**AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT**

<table>
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<th>ITEM</th>
<th>INFORMATION</th>
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<tr>
<td>2. AMENDMENT/MODIFICATION NO.</td>
<td>MO99</td>
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| 6. ISSUED BY | US Department of Energy  
Oak Ridge Operations  
P.O. Box 2001  
Oak Ridge, TN 37831-8756 |
| 10A. MODIFICATION OF CONTRACT/OFFER NO. | DE-AC05-00OR22725 |
| 10B. DATED (SEE ITEM 13) | October 18, 1999 |

**8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)**

<table>
<thead>
<tr>
<th>CODE</th>
<th>FACILITY CODE</th>
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| UT-Battelle, LLC  
Attn: Michael J. Frietze, Director  
Prime Contract Administration  
Post Office Box 2008  
Oak Ridge, TN 37831-6231 |

**11. THIS ITEM 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; or
  - (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or
  - (c) By separate letter or telegram 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 telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/OFFER NO. AS DESCRIBED IN ITEM 14.**

**CHECK ONE**

- A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority)
- B. THE ABOVE NUMBERED CONTRACT/OFFER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(d).
- C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
- D. OTHER (Specify type of modification and authority)  
  Mutual Agreement and P.L. 95-91

**14. DESCRIPTION OF AMENDMENT/MODIFICATION**

Organized by UCF section headings, including solicitation/contract subject matter where feasible.

See Page 2.

**15A. NAME AND TITLE OF SIGNER (Type or print)**

Greg L. Turner  
Chief Financial Officer

**15B. CONTRACT/OFFEROR**

Greg L. Turner  
(Signature of person authorized to sign)  
3/9/04

**15C. DATE SIGNED**

3/9/04

**16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)**

Susan G. Hiser  
Contracting Officer

**16B. UNITED STATES OF AMERICA**

3/15/04

**16C. DATE SIGNED**

3/15/04

STANDARD FORM 30 (REV. 10-83)  
Prescribed by GSA FAR (48 CFR 53.243)
The purpose of this modification is to: (1) Add clause H-53, Other Patent Related Matters, (2) delete clause I-123 in its entirety and substitute the clause below, (3) delete clause I-134 in its entirety and substitute the clause below, and (4) delete clause I-135 in its entirety.

1. Clause H-53, Other Patent Related Matters is added:

**H-53, Other Patent Related Matters**

(a) Transfer of Patent Rights to a Successor Contractor

As consideration for the Contractor’s commitment to expend private monies in its privately-funded technology transfer effort under this Contract, including at least two hundred fifty thousand dollars ($250,000) per year for activities under the privately-funded technology transfer program which includes a combination of the filing of an average of three (3) patent applications per year during the period of this Contract, including expenses related to the patenting, marketing, licensing and development of Subject Inventions, the Parties agree that at the termination or expiration of this Contract, the following terms and conditions shall apply to Subject Inventions which were elected to be pursued under the Contractor’s privately-funded technology transfer program, and to the licenses and royalties generated therefrom:

(1) In the event Contractor has executed a license, assignment or other commercialization agreement to a Subject Invention prior to termination or expiration of this Contract in which royalties, fees, equity or other consideration is to be or has been paid (hereinafter “agreement”), the distribution of net income from royalties, equity, or any other consideration received or to be received under such agreement shall remain as prior to Contract termination or expiration and shall continue for the duration of such agreement. As set forth in paragraph (d) below, fifty-one percent (51%) of such net income shall go to the Successor Contractor at the Facility for use at the Facility pursuant to its contract or, in the absence of a Successor Contractor, to such other entity designated by the Government, and forty-nine percent (49%) may be retained by the Contractor for use in accordance with 35 USC Section 200 et seq. Administration of agreements related to such Subject Invention, shall remain with the Contractor. Title to such Subject Invention shall remain with the Contractor provided the Contractor has fulfilled the commitments set forth in paragraph (a) above. If the Contractor has not fulfilled the commitments set forth in paragraph (a) above, upon request, title to such Subject Invention shall be transferred to the Successor Contractor, or such other entity designated by the Government.

(2) In the event Contractor has not executed an agreement (as defined in paragraph (1) above) to a Subject Invention, upon request, title to such Subject Invention shall be transferred to the Successor Contractor, or to such other entity designated by the Government, unless Contractor can demonstrate that it has expended at least twenty thousand dollars ($20,000) of private monies in its privately-funded technology
transfer program toward the patenting, licensing, marketing and/or development of such Subject Invention, and the Contractor has fulfilled the commitments set forth in paragraph (a) above. In the event Contractor retains title to a Subject Invention under this paragraph, the distribution of royalties, fees, equity or other consideration from such agreement shall be as set forth in paragraph (1) above.

(3) In the event Contractor retains title to Subject Inventions under paragraphs (1) or (2) above, and executes an agreement (as defined in paragraph (1) above) to such Subject Inventions after the termination or expiration of this Contract, the distribution of royalties, fees, equity or other consideration from such agreement shall be as set forth in paragraph (1) above.

(4) The Contractor and the Government shall enter negotiations prior to such termination or expiration with respect to retention of the title to Subject Inventions. Such negotiations shall consider the equities of the Parties with respect to each Subject Invention and shall take into consideration the presence of private investment, DOE’s need for continued operation of the Facility, potential commercial use, assumption of patent related liabilities, effective technology transfer, and the need to market the technology. Such negotiations shall not change the disposition of title provided for in paragraphs (1) and (2) above unless mutually agreed by the Contractor and the Government.

(5) For any Subject Invention to which the Contractor maintains title or administration of an agreement under paragraphs (a)(1)-(2) above, the Contractor agrees that, to the extent it is able to do so in view of prior licenses or assignments, it will negotiate in good faith to enable the Successor Contractor to practice such subject invention in the form of CRADAs, Work For Others agreements, licenses or other appropriate agreements, in order to fulfill the missions and programs of the Facility. It is the intention of the Contractor to enable the Successor Contractor to continue operation of the Facility, including the Facility’s technology transfer program. In any event, the Successor Contractor retains the nonexclusive royalty-free right to practice the Subject Invention on behalf of the U.S. Government.

(6) The provisions of paragraph (a)(1), (2), (3), and (5) above survive expiration or termination of the Contract.

(b) Costs

(1) Except as otherwise specified in the clause of this Contract entitled, “Technology Transfer Mission,” as allowable costs for conducting activities pursuant to provisions of that clause, no costs are allowable as direct or indirect costs for the preparation, filing, or prosecution of patent applications or the payment of maintenance fees or licensing and marketing costs after the Contractor elects to pursue commercialization of a Subject Invention under its privately-funded technology transfer program pursuant to paragraph (f) below.
(2) If an extension of time for election of a Subject Invention for privately-funded technology transfer is approved in accordance with paragraph (f) below, Contractor shall reimburse all allowable costs incurred with respect to such Subject Invention during the time period of the extension. The Contractor shall also reimburse all patent costs which are incurred under the Contract for all Subject Inventions elected to be treated under privately-funded technology transfer, regardless of when such costs are incurred.

(c) Liability of the Government

(1) All costs, including litigation costs, associated with and attributed to Contractor’s privately funded technology transfer program are unallowable.

(2) The Contractor shall not include in any license agreement or assignment any guarantee or requirement which would obligate the Government to pay any costs or create any liability on behalf of the Government.

(3) The Contractor shall include in all licensing agreements and in any assignment of title the following clauses unless otherwise approved or directed by the Contracting Officer following consultation with DOE Patent Counsel:

(i) "This agreement is entered into by UT-Battelle, LLC (UT-Battelle) in its private capacity. It is understood and agreed that the U.S. Government is not a party to this agreement and in no manner whatsoever shall be liable for nor assume any responsibility or obligation for any claim, cost or damages arising out of or resulting from this agreement or the subject matter licensed assigned)."

(ii) "Nothing in this Agreement shall be deemed to be a representation or warranty by UT-Battelle or the U.S. Government of the validity of any of the patents or the accuracy, safety, or usefulness for any purpose, of any TECHNICAL INFORMATION, techniques, or practices at any time made available by UT-Battelle. Neither the U.S. Government nor UT-Battelle nor any member company of UT-Battelle shall have any liability whatsoever to LICENSEE or any other person for or on account of any injury, loss, or damage of any kind or nature sustained by, or any damage assessed or asserted against, or any other liability incurred by or imposed upon LICENSEE or any other person, arising out of or in connection with or resulting from:

(A) The production, use, or sale of any apparatus or product, or the practice of the INVENTIONS;

(B) The use of any TECHNICAL INFORMATION, techniques, or practices disclosed by UT-Battelle; or
(C) Any advertising or other promotional activities with respect to any of the foregoing, and LICENSEE shall hold the U.S. Government, UT-Battelle, and any member company of UT-Battelle harmless in the event the U.S. Government, UT-Battelle, or any member company of UT-Battelle is held liable.

UT-Battelle represents that it has the right to grant all of the rights granted herein, except as to such rights as the Government of the United States of America may have or may assert."

(d) Distribution of net income

In the event the Contractor engages in a privately-funded technology transfer program under the clause of this Contract entitled, “Patent Rights – Management and Operating Contracts, Nonprofit Organization or Small Business Firm Contractor” or the clause of this Contract entitled, “Rights in Data – Technology Transfer”, such that private funds are utilized for technology transfer after the Contractor elects to pursue privately-funded commercialization of a Subject Invention or after the Contractor has received permission from the Contracting Officer to assert statutory copyright in a software program and received DOE approval to commercialize such software under its privately-funded technology transfer program under paragraph (i) below, net income from such privately-funded technology transfer program shall be distributed as follows:

(1) Fifty-one percent (51%) of net income shall be used at the Facility for scientific research, development and education consistent with the research and development mission and objectives of the Facility. Forty-nine percent (49%) of such net income may be used by the Contractor at a location other than the Facility if such use is for scientific research, development, and education consistent with the research and development mission and objectives of the Facility in accordance with 35 USC Section 200 et seq.

(2) "Net income" is defined as that amount remaining after the expense of patenting costs, licensing and marketing costs, payments to inventors, and other expenses incidental to the administration of subject inventions is deducted from gross income received.

(e) Equity Plan

It is the intent of the Government and the Contractor that the Contractor shall, in its discretion, take reasonable and prudent actions from both a commercial and stewardship perspective related to the ownership of equity received from third parties under this Contract. Contractor shall submit to the Contracting Officer a plan which shall set forth principles for the Contractor’s acquisition, retention and disposition of equity received from third parties as
consideration for licenses or assignments granted to such third party. Such plan shall consider, at a minimum,

(1) the manner in which the Contractor shall acquire such equity in a third party, including the manner in which Contractor shall apportion capital contributions to such third party between the relative value of private Contractor contributions and the value of contributions representing a license under a Subject Invention;

(2) the manner in which the Contractor shall hold such equity, given that the Government has an undivided 51% interest in that portion of such equity representing the value of contributions resulting from a license to such Subject Invention;

(3) the manner in which the Contractor shall dispose of such equity, giving due consideration to the potential for a conflict of interest between the interests of the Government and the Contractor; and

(4) the manner in which Contractor’s inventors are compensated.

(f) The Contractor shall indicate whether a Subject Invention will be pursued under its government-funded technology transfer program or its privately-funded technology transfer program within six (6) months after the Subject Invention is reported to the Contractor, unless an extension is otherwise agreed in writing by the Patent Counsel. Subject Inventions reported to the Contractor on or after the effective date of the contract modification that incorporates this clause into Prime Contract No. DE-AC05-00OR22725 will be eligible for commercialization pursuant to the privately-funded technology transfer program.

(g) In its privately-funded technology transfer program, the Contractor shall be substantially guided by the principles of U.S. Competitiveness and Fairness of Opportunity as set forth herein.

(h) When requesting approval from DOE to assert statutory copyright in a particular software package pursuant to the clause entitled “Rights in Data—Technology Transfer” (Clause I-93(e) herein), Contractor may request that commercialization of such software proceed under the provisions of this Clause H-53. If approved, no costs of such commercialization thereafter shall be allowable, and the proceeds of such commercialization shall be treated in accordance with paragraph (a) above as if such proceeds had resulted from the commercialization of a Subject Invention. Upon termination or expiration of the Contract, such software will be treated as if such software were a Subject Invention elected under Contractor’s privately-funded technology transfer program. Disposition of title to such software will be governed by the provisions of paragraphs (a)(1)-(a)(5) above, except that the $20,000 expenditure requirement for Subject Inventions set forth in paragraph (a)(2) is not applicable to such software.
(i) Contractor’s privately-funded technology transfer program shall be conducted so as to avoid interference with or adverse effects on Contractor’s performance of other activities authorized by the Contract, including its government-funded technology transfer program.

(j) The Contractor shall have procedures implementing its privately-funded technology transfer program. Such implementing procedures shall be provided to the Contracting Officer for review and approval within ninety (90) days after execution of the contract modification authorizing privately-funded technology transfer. The Contracting Officer shall have thirty (30) days thereafter to approve or require specific changes to such procedures.

(k) To the extent it provides the most effective technology transfer program, DOE retains the right to require certain portions of Contractor’s privately-funded technology transfer program to be administered by a non-laboratory employee(s).

(End of Clause)

2. Clause I-123, DEAR 970.5204-40 (Jan 1996) is deleted in its entirety and the following is substituted:

I-123  970.5227-3 Technology Transfer Mission (AUG 2002) Alternate I (AUG 2002) (Deviation)

This clause has as its purpose implementation of the National Competitiveness Technology Transfer Act of 1989 (Sections 3131, 3132, 3133, and 3157 of Pub. L. 101-189 and as amended by Pub. L. 103-160, Sections 3134 and 3160). The Contractor shall conduct technology transfer activities with a purpose of providing benefit from Federal research to U.S. industrial competitiveness.

(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)(1) 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); 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 Work for Others (WFO); 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, WFO, science education activities, consulting, personnel, assignments, and licensing in accordance with this clause.

(b) Definitions. (1) Contractor's Laboratory Director means the individual who has supervision over all or substantially all of the Contractor's operations at the Laboratory.

(2) Intellectual Property means patents, trademarks, copyrights, mask works, protected CRADA information, and other forms of comparable property rights protected by Federal Law and other foreign counterparts.

(3) 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.

(4) 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 following:

(i) Purpose;

(ii) Scope of Work which delineates the rights and responsibilities of the Government, the Contractor and Third Parties, one of which must be a non-Federal party;
(iii) Schedule for the work; and

(iv) Cost and resource contributions of the parties associated with the work and the schedule.

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

(6) 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.

(7) Laboratory Tangible Research Product means tangible material results of research which

(i) are provided to permit replication, reproduction, evaluation or confirmation of the research effort, or to evaluate its potential commercial utility;

(ii) are not materials generally commercially available; and

(iii) were made under this contract by Laboratory employees or through the use of Laboratory research facilities.

(8) 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.

(9) (Deviation) Privately funded technology transfer means the prosecuting, maintaining, licensing, and marketing of inventions which are not owned by the Government (and not related to CRADAs) when such activities are conducted entirely without the use of Government funds.

(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, and the widespread notice of technology transfer opportunities, shall be deemed allowable provided that such costs meet the other requirements of the allowable costs provisions of this Contract. In addition to any separately designated funds, these costs in any fiscal year shall not exceed an amount equal to 0.5 percent of the operating funds included in the Federal research and development budget (including Work For Others) of the Laboratory for that fiscal year without written approval of the contracting officer.

(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 other 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 the CRADA activity 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 WFO 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 has been a Laboratory employee within the previous two years or to the company in which the individual is a principal; and

(9) Notify non-Federal sponsors of WFO activities, or non-Federal users of user facilities, of any relevant Intellectual Property interest of the Contractor prior to execution of WFOs or user agreements.

(10) Notify DOE prior to evaluating a proposal by a third party or DOE, when the subject matter of the proposal involves an elected or waived subject invention under this contract or one in which the Contractor intends to elect to retain title under this contract.

(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. (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; or
(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; and

(B) in licensing 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.

(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).

(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. 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, 75 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 an illegal augmentation of funds furnished by the U.S. Government.

(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.

(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 package, 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). 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.

(l) 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 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 Cooperative Research and Development Agreements. Upon approval of the contracting officer and as provided in a DOE approved Joint Work Statement (JWS), the Laboratory Director, or designee, may enter into CRADAs 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 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 or proposed CRADA, the contracting officer shall approve, disapprove or request modification to the JWS 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 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 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;

(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. 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) 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) Work For Others and User Facility Programs. (i) WFO and User Facility Agreements (UFAs) are not CRADAs and will be available for use by the Contractor in addition to CRADAs for achieving utilization of employee expertise and unique facilities for maximizing technology transfer. The Contractor agrees form 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., WFO 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 WFO 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 Work for
Others 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 preparation, negotiation, or
approval of a CRADA, 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 preparation, negotiation, or approval of
the CRADA;

(2) receives a gift or gratuity from any entity, other than the Contractor,
that has a substantial interest in the preparation, negotiation, or
approval of the CRADA; or

(B) A financial interest in any entity, other than the Contractor, that has a
substantial interest in the preparation, negotiation, or approval of the
CRADA, 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 preparation,
negotiation, or approval of a CRADA 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 in the preparation, negotiation or approval of a
CRADA 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 preparing, negotiating, or approving the
CRADA.
(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 the Secretary of Energy, the Administrator for Nuclear Security, the 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.

(q) (Deviation) Nothing in paragraphs (c) Allowable Costs, (e) Fairness of Opportunity, (f) U.S. Industrial Competitiveness, (g) Indemnity-Product Liability, (h) Disposition of Income, and (i) Transfer to Successor Contractor of this clause are intended to apply to the contractor's privately funded technology transfer activities if such privately funded activities are addressed elsewhere in the contract.

(End of clause)

3. Clause I-134, DEAR 970.5204-71, Patent Rights – Nonprofit Management and Operating Contractors (Feb 1995) (Modified) is deleted in its entirety and the following is substituted:

(a) Definitions.

(1) DOE licensing regulations means the Department of Energy patent licensing regulations at 10 CFR Part 781.

(2) 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).

(3) 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.).

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

(5) 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 (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

(6) Patent Counsel means the Department of Energy (DOE) Patent Counsel assisting the DOE contracting activity.

(7) 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.

(8) 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 121.38 and 13 CFR 121.312, respectively, are used.

(9) Subject Invention means any invention of the contractor conceived or first actually reduced to practice in the performance of work 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.

(10) 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.

(1) Retention of title by the Contractor. Except for exceptional circumstance subject inventions, the contractor 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 Contractor 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.

(2) Exceptional circumstance subject inventions. Except to the extent that rights are retained by the Contractor in a determination of exceptional circumstances or granted to a contractor through a determination of greater rights in accordance with subparagraph (b)(4) of this clause, the Contractor does not have a 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) Inventions made under any agreement, contract or subcontract related to the following are exceptional circumstance subject inventions:

(A) DOE Steel Initiative and Metals Initiative;

(B) U.S. Advanced Battery Consortium; and
(C) any funding agreement which is funded in part by the Electric Power Research Institute (EPRI) or the Gas Research Institute (GRI).

(iii) DOE reserves the right to unilaterally amend this contract to modify, by deletion or insertion, technical fields, tasks, or other classifications for the purpose of determining DOE exceptional circumstance subject inventions.

(3) 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 Appendix [Insert Reference] to this contract. DOE reserves the right to unilaterally amend this contract to identify specific treaties or international agreements entered into or to be entered into by the Government after the effective date of this contract and to effectuate those license 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 made after the date of the amendment.

(4) Contractor request for greater rights in exceptional circumstance subject inventions. The Contractor may request rights greater than allowed by the exceptional circumstance determination in an exceptional circumstance subject invention by submitting such a request in writing to Patent Counsel at the time the exceptional circumstance subject invention is disclosed to DOE or within eight (8) months after conception or first actual reduction to practice of the exceptional circumstance subject invention, whichever occurs first, unless a longer period is authorized in writing by the Patent Counsel for good cause shown in writing by the Contractor. DOE may, in its discretion, grant or refuse to grant such a request by the Contractor.

(5) Contractor employee inventor rights. If the Contractor does not elect to retain title to a Subject Invention or does not request greater rights in an exceptional circumstance subject invention, 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, in its discretion, grant or refuse to grant such a request by the Contractor employee inventor.

(6) Government assignment of rights in Government employees' Subject Inventions. If a Government employee is a joint inventor of a Subject Invention or of an exceptional circumstance subject invention to which the Contractor has rights, the Government may assign or refuse to assign to the Contractor any rights in the Subject Invention or exceptional circumstance subject invention acquired by the Government from the Government employee, in accordance with 48 CFR 27.304 1(d). The rights assigned to the Contractor are subject to any provision of this clause that is applicable to
Subject Inventions in which the Contractor retains title, including reservation by the Government of a nonexclusive, nontransferable, irrevocable, paid up license, except that the Contractor shall file its initial patent application claiming the Subject Invention or exceptional circumstance invention within one (1) year after the assignment of such rights. The Contractor shall share royalties collected for the manufacture, use or sale of the Subject Invention with the Government employee.

(7) 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 the right to retain title to any weapons related Subject Inventions.

(c) Subject Invention Disclosure, Election of Title and Filing of Patent Application by Contractor.

(1) Subject Invention disclosure. The contractor will disclose each Subject Invention to the Patent Counsel within two months after the inventor discloses it in writing to contractor personnel responsible for patent matters. The disclosure to the agency shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s) and all sources of funding by B&R code for the invention. 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. The disclosure shall include a written statement as to whether the invention falls within an exceptional circumstance field. DOE will make a determination and advise the Contractor within 30 days of receipt of an invention disclosure as to whether the invention is an exceptional circumstance subject invention. In addition, after disclosure to the Patent Counsel, the Contractor 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 contractor. The Contractor shall obtain approval from Patent Counsel prior to any release or publication of information concerning any nonelectable Subject Invention such as an exceptional circumstance subject invention or any Subject Invention related to a treaty or international agreement.

(2) Election by the Contractor. Except as provided in paragraph (b)(2) of this clause, the Contractor 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 publication, on sale or public use 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) Filing of patent applications by the Contractor. The Contractor 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, or prior to the end of any 1 year
statutory period wherein valid patent protection can be obtained in the United
States after a publication, on sale, or public use. The Contractor will file patent
applications in additional countries or international patent offices within either
ten months of the corresponding initial patent application or six months from the
date permission is granted by the Commissioner of Patents and Trademarks to
file foreign patent applications where such filing has been prohibited by a
Secrecy Order.

(4) Contractor's request for an extension of time. Requests for an extension of the
time for disclosure, election, and filing under subparagraphs (c)(1), (2) and (3)
may, at the discretion of Patent Counsel, be granted.

(5) (Deviation) Publication Approval. During the course of the work under this
contract, the Contractor or its employees may desire to release or publish
information regarding scientific or technical developments conceived or first
actually reduced to practice in the course of or under this contract. In order that
public disclosure of such information will not adversely affect the patent interest
of DOE or the Contractor, approval for release or publication shall be secured
from the Contractor personnel designated to review such information prior to any
such release or publication. Where DOE's approval of publication is requested,
DOE's response to such requests for approval shall normally be provided within
90 days except in circumstances in which a domestic patent application must be
filed in order to protect foreign rights. In the case involving foreign patent rights,
DOE shall be granted an additional 180 days with which to respond to the request
for approval, unless extended by mutual agreement.

(d) Conditions When the Government May Obtain Title.

The Contractor will convey to the DOE, upon written request, title to any Subject
Invention

(1) If the Contractor 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;
provided, that DOE may only request title within sixty (60) days after learning of
the failure of the Contractor to disclose or to elect within the specified times.

(2) In those countries in which the Contractor fails to file a patent application within
the times specified in subparagraph (c) of this clause; provided, however, that if
the Contractor has filed a patent application in a country after the times specified
in subparagraph (c) above, but prior to its receipt of the written request of the DOE, the Contractor shall continue to retain title in that country.

(3) In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in a reexamination or opposition proceeding on, a patent on a Subject Invention.

(4) If the Contractor requests that DOE acquire title or rights from the Contractor in a Subject Invention to which the Contractor had initially retained title or rights, or in an exceptional circumstance subject invention to which the Contractor was granted greater rights, 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.

(e) Minimum Rights of the Contractor and Protection of the Contractor's Right to File.

(1) (Deviation) Request for a Contractor license. The Contractor may request the right to reserve a revocable, nonexclusive, royalty free license throughout the world in each Subject Invention to which the Government obtains title, except if the Contractor fails to disclose the invention within the times specified in paragraph (c) of this clause. DOE may grant or refuse to grant such a request by the Contractor. When DOE approves such reservation, the Contractor's license will normally extend to its domestic subsidiaries, affiliates, and members, 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. The license is transferable only with the approval of DOE, except when transferred to the successor of that part of the contractor's business to which the invention pertains.

(2) Revocation or modification of a Contractor license. The Contractor's domestic license may be revoked or modified by DOE 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 DOE licensing regulations at 10 CFR Part 781. This license will not be revoked in the field of use or the geographical areas in which the Contractor has achieved practical application and continues to make the benefits of the Subject Invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of DOE to the extent the Contractor, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application of the Subject Invention in that foreign country.

(3) Notice of revocation of modification of a Contractor license. Before revocation or modification of the license, DOE will furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor will be allowed
thirty days (or such other time as may be authorized by DOE for good cause shown by the Contractor) after the notice to show cause why the license should not be revoked or modified. The Contractor has the right to appeal, in accordance with applicable regulations in 37 CFR part 404 and DOE licensing regulations at 10 CFR part 781 concerning the licensing of Government owned inventions, any decision concerning the revocation or modification of the license.

(f) Contractor Action to Protect the Government's Interest.

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

(i) establish or confirm the rights the Government has throughout the world in those Subject Inventions to which the Contractor elects to retain title, and

(ii) convey title to DOE when requested under subparagraphs (b) or paragraph (d) of this clause and to enable the Government to obtain patent protection throughout the world in that Subject Invention.

(2) Contractor employee agreements. The Contractor agrees to require, by written agreement, its employees, other than clerical and nontechnical 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 in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, 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 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) Notification of discontinuation of patent protection. The contractor will notify the Patent Counsel of any decision not to continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than thirty days before the expiration of the response period required by the relevant patent office.

(4) Notification of Government rights. The contractor 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
(identify the Federal agency). The government has certain rights in the invention."

(5) Invention Identification Procedures. The Contractor shall establish and maintain active and effective procedures to ensure that Subject Inventions are promptly identified and timely disclosed and shall submit a written description of such procedures to the Contracting Officer so that the Contracting Officer may evaluate and determine their effectiveness.

(6) Invention Filing Documentation. 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.

(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 the confidentiality provision at 35 U.S.C. 205 and 37 CFR Part 40.

(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. nonprofit organization or small business firm subcontractors. Unless otherwise authorized or directed by the Contracting Officer, the Contractor shall include the patent rights clause at 48 CFR 952.227-11, 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)(2) of this clause. The subcontractor retains all rights provided for the contractor in the patent rights clause at 48 CFR 952.227-11.
(3) Inclusion of patent rights clause subcontractors other than non profit organizations and 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, in any contract for experimental, developmental, demonstration or research work. For subcontracts subject to exceptional circumstances, the contractor must consult with DOE patent counsel with respect to the appropriate patent clause.

(4) DOE and subcontractor contract. With respect to subcontracts at any tier, DOE, the subcontractor, and the Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and DOE with respect to the matters covered by the 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.

(5) Subcontractor refusal to accept terms of patent 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 a refusal, including any 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.

(6) 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.

(7) 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.

(h) Reporting on Utilization of Subject Inventions. The Contractor agrees to submit to DOE 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 Contractor 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 Contractor, and such other data and information as DOE may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by DOE in connection with any march in proceeding undertaken by DOE in accordance with paragraph (j) of this clause. As required by 35 U.S.C. 202(c)(5),
DOE agrees it will not disclose such information to persons outside the Government without permission of the Contractor.

(i) Preference for United States Industry. Notwithstanding any other provision of this clause, the Contractor agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any Subject Invention in the United States unless such person agrees that any product 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 DOE 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. The Contractor agrees that, with respect to any Subject Invention in which it has acquired title, DOE has the right in accordance with the procedures in 37 CFR 401.6 and any DOE supplemental regulations to 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, and, if the Contractor, assignee or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if DOE determines that

1. Such action is necessary because the Contractor 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 Contractor, 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 Contractor, assignee, or licensees;

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 Contracts With Nonprofit Organizations. If the Contractor is a nonprofit organization, it agrees that

1. DOE approval of assignment of rights. Rights to a Subject Invention in the United States may not be assigned by the Contractor without the approval of
DOE, 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 of this clause as the Contractor.

(2) Small business firm licensees. It will make efforts that are reasonable under the circumstances to attract licensees of Subject Inventions that are small business firms, and that it will 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, that the Contractor is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Contractor. However, the Contractor agrees that the Secretary of Commerce may review the Contractor's licensing program and decisions regarding small business firm applicants, and the Contractor will negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when that Secretary's review discloses that the Contractor could take reasonable steps to more effectively implement the requirements of this subparagraph (k)(2).

(3) 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.

(l) Communications. The Contractor shall direct any notification, disclosure or request provided for in this clause to the Patent Counsel assisting the DOE contracting activity.

(m) 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 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.

(2) Final reports. Upon DOE's request, the Contractor shall submit to DOE, prior to closeout of the contract, 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 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.
(n) Examination of Records Relating to Subject 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, 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 compliance with any requirement of this clause.

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, including exceptional circumstance subject inventions, 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.

(o) 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 product 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.

(p) 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 (p)(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.

(q) 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.

(r) 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.

(s) Educational Awards Subject to 35 U.S.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 (1) related to exceptional circumstance technology or (2) which is subject to treaties or international agreements as set forth in paragraph (b)(3) of this clause or agreements other than funding agreements. The Contracting Officer may disapprove of any such placement.
(t) 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.

(End of clause)