

(5) *Conflicts of interest.*

(i) Except as provided in paragraph (n)(5)(iii) of this clause, the Contractor shall assure that no employee of the Contractor shall have a substantial role (including an advisory role) in the negotiation, approval or performance of a technology transfer agreement, if, to such employee's knowledge--

(A) Such employee, or the spouse, child, parent, sibling, or partner of such employee, or an organization (other than the Contractor) in which such employee serves as an officer, director, trustee, partner, or employee-

(1) Holds financial interest in any entity, other than the Contractor, that has a substantial interest in the entity of the technology transfer agreement; or

(2) Receives a gift or gratuity from any entity, other than the Contractor, that has a substantial interest in the entity of the technology transfer agreement; or

(B) A financial interest in any entity, other than the Contractor, that has a substantial interest in the entity of the technology transfer agreement, is held by any person or organization with whom such employee is negotiating or has any arrangement concerning prospective employment.

(ii) The Contractor shall require that each employee of the Contractor who has a substantial role (including an advisory role) in the negotiation, approval or performance of the technology transfer agreement certify through the Contractor to the Contracting Officer that the circumstances described in paragraph (n)(5)(i) of this clause do not apply to that employee.

(iii) The requirements of paragraphs (n)(5)(i) and (n)(5)(ii) of this clause shall not apply in a case where the Contracting Officer is advised by the Contractor in advance of the participation of an employee described in those paragraphs of the nature of and extent of any financial interest described in paragraph (n)(5)(i) of this clause, and the Contracting Officer determines that such financial interest is not so substantial as to be considered likely to affect the integrity of the Contractor employee's participation in the process of negotiation, approval or performance of the technology transfer agreement.

(o) *Technology transfer in other cost-sharing agreements.* In conducting research and development activities in cost-shared agreements not covered by paragraph (n) of this clause, the Contractor, with prior written permission of the Contracting Officer, may provide for the withholding of data produced thereunder in accordance with the applicable provisions of paragraph (n)(3) of this clause.

(p) *Technology partnership ombudsman.*

(1) The Contractor agrees to establish a position to be known as "Technology Partnership Ombudsman," to help resolve complaints from outside organizations regarding the policies and actions of the Contractor with respect to technology partnerships (including CRADAs), patents owned by the Contractor for inventions made at the laboratory, and technology licensing.

(2) The Ombudsman shall be a senior official of the Contractor's laboratory staff, who is not involved in day-to-day technology partnerships, patents or technology licensing, or, if appointed from outside the laboratory or facility, shall function as such senior official.

(3) The duties of the Technology Partnership Ombudsman shall include—

- (i) Serving as the focal point for assisting the public and industry in resolving complaints and disputes with the laboratory or facility regarding technology partnerships, patents, and technology licensing;
- (ii) Promoting the use of collaborative alternative dispute resolution techniques such as mediation to facilitate the speedy and low cost resolution of complaints and disputes, when appropriate; and
- (iii) Submitting a quarterly report, in a format provided by DOE, to Director of the DOE Office of Dispute Resolution and the Contracting Officer concerning the number and nature of complaints and disputes raised, along with the Ombudsman's assessment of their resolution, consistent with the protection of confidential and sensitive information.

(End of clause)

970.5227-12 Patent Rights-Management and Operating Contracts, For-Profit Contractor, Patent Waiver Alternate 1 (DEC 2000) (DEVIATION)

(a) Definitions.

Department of Energy (DOE), as used in this clause, includes the National Nuclear Security Administration (NNSA), and unless otherwise identified or indicated, includes the coordinated efforts of the DOE and NNSA.

DOE licensing regulations means the Department of Energy patent licensing regulations at 10 CFR part 781.

DOE patent waiver regulations means the Department of Energy patent waiver regulations at 10 CFR part 784.

Exceptional Circumstance Subject Invention means any subject invention in a technical field or related to a task determined by the Department of Energy to be subject to an exceptional circumstance under 35 U.S.C. 202(a)(ii), and in accordance with 37 CFR 401.3(e).

Initial Patent Application means, as to a given Subject Invention, the first provisional or non-provisional U.S. national application for patent as defined in 37 CFR 1.9(a)(2) and (3), respectively, the first international application filed under the Patent Cooperation Treaty as defined in 37 CFR 1.9(b) which designates the United States, or the first application for a Plant Variety Protection certificate, as applicable.

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.).

Made when used in relation to any invention means the conception or first actual reduction to practice of such invention.

Patent Counsel means DOE Patent Counsel assisting the DOE contracting activity. The Patent Counsel is the first and primary point of contact for activities described in this clause.

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.

Statutory period means the one-year period before the effective filing date of a claimed invention 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.

Subject Invention means any invention of the Contractor conceived or first actually reduced to practice in the course of or under this contract, 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)) shall also occur during the period of contract performance.

(b) *Allocation of Principal Rights.*

(1) *Assignment to the Government.* Except to the extent that rights are retained by the Contractor by the granting of an advance class waiver pursuant to subparagraph (b)(2) of this clause or a determination of greater rights pursuant to subparagraph (b)(7) of this clause, the Contractor agrees to assign to the Government the entire right, title, and interest throughout the world in and to each subject invention.

(2) *Advance class waiver of Government rights to the Contractor.* DOE may grant to the Contractor an advance class waiver of Government rights in any or all subject inventions, at the time of execution of the contract, such that the Contractor may elect to retain the entire right, title and interest throughout the world to such waived subject inventions, in accordance with the terms and conditions of the advance class waiver. Unless otherwise provided by the terms of the advance class waiver, any rights **in** a subject invention retained by the Contractor under an advance class waiver are subject to 35 U.S.C. 203 and the provisions of this clause, including the Government license provided for in subparagraph (b)(3) of this clause, (t) U.S. Competitiveness of this clause, and any reservations and conditions deemed appropriate by the Secretary of Energy or designee.

(3) *Government license.* With respect to any subject invention to which the Contractor retains title, either under an advance class waiver pursuant to subparagraph (b)(2) or a determination of greater rights pursuant to subparagraph (b)(7) of this clause, the Government has 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.

(4) *Foreign patent rights.* If the Government has title to a subject invention and the Government decides against securing patent rights in a foreign country for the subject invention, the Contractor may request such foreign patent rights from DOE, and DOE may grant the Contractor's request, subject to 35 U.S.C. 203 and the provisions of this clause, including the Government license provided for in subparagraph (b)(3) of this clause, and any reservations and conditions deemed appropriate by the Secretary of Energy or designee.

(5) *Treaties and international agreements.* Any rights acquired by the Contractor in subject inventions are subject to any disposition of right, title, or interest in or to subject inventions provided for in treaties or international agreements identified at DOE's Office of International Affairs (international Commitments-IEC) (<http://energy.gov/ia/iec-documents>), or other rights which are necessary for the Government to meet its obligations to foreign governments, their nationals and international organizations under such treaties or international agreements with respect to subject inventions.

(6) *Exceptional circumstance subject inventions.* Except to the extent that rights are retained by the Contractor by a determination of greater rights **in** accordance with subparagraph (b)(7) of this clause, the Contractor does not have the right to retain title to any exceptional circumstance subject inventions and agrees to assign to the Government the entire right, title, and interest, throughout the world, in and to any exceptional circumstance subject inventions.

(i) Inventions within or relating to the following fields of technology are exceptional circumstance subject inventions—

- (A) Uranium enrichment technology;
- (B) Storage and disposal of civilian high-level nuclear waste and spent fuel technology; and
- (C) National security technologies classified or sensitive under Section 148 of the Atomic Energy Act(42 U.S.C. 2168).

(ii) As determined by the DOE, inventions made under any agreement, contract or subcontract, related to the exceptional circumstance subject inventions under U.S.C. § 202, maintained by the Office of the Assistant General Counsel for Technology Transfer and Intellectual Property, include but is not limited to the following-

- (A) DOE Steel Initiative and Metals Initiative;
- (B) U.S. Advanced Battery Consortium;
- (C) Any funding agreement which is funded in part by the Electric Power Research Institute (EPRI) or the Gas Research Institute (GRI);
- (D) Any funding agreement related to Energy Efficiency, Storage, Integration and Related Technologies, Renewable Energy, and Advanced Energy Technologies which is funded by the Office of Energy Efficiency and Renewable Energy (EERE) or the Advanced Research Projects Agency-Energy (ARPA-E);
- (E) Solid State Energy Conversion Alliance (SECA), if the Contractor is a participant in the "Core Technology Program";
- (F) Solid State Lighting (SSL) Program, if the Contractor is a participant in the "Core Technology Program.";
- (G) Cybersecurity, Energy Security, and Emergency Response;
- (H) Quantum Information Science Technologies; and
- (I) Domestic Manufacture of DOE Science and Energy Technologies (S&E DEC).

(iii) Inventions subject to "Department of Energy Determination of Exceptional Circumstances under the Bayh-Dole Act to Further Promote Domestic Manufacture of DOE Science and Energy Technologies" (S&E DEC) issued 6/7/2021 must comply with paragraph (t) U.S. Competitiveness requirements to the maximum extent authorized by the S&E DEC unless otherwise directed by DOE Patent Counsel in writing.

(iv) Exceptional circumstances subject inventions are as set forth in the applicable patent waiver. In addition, DOE reserves the right to unilaterally amend this contract to modify, by deletion or insertion, technical fields, programs, initiatives, and/or other classifications for the purpose of defining

DOE exceptional circumstance subject inventions.

(7) *Contractor request for greater rights.* The Contractor may request greater rights in an identified subject invention, including an exceptional circumstance subject invention, to which the Contractor does not have the right to elect to retain title, in accordance with the DOE patent waiver regulations, by submitting such a request in writing to Patent Counsel with a copy to the Contracting Officer at the time the subject invention is first disclosed to DOE pursuant to subparagraph (c)(1) of this clause, or not later than eight (8) months after such disclosure, unless a longer period is authorized in writing by the Contracting Officer for good cause shown in writing by the Contractor. DOE may grant or refuse to grant such a request by the Contractor. Unless otherwise provided in the greater rights determination, any rights in a subject invention obtained by the Contractor under a determination of greater rights is subject to 35 U.S.C. 203 and the provisions of this clause, including the Government license provided for in subparagraph (b)(3) of this clause, and to any reservations and conditions deemed appropriate by the Secretary of Energy or designee.

(8) *Contractor employee-inventor rights.* If the Contractor does not elect to retain title to a subject invention or does not request greater rights in a subject invention, including an exceptional circumstance subject invention, to which the Contractor does not have the right to elect to retain title, a Contractor employee-inventor, after consultation with the Contractor and with written authorization from the Contractor in accordance with 10 CFR 784.9(b)(4), may request greater rights, including title, in the subject invention or the exceptional circumstance invention from DOE, and DOE may grant or refuse to grant such a request by the Contractor employee-inventor.

(9) *Government assignment of rights in Government employees' subject inventions.* If a DOE employee is a joint inventor of a subject invention to which the Contractor has rights, DOE may assign or refuse to assign any rights in the subject invention acquired by the Government from the DOE employee to the Contractor, consistent with 48 CFR 27.304-1(d). Unless otherwise provided in the assignment, the rights assigned to the Contractor are subject to the Government license provided for in subparagraph (b)(3) of this clause, and to any provision of this clause applicable to subject inventions in which rights are retained by the Contractor, and to any reservations and conditions deemed appropriate by the Secretary of Energy or designee. The Contractor shall share royalties collected for the manufacture, use or sale of the subject invention with the DOE employee.

(c) *Subject invention disclosure, election of title, and filing of patent application by Contractor.*

(1) *Subject invention disclosure.* The Contractor shall disclose each subject invention to Patent Counsel with a copy to the Contracting Officer within two (2) months after an inventor discloses it in writing to contractor personnel responsible for patent matters or, if earlier, within six (6) months after the Contractor has knowledge of the subject invention, but in any event no less than 60 days before any on sale, public use, or publication of the subject invention. The disclosure to DOE shall be in the form of a written or electronic report and shall include:

- (i) The contract number under which the subject invention was made;
- (ii) The inventor(s) of the subject invention;
- (iii) A description of the subject invention in sufficient technical detail to convey a clear understanding of the nature, purpose and operation of the subject

invention, and of the physical, chemical, biological or electrical characteristics of the subject invention, to the extent known by the Contractor at the time of the disclosure;

(iv) The date and identification of any publication, on sale or public use of the invention;

(v) The date and identification of any submissions for publication of any manuscripts describing the invention, and a statement of whether the manuscript is accepted for publication, to the extent known by the Contractor at the time of the disclosure;

(vi) A statement indicating whether the subject invention is an exceptional circumstance subject invention, related to national security, or subject to a treaty or an international agreement, to the extent known or believed by Contractor at the time of the disclosure;

(vii) All sources of funding by Budget and Resources (B&R) code and, if applicable, the technology transfer agreement numbers; and

(viii) The identification of any agreement relating to the subject invention, including Cooperative Research and Development Agreements and Strategic Partnership Projects agreements.

Unless the Contractor contends otherwise in writing at the time the invention is disclosed, inventions disclosed to DOE under this paragraph are deemed made in the manner specified in Sections (a)(1) and (a)(2) of 42 U.S.C. 5908.

(2) *Publication after disclosure.* After disclosure of the subject invention to the DOE, the Contractor shall promptly notify Patent Counsel of the acceptance for publication of any manuscript describing the subject invention or of any expected or on sale or public use of the subject invention, known by the Contractor. The Contractor shall obtain approval from Patent Counsel prior to any release or publication of information concerning an exceptional circumstance subject invention or any subject invention related to a treaty or international agreement.

(3) *Election by the Contractor under an advance class waiver.* If the Contractor has the right to elect to retain title to subject inventions under an advance class waiver granted in accordance with subparagraph (b)(2) of this clause, and unless otherwise provided for by the terms of the advance class waiver, the Contractor shall elect in writing whether or not to retain title to any subject invention by notifying DOE within two (2) years of the date of the disclosure of the subject invention to DOE, in accordance with subparagraph (c)(1) of this clause. The notification shall identify the advance class waiver, state the countries, including the United States, in which rights are retained, and certify that the subject invention is not an exceptional circumstance subject invention or subject to a treaty or international agreement. If a publication, on sale or public use of the subject invention has initiated the Statutory Period under 35 U.S.C. 102(b), the period for election may be shortened by DOE to a date that is no more than sixty (60) days prior to the end of the Statutory Period.

(4) *Filing of patent applications by the Contractor under an advance class waiver.* If the Contractor has the right to retain title to a subject invention in accordance with an advance class waiver pursuant to subparagraph (b)(2) of this clause or a determination of

greater rights pursuant to paragraph (b)(7) of this clause, and unless otherwise provided for by the terms of the advance class waiver or greater rights determination, the Contractor shall file Initial Patent Application claiming the subject invention to which it retains title either within one (1) year after the Contractor's election to retain or grant of title to the subject invention or prior to the end of any Statutory Period whichever occurs first. Any patent applications filed by the Contractor in foreign countries or international patent offices shall be filed within either ten (10) months of the corresponding first filed patent application or, if such filing has been prohibited by a Secrecy Order, within six (6) months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications.

(5) *Submission of patent information and documents.* If the Contractor files a domestic or foreign patent application claiming a subject invention, the Contractor shall promptly submit to Patent Counsel, upon request, the following information and documents:

(i) The filing date, serial number, title, and a copy of the patent application (including an English-language version if filed in a language other than English);

(ii) An executed and approved instrument fully confirmatory of all Government rights in the subject invention; and

(iii) The patent number, issue date, and a copy of any issued patent claiming the subject invention.

(6) *Contractor's request for an extension of time.* Requests for an extension of the time to disclose a subject invention, to elect to retain title to a subject invention, or to file a patent application under subparagraphs (c)(1), (3), and (4) of this clause may be granted at the discretion of Patent Counsel or DOE.

(7) *Duplication and disclosure of documents.* The Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause; provided, however, that any such duplication or disclosure by the Government is subject to 35 U.S.C. 205 and 37 CFR Part 40.

(8) *Reporting to DOE and Approvals.* Whenever possible in this paragraph (c), the Government electronic reporting system (e.g., iEdison or similar system) may be used for reporting and approvals.

(d) *Conditions when the Government may obtain title notwithstanding an advance class waiver.*

(1) *Return of title to a subject invention.* If the Contractor requests that DOE acquire title or rights from the Contractor in a subject invention, including an exceptional circumstance subject invention, to which the Contractor retained title or rights under subparagraph (b)(2) or subparagraph (b)(7) of this clause, DOE may acquire such title or rights from the Contractor, or DOE may decide against acquiring such title or rights from the Contractor, at DOE's sole discretion.

(2) *Failure to disclose or elect to retain title.* Title vests in DOE and DOE may request, in writing, a formal assignment of title to a subject invention from the Contractor, and the Contractor shall convey title to the subject invention to DOE, if

the Contractor elects not to retain title to the subject invention under an advance class waiver, or the Contractor fails to disclose or fails to elect to retain title to the subject invention within the times specified in subparagraphs (c)(1) and (c)(3) of this clause.

(3) *Failure to file domestic or foreign patent applications.* In those countries in which the Contractor fails to file a patent application within the times specified in subparagraph (c)(4) of this clause, DOE may request, in writing, title to the subject invention from the Contractor, and the Contractor shall convey title to the subject invention to DOE; provided, however, that if the Contractor has filed a patent application in any country after the times specified in subparagraph (c)(4) of this clause, but prior to its receipt of DOE's written request for title, the Contractor continues to retain title in that country.

(4) *Discontinuation of patent protection by the Contractor.* If the Contractor decides to not file a non-provisional application, or to discontinue the prosecution of a patent application, the payment of maintenance fees, or the defense of a subject invention in a reexamination or opposition proceeding, in any country, DOE may request, in writing, title to the subject invention from the Contractor, and the Contractor shall convey title to the subject invention to DOE.

(5) *Termination of advance class waiver.* DOE may request, in writing, title to any subject inventions from the Contractor, and the Contractor shall convey title to the subject inventions to DOE, if the advance class waiver granted under subparagraph (b)(2) of this clause is terminated under paragraph (v) of this clause.

(6) Upon a breach of paragraph(t) U.S. Competitiveness of this clause.

(e) *Minimum rights of the contractor.*

(1) *Request for a Contractor license.* Except for subject inventions that the Contractor fails to disclose within the time periods specified at subparagraph (c)(1) of this clause, the Contractor may request a revocable, nonexclusive, royalty-free license in each patent application filed in any country claiming a subject invention and any resulting patent in which the Government obtains title, and DOE may grant or refuse to grant such a request by the Contractor. If DOE grants the Contractor's request for a license, the Contractor's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Contractor is a party and includes the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded.

(2) *Transfer of a contractor license.* Contractor must obtain DOE approval of any transfer of the Contractor's license in a subject invention, and DOE may determine that the Contractor's license is non-transferable, on a case-by-case basis.

(3) *Revocation or modification of a contractor license.* DOE may revoke or modify the Contractor's domestic license 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 in 37 CFR part 404 and DOE licensing regulations. DOE may not revoke the Contractor's domestic license in that field of use or the geographical areas in which the Contractor, its licensees or its domestic subsidiaries or affiliates have achieved practical applications and continues to make the benefits of the invention reasonably accessible to the public. DOE may revoke or modify the Contractor's

license in any foreign country to the extent the Contractor, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

(4) *Notice of revocation or modification of a contractor license.* Before revocation or modification of the license, DOE shall furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor shall be allowed thirty (30) days from the date of the notice (or such other time as may be authorized by DOE for good cause shown by the Contractor) to show cause why the license should not be revoked or modified. The Contractor has the right to appeal any decision concerning the revocation or modification of its license, in accordance with applicable regulations in 37 CFR part 404 and DOE licensing regulations.

(f) Contractor action to protect the Government's interest.

(1) *Execution and delivery of title or license instruments.* The Contractor agrees to execute or have executed, and to deliver promptly to DOE all instruments necessary to accomplish the following actions:

(i) Establish or confirm the Government's rights throughout the world in subject inventions to which the Contractor elects to retain title;

(ii) Convey title in a subject invention to DOE pursuant to subparagraph (b)(5) and paragraph (d) of this clause; or

(iii) Enable the Government to obtain patent protection throughout the world in a subject invention to which the Government has title.

(2) *Contractor employee agreements.* The Contractor agrees to require, by written agreement, its employees, other than clerical and non-technical employees, to disclose promptly in writing to contractor personnel identified as responsible for the administration of patent matters and in a format suggested by the Contractor, each subject invention made under this contract, and to execute all papers necessary to file patent applications claiming subject inventions or to establish the Government's rights in the subject inventions. This disclosure format shall at a minimum include the information required by subparagraph (c)(1) of this clause. The Contractor 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) *Contractor procedures for reporting subject inventions to DOE.* The Contractor agrees to establish and maintain effective procedures for ensuring the prompt identification and timely disclosure of subject inventions to DOE. The Contractor shall submit a written description of such procedures to the Contracting Officer, upon request, for evaluation and approval of the effectiveness of such procedures by the Contracting Officer.

(4) *Notification of discontinuation of patent protection.* With respect to any subject invention for which the Contractor has responsibility for patent prosecution, the Contractor shall notify Patent Counsel of any decision to discontinue the prosecution of a patent application, payment of maintenance fees, or defense of a subject invention in a reexamination or opposition proceeding, in any country, not less than 60 days before the expiration of the response period for any action required by the corresponding patent

office.

(5) *Notification of Government rights.* With respect to any subject invention to which the Contractor has title, the Contractor agrees to include, within the specification of any United States patent application and within any patent issuing thereon claiming a subject invention, the following statement, "This invention was made with Government support under (identify the contract) awarded by the United States Department of Energy. The Government has certain rights in the invention."

(6) *Avoidance of royalty charges.* If the Contractor licenses a subject invention, the Contractor agrees to avoid royalty charges on acquisitions involving Government funds, including funds derived through a Military Assistance Program of the Government or otherwise derived through the Government, to refund any amounts received as royalty charges on a subject invention in acquisitions for, or on behalf of, the Government, and to provide for such refund in any instrument transferring rights in the subject invention to any party.

(7) *DOE approval of assignment of rights.* Rights in a subject invention in the United States may not be assigned by the Contractor without the approval of DOE.

(8) *Small business firm licensees.* The Contractor shall make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms, and may give a preference to a small business firm when licensing a subject invention if the Contractor determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided, the Contractor is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision as to whether to give a preference in any specific case is at the discretion of the Contractor.

(9) *Contractor licensing of subject inventions.* To the extent that it provides the most effective technology transfer, licensing of subject inventions shall be administered by Contractor employees on location at the facility.

(g) *Subcontracts.*

(1) *Subcontractor subject inventions.* The Contractor shall not obtain rights in the subcontractor's subject inventions as part of the consideration for awarding a subcontract.

(2) *Inclusion of patent rights clause-non-profit organization or small business firm subcontractors.* Unless otherwise authorized or directed by the Contracting Officer, the Contractor shall include the patent rights clause at 37 CFR 401.14, suitably modified to identify the parties, in all subcontracts, at any tier, for experimental, developmental, demonstration or research work to be performed by a small business firm or domestic nonprofit organization, except subcontracts which are subject to exceptional circumstances in accordance with 35 U.S.C. 202 and subparagraph (b)(5) of this clause. If the S&E DEC is applicable (see subparagraph (b)(3)(iii) of this clause), paragraph (t) U.S. Competitiveness must be included in the subcontractor's patent clause as paragraph (m) U.S. Competitiveness. Additionally, the following item (4) must be added to paragraph (d) of the subcontractor's patent clause "(4) Upon a breach of paragraph (m) U.S. Competitiveness of this clause."

(3) *Inclusion of patent rights clause-subcontractors other than non-profit organizations or small business firms.* Except for the subcontracts described in subparagraph (g)(2) of this clause, the Contractor shall include the patent rights clause at 48 CFR 952.227-13, suitably modified to identify the parties and any applicable exceptional circumstance, in any contract for experimental, developmental, demonstration or research work. If the S&E DEC is applicable (see subparagraph (b)(3)(iii) of this clause), paragraph (t) U.S. Competitiveness must be included in the subcontractor's patent clause as paragraph (n) U.S. Competitiveness. Additionally, the following must be appended to the first sentence paragraph of (d)(1)" or upon a breach of paragraph (n) U.S. Competitiveness of this clause."

(10) *DOE and subcontractor contract.* With respect to subcontracts at any tier, DOE, the subcontractor and Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and DOE with respect to those matters covered by this clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (j) of this clause.

(11) *Subcontractor refusal to accept terms of patent rights clause.* If a prospective subcontractor refuses to accept the terms of a patent rights clause, the Contractor shall promptly submit a written notice to the Contracting Officer stating the subcontractor's reasons for such refusal and including relevant information for expediting disposition of the matter; and the Contractor shall not proceed with the subcontract without the written authorization of the Contracting Officer.

(12) *Notification of award of subcontract.* Upon the award of any subcontract at any tier containing a patent rights clause, the Contractor shall promptly notify the Contracting Officer in writing and identify the subcontractor, the applicable patent rights clause, the work to be performed under the subcontract, and the dates of award and estimated completion. Upon request of the Contracting Officer, the Contractor shall furnish a copy of a subcontract.

(13) *Identification of subcontractor subject inventions.* If the Contractor in the performance of this contract becomes aware of a subject invention made under a subcontract, the Contractor shall promptly notify Patent Counsel and identify the subject invention, with a copy of the notification and identification to the Contracting Officer.

(h) *Reporting on utilization of subject inventions.* Upon request by DOE, the Contractor agrees to submit periodic reports, no more frequently than annually, describing the utilization of a subject invention or efforts made by the Contractor or its licensees or assignees to obtain utilization of the subject invention. In addition, the Contractor shall provide data to DOE for the annual data call for the Department of Commerce report that included the number of patent applications filed, the number of patent issued, licensing activity, gross royalties received by the Contractor, and other data and information reasonably specified by DOE. Upon request by DOE, the Contractor also agrees to provide reports in connection with any march- in proceedings undertaken by DOE, in accordance with paragraph (j) of this clause. If any data or information reported by the Contractor in accordance with this provision is considered privileged and confidential by the Contractor, its licensee, or assignee and the Contractor properly marks the data or information privileged or confidential, DOE agrees not to disclose such information to persons outside the Government, to the extent permitted by law.

(i) *Preference for United States industry.* Notwithstanding any other provision of this clause the Contractor agrees that with respect to any subject invention in which it retains title, neither it nor any assignee may grant to any person the exclusive right to use or sell any subject invention 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, DOE may waive the requirement for such an agreement upon a showing by the Contractor 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.* With respect to any subject invention to which the Contractor has elected to retain or is granted title, DOE may, in accordance with the procedures in the DOE patent waiver regulations, require the Contractor, 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. If the Contractor, assignee or exclusive licensee refuses such a request, DOE has the right to grant such a license itself under the patent waiver.

(k) *Communications.* The Contractor shall direct any notification, disclosure, or request provided for in this clause to the Patent Counsel identified in the contract.

(l) *Reports.*

(1) *Interim reports.* Upon DOE's request, the Contractor shall submit to DOE, no more frequently than annually, a list of subject inventions disclosed to DOE during a specified period, or a statement that no subject inventions were made during the specified period; and/or a list of subcontracts containing a patent clause and awarded by the Contractor during a specified period, or a statement that no such subcontracts were awarded during the specified period. The interim report shall state whether the Contractor's invention disclosures were submitted to DOE in accordance with the requirements of subparagraphs (f)(3) and (f)(4) of this clause.

(2) *Final reports.* Upon DOE's request, the Contractor shall submit to DOE, prior to closeout of the contract or within three (3) months of the date of completion of the contracted work, a list of all subject inventions disclosed during the performance period of the contract, or a statement that no subject inventions were made during the contract performance period; and/or a list of all subcontracts containing a patent clause and awarded by the Contractor during the contract performance period, or a statement that no such subcontracts were awarded during the contract performance period.

(m) *Facilities license.* In addition to the rights of the parties with respect to inventions or discoveries conceived or first actually reduced to practice in the course of or under this contract, the Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license in and to any inventions or discoveries regardless of when conceived or actually reduced to practice or acquired by the contractor at any time through completion of this contract and which are incorporated or embodied in the construction of the facility or which are utilized in the operation of the facility or which cover articles, materials, or products manufactured at the facility-

(1) To practice or have practiced by or for the Government at the facility; and

(2) To transfer such license with the transfer of that facility. Notwithstanding the acceptance or exercise by the Government of these rights, the Government may contest at any time the enforceability, validity or scope of, or title to, any rights or patents herein licensed.

(n) *Atomic energy.*

(1) *Pecuniary awards.* No claim for pecuniary award of compensation under the provisions of the Atomic Energy Act of 1954, as amended, may be asserted with respect to any invention or discovery made or conceived in the course of or under this contract.

(2) *Patent agreements.* Except as otherwise authorized in writing by the Contracting Officer, the Contractor shall obtain patent agreements to effectuate the provisions of subparagraph (o)(1) of this clause from all persons who perform any part of the work under this contract, except nontechnical personnel, such as clerical employees and manual laborers.

(o) *Classified inventions.*

(1) *Approval for filing a foreign patent application.* The Contractor shall not file or cause to be filed an application or registration for a patent disclosing a subject invention related to classified subject matter in any country other than the United States without first obtaining the written approval of the Contracting Officer.

(2) *Transmission of classified subject matter.* If in accordance with this clause the Contractor files a patent application in the United States disclosing a subject invention that is classified for reasons of security, the Contractor shall observe all applicable security regulations covering the transmission of classified subject matter. If the Contractor transmits a patent application disclosing a classified subject invention to the United States Patent and Trademark Office (USPTO), the Contractor shall submit a separate letter to the USPTO identifying the contract or contracts by agency and agreement number that require security classification markings to be placed on the patent application.

(3) *Inclusion of clause in subcontracts.* The Contractor agrees to include the substance of this clause in subcontracts at any tier that cover or are likely to cover subject matter classified for reasons of security.

(p) *Records relating to inventions.*

(1) *Contractor compliance.* Until the expiration of three (3) years after final payment under this contract, the Contracting Officer or any authorized representative may examine any books (including laboratory notebooks), records, and documents and other supporting data of the Contractor, which the Contracting Officer or authorized representative deems reasonably pertinent to the discovery or identification of subject inventions, including exceptional circumstance subject inventions, or to determine Contractor (and inventor) compliance with the requirements of this clause, including proper identification and disclosure of subject inventions, and establishment and maintenance of invention disclosure procedures.

(2) *Unreported inventions.* If the Contracting Officer is aware of an invention that is not disclosed by the Contractor to DOE, and the Contracting Officer believes

the unreported invention may be a subject invention, DOE may require the Contractor to submit to DOE a disclosure of the invention for a determination of ownership rights.

(3) *Confidentiality.* Any examination of records under this paragraph is subject to appropriate conditions to protect the confidentiality of the information involved.

(4) *Power of inspection.* With respect to a subject invention for which the Contractor has responsibility for patent prosecution, the Contractor shall furnish the Government, upon request by DOE, an irrevocable power to inspect and make copies of a prosecution file for any patent application claiming the subject invention.

(q) *Patent functions.* Upon the written request of the Contracting Officer or Patent Counsel the Contractor agrees to make reasonable efforts to support DOE in accomplishing patent-related functions for work arising out of the contract, including, but not limited to, the prosecution of patent applications, and the determination of questions of novelty, patentability, and inventorship.

(r) *Educational awards subject to 35 US. C. 212.* The Contractor shall notify the Contracting Officer prior to the placement of any person subject to 35 U.S.C. 212 in an area of technology or task related to exceptional circumstance technology or any person who is subject to treaties or international agreements as set forth in paragraph (b)(6) of this clause or to agreements other than funding agreements. The Contracting Officer may disapprove of any such placement.

(s) *Annual appraisal by Patent Counsel.* Patent Counsel may conduct an annual appraisal to evaluate the Contractor's effectiveness in identifying and protecting subject inventions in accordance with DOE policy.

(t) *U.S. Competitiveness. Notwithstanding 48 CFR 970.5227-3(!) U.S. Industrial Competitiveness, for all work subject to the S&E DEC, the Contractor 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 Contractor 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 Contractor 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. Should the Contractor or other such entity receiving rights in the invention(s): (1) undergo a change in ownership amounting to a controlling interest, or (2) sell, assign, or otherwise transfer title or exclusive rights in the invention(s), then the assignment, license, or other transfer of rights in the subject invention(s) is/are suspended until approved in writing by DOE. The Contractor and any successor assignee will convey to DOE, upon written request from DOE, title to any subject invention, upon a breach of this paragraph. The Contractor will include this paragraph in all subawards/contracts, regardless of tier, for experimental, developmental or research work.*

(u) *Publication.* The Contractor shall receive approval from Patent Counsel prior to releasing or publishing information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this contract, to ensure such release or publication does not adversely affect the patent rights of DOE or the Contractor. At the discretion of the Patent Counsel, authority to review publications prior to release may be delegated to the Contractor.

(v) *Termination of contractor's advance class waiver.* If a request by the Contractor for an advance class waiver pursuant to subparagraph (b)(2) of this clause or a determination of greater rights pursuant to paragraph (c) of this clause contains false material statements or fails to disclose material facts, and DOE relies on the false statements or omissions in granting the Contractor's request, the waiver or grant of any Government rights (in whole or in part) to the subject invention(s) may be terminated at the discretion of the Secretary of Energy or designee. Prior to termination, DOE shall provide the Contractor with written notification of the termination, including a statement of facts in support of the termination, and the Contractor shall be allowed thirty (30) days, or a longer period authorized by the Secretary of Energy or designee for good cause shown in writing by the Contractor, to show cause for not terminating the waiver or grant. Any termination of an advance class waiver or a determination of greater rights is subject to the Contractor's license as provided for in paragraph (f) of this clause.

(w) *Unauthorized Access.* The contractor will protect all invention reports, unpublished patent applications and other invention related information from unauthorized access and disclosure using at least commonly available techniques and practices. In the event that the Contractor becomes aware of unauthorized access to invention reports, unpublished patent applications and other invention related information, the Contractor shall notify Patent Counsel within 7 days.

(End of clause)

Alternate I - Weapons related subject inventions. (Deviation) As prescribed at 970.2703-2(g), insert the following definition in paragraph (a) and add subparagraph (b)(10):

(a) *Definitions. Weapons related subject invention* means any subject invention conceived or first actually reduced to practice in the course of or under work funded by or through defense programs, including Department of Defense and intelligence reimbursable work, or the Naval Nuclear Propulsion Program of the Department of Energy or the National Nuclear Security Administration.

(b) *Allocation of Principal Rights. (10) Weapons related subject inventions.* Except to the extent that DOE is solely satisfied that the Contractor meets certain procedural requirements and DOE grants rights to the Contractor in weapons related subject inventions, the Contractor does not have a right to retain title to any weapons related subject inventions.

(End of alternate)