Continued...

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

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

Maria D. Vasquez

(Signature of person authorized to sign)
<table>
<thead>
<tr>
<th>ITEM NO. (A)</th>
<th>SUPPLIES/SERVICES (B)</th>
<th>QUANTITY (C)</th>
<th>UNIT (D)</th>
<th>UNIT PRICE (E)</th>
<th>AMOUNT (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Payment:
OR for NNSA
U.S. Department of Energy
Oak Ridge Financial Service Center
P.O. Box 5807
Oak Ridge TN 37831

Period of Performance: 11/01/2018 to 10/23/2023
1. The purpose of this modification is as follows:

   a. PART I – THE SCHEDULE TABLE OF CONTENTS:

      i. TABLE OF CONTENTS for SECTION H: SPECIAL CONTRACT REQUIREMENTS, is revised;

   b. PART I – THE SCHEDULE, SECTION H: SPECIAL CONTRACT REQUIREMENTS:

      i. SECTION H: SPECIAL CONTRACT REQUIREMENTS, H-20 ORGANIZATIONAL CULTURE CHANGE, is revised;

      ii. SECTION H: SPECIAL CONTRACT REQUIREMENTS, H-39, H-42, and H-43 are added in their entirety;

   c. PART II – CONTRACT CLAUSES, SECTION I - CONTRACT CLAUSES:

      i. TABLE OF CONTENTS for PART II, CONTRACT CLAUSES, SECTION I – CONTRACT CLAUSES, C. FAR and DEAR CLAUSES INCORPORATED IN FULL TEXT, is revised;

      ii. C. FAR and DEAR CLAUSES INCORPORATED IN FULL TEXT, Clauses I-29 through I-31 are added in their entirety;

   d. PART III – LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS:

      i. SECTION J APPENDIX A STATEMENT OF WORK, CHAPTER II Work Scope Structure is modified by adding Section 2.22 and Section 2.22.1 and Section 2.22.2.

As a result of the actions noted above the contract is modified in the following particulars:

2. Changes to the Basic contract are as follows:

1) PART I, THE SCHEDULE TABLE OF CONTENTS, SECTION H: SPECIAL CONTRACT REQUIREMENTS, is hereby modified as follows:

   a) The TABLE OF CONTENTS SECTION H is modified by adding the following references:

      H-39 DEFINITION OF UNUSUALLY HAZARDOUS OR NUCLEAR RISK AND OTHER TERMS FOR PURPOSES OF FAR CLAUSE 52.250-1, INDEMNIFICATION UNDER PUBLIC LAW 85-804 (APR 1984) ALT I (APR 1984)

      H-42 NNSA and DOE/EM MANAGEMENT STEERING COMMITTEE (MSC)

      H-43 PERFORMANCE DIRECTION
b) SECTION H: SPECIAL CONTRACT REQUIREMENTS, is modified by revising special contract requirement H-20 ORGANIZATIONAL CULTURE CHANGE, as set forth below:

FROM:
The contractor shall improve the organizational culture by proactively balancing the conduct of operations in every aspect of executing the statement of work (e.g. integrating a research environment with a production environment and integrating construction and operations in a high hazard environment). This balance should allocate resources and leadership focus to ensure mission deliverables and desired outcomes are achieved in a timely manner with operations that are safe, secure and efficient. In addition, organizational culture change should promote an improved safety culture as described by the focus areas and attributes described in Department of Energy Guide 450.4-1C, Attachment 10. The Contractor shall include organizational culture improvement as part of its strategic planning activities.

TO:
The contractor shall improve the organizational culture by proactively balancing the conduct of operations in every aspect of executing the statement of work (e.g. integrating a research environment with a production environment and integrating construction and operations in a high hazard environment). This balance should allocate resources and leadership focus to ensure mission deliverables and desired outcomes are achieved in a timely manner with operations that are safe, secure and efficient. In addition, organizational culture change should promote an improved safety culture as described by the focus areas and attributes described in Department of Energy Guide 450.4-1C, Attachment 10. The Contractor shall include organizational culture improvement as part of its strategic planning activities. Other organizational culture improvement activities will include but not limited to the following:

(a) Within 6 months of the start of the base period, partner with NNSA to develop an integrated baseline for TA-55 to encompass pit manufacturing, surveillance, infrastructure and equipment installation targeted to accelerate manufacture of War Reserve (WR) pits to meet 30 pits/year, 1 year ahead of schedule.

(b) Implement Laboratory Operations Supervisor Academy (LOSA) to train all supervisory staff in hazardous operations areas within 12 months of the start of the base period and all remaining supervisory staff within 24 months of the start of the base period.

(c) Use corporate reach back to Fluor to ensure continuity and revalidate capital projects at risk within 6 months of the start of the base period.

(d) Assess all outstanding criticality safety evaluations (CSEs) for LANL PF-4 operations within 6 months of the start of the base period; then use corporate reach
back to bring resources to accelerate high priority evaluations.

c) SECTION H: SPECIAL CONTRACT REQUIREMENTS, is modified by adding special contract requirements H-39, H-42 and H-43, as set forth below:

H-39 DEFINITION OF UNUSUALLY HAZARDOUS OR NUCLEAR RISK AND OTHER TERMS FOR PURPOSES OF FAR CLAUSE 52.250-1, INDEMNIFICATION UNDER PUBLIC LAW 85-804 (APR 1984) ALT I (APR 1894)

(a) The term "a risk defined in this contract as unusually hazardous or nuclear" as used in FAR Clause 52.250-1 means the risk of legal liability to third parties (including legal costs as defined in paragraph jj. of Section 11 of the Atomic Energy Act of 1954, as amended, 42 U.S.C. Section 2014Gj), notwithstanding the fact that the claim or suit may not arise under Section 170 of said Act), arising from actions or inactions in the course of the following performed by the Contractor, under this contract:

1. Participation in activities in support of a nonproliferation effort on behalf of the United States, outside the United States, as described in (i) through (iv):
   i. DOE's Nuclear Emergency Search Team (NEST),
   ii. DOE's Nuclear/Radiological Advisory Team (N/RAT)
   iii. DOE's Accident Response Group (ARG)/DOE's Joint Technical Operations Team (JTOT);
   iv. Crisis response teams;

   to the extent participation in activities described in subparagraph i., ii.,iii. or iv. above involves nuclear emergency response activities involving real or suspected nuclear weapons, nuclear weapons components, or nuclear materials which can be readily utilized either (1) for the production or the fabrication of nuclear weapons without substantial further effort, or (2) for intentional widespread contamination or dispersal of harmful nuclear materials, whether or not such real or suspected weapons, components, or harmful nuclear materials are owned by the United States.

2. Repairs and maintenance of United States-owned nuclear weapons, requested by the Department of Defense under DOE's Stewardship role for the United States nuclear weapons stockpile.

3. Repairs and maintenance of United Kingdom-owned nuclear weapons requested by the Ministry of Defense of the United Kingdom, as directed or approved by the President of the United States, the Secretary of Energy, the Deputy Secretary of
Energy, or the Under Secretary of Energy.

4. Participation in DOE's Materials Protection Control and Accountability (MPC&A) program including cooperative work outside the United States on the design and implementation of MPC&A systems for facilities processing, handling, and storing nuclear materials, and the transportation of nuclear materials; provision of U.S.-manufactured equipment, and procurement of equipment for installation in facilities in order to implement the above systems; and training in the design, use and assessment of MPC&A systems.

5. Participation in the U.S.-Russian Plutonium Disposition Program including cooperative work outside the United States on the demonstrations of alternative technologies for converting weapons-origin plutonium into forms unsuitable for direct weapons applications and subsequently into forms suitable for ultimate disposition; technical support for the construction and demonstration of a pilot line for Russian plutonium conversion/disposition of weapons-origin plutonium; and technical support for the construction of a Russian production line for conversion and/or disposition of Russian weapons-origin plutonium.

6. Other activities relating to nonproliferation, emergency response, anti-terrorism activities, or critical national security activities that involve the use, detection, identification, assessment, control, containment, dismantlement, characterization, packaging, transportation, movement, storage, or disposal of nuclear, radioactive, chemical, biological, or explosive material, facilities or devices, and nuclear weapons research, design, development, production, testing and maintenance, and development of technology as part of Government programs for nuclear weapons deployment, storage and stockpile stewardship, transportation, demilitarization, dismantlement or disposition, provided such activities are specifically requested or approved, in writing, by the President of the United States, the Secretary of Energy, the Deputy Secretary of Energy, or the Under Secretary for Nuclear Security, and further provided that the request or approval specifically identifies a particular project involving one of those activities and makes the indemnity provided by this clause applicable to that particular project under the contract.

(b) The unusually hazardous or nuclear risks described above are indemnified only to the extent that they are not covered by the Price-Anderson Act, Section 170d of the Atomic Energy Act of 1954, as amended, (42 U.S.C. § 2210(d)) or where the indemnification provided by the Price-Anderson Act is limited by the restriction on Public Liability imposed by Section 170e. of the Atomic Energy Act of 1954, as amended (42 U.S.C. § 221 0(e)) to an amount which is not sufficient to provide complete indemnification for the legal liability to which the contractor is exposed.
(c) Additional Definitions of Terms

1. As used in this H-39 clause, the term "nuclear materials" means source, special nuclear, or byproduct materials as those terms are defined in Section 11 of the Atomic Energy Act of 1954, as amended, 42 U.S.C. § 2014.

2. As used in FAR 52.250-1 INDEMNIFICATION UNDER PUBLIC LAW 85-804 (APR 1984) (ALTERNATE I) (APR 1984),

i. the term "Contractor" except as used in paragraphs (a) and (e) of 29, FAR 52.250-1 means

(A) Triad National Security, LLC (Triad),

(B) Triad parent organizations including: Battelle Memorial Institute, The Texas A&M University System, and The Regents of the University of California; integrated large business subcontractors, Fluor Federal Services, Inc. and Huntington Ingalls Industries/Stoller Newport News Nuclear, Inc.; and integrated small business subcontractors Longenecker & Associates, Inc., TechSource, Inc. and Merrick-SMSI Joint Venture, LLP and each parent organization's corporate successors and corporate affiliates, and

(C) Employees, officers and directors of (A) and/or (B) above named or threatened to be named as defendants in lawsuits or litigation threatened or initiated by third parties which seek to impose or establish, or which could result in, a risk which is defined in this contract as unusually hazardous or nuclear, on account of actions or inactions of Triad National Security, LLC, or on account of actions or inactions undertaken by the corporations or individuals identified in subparagraph (A) and/or (B) above for, on behalf of, or with respect to, Triad National Security, LLC under this contract.

ii. the term "Contractor" as used in paragraphs (a) and (e) of 29, FAR 52.250-1 means Triad National Security, LLC;

iii. the term "Contractor's business" means the management and operation of the Los Alamos National Laboratory (LANL) and satellite facilities of DOE/NNSA under this contract;

iv. the terms "Contractor's operations at any one plant or separate location in which this contract is being performed" and "a separate and complete major industrial operation in connection with the performance of this contract" mean the Los Alamos National Laboratory located in Los Alamos County,
New Mexico;

v. the term "agency head" means the Secretary of Energy; and

vi. the term "affiliate" as used in this clause means the member companies of Triad National Security, LLC (Battelle Memorial Institute, The Regents of the University of California, and The Texas A&M University System, and, if applicable, the parent companies of each including the ultimate parent company of each) as well as companies, other than Triad National Security, LLC, that directly or indirectly, are owned or otherwise controlled by the member companies of Triad National Security, LLC.

**H-42 NNSA and DOE/EM MANAGEMENT STEERING COMMITTEE (MSC)**

(a) An MSC will be established under the DOE Environmental Management (EM) Los Alamos Legacy Cleanup Contract (LLCC) comprised of senior level advisors with DOE EM and the Contractor to assist in both the work of EM and NNSA and the NNSA/DOE EM Federal Prime Contractor. To ensure that problems and issues are fairly and efficiently resolved, the MSC will assist in early resolution of issues. Such resolution will not supersede the Contracting Officer's (CO) authority nor take precedence over any requirement in either this Contract or the DOE EM LLCC.

(b) The Contractor shall provide representatives to serve as members of the MSC and the associated organizations. The MSC includes members of EM-LA, NA-LA, the NNSA M&O Contractor, and the LLCC Federal Prime Contractor. The Contractor shall raise issues as applicable, as they are identified to the MSC. The MSC meets as needed, and the implementing organizations meet monthly, but expect that the frequency will decrease over time. The MSC does not diminish authority of the designated NNSA and EM CO responsibility for the contract(s). Therefore, before consulting with the MSC, parties must first address their concerns, issues, disagreements, and/or recommendations to the cognizant CO(s) for resolution. All contractual actions and technical direction under this Contract shall be provided by the designated CO and Contracting Officer Representative, respectively.

**H-43 PERFORMANCE DIRECTION**

(a) The Contractor is responsible for the management and operation of the site in accordance with the Terms and Conditions of the Contract, duly issued Work Authorizations (WAs), and written direction and guidance provided by the Contracting Officer and the Contracting Officer’s Representative (COR). NNSA is responsible for establishing the work to be accomplished, the applicable requirements to be met, and overseeing the performance of work of the Contractor. The Contractor will use its expertise and ingenuity in Contract performance and in making choices among acceptable alternatives to most effectively, efficiently and safely accomplish the work
called for by this Contract. If the Contractor fails to comply with NNSA requirements, NNSA may direct the Contractor in how to complete the work.

(b) Only the Contracting Officer may issue, modify, and priority rank WAs.

(c) (1) The Contracting Officer and the NNSA Administrator will appoint, in writing, specific NNSA employees as CORs with the authority to issue Performance Direction to the Contractor. CORs are authorized to act within the limits of their delegation letter. A copy of each letter will be provided to the Contractor. COR functions include technical monitoring, inspection, and other functions of a technical nature not involving a change in the scope, cost, or terms and conditions of the Contract. The COR is authorized to review and approve technical reports, drawings, specifications, and technical information delivered by the Contractor.

(2) The Contractor must comply with written Performance Directions that are signed by the COR and:

(i) Redirect the Contract effort, shift work emphasis within a work area or a WA, require pursuit of certain lines of inquiry, further define or otherwise serve to accomplish the Statement of Work (SOW), or

(ii) Provide information that assists in the interpretation of drawings, specifications, or technical portions of the work description.

(3) Performance Direction does not:

(i) authorize the Contractor to exceed the funds obligated on the Contract;

(ii) authorize any increased cost or delay in delivery in a WA;

(iii) entitle the Contractor to an increase in fee; or

(iv) change any of the terms or conditions of the Contract.

(d) The Contractor shall accept only Performance Direction that is provided in writing by a COR and that is within the SOW and a WA.

(e) (1) The Contractor shall promptly comply with each duly issued Performance Direction unless the Contractor reasonably believes that the Performance Direction violates this clause. If the Contractor believes the Performance Direction violates this clause, the Contractor shall suspend implementation of the Performance Direction and promptly notify the Contracting Officer of its reasons for believing that the Performance Direction violates this clause. Oral notification to the Contracting Officer shall be confirmed in writing within ten days of the oral notification.

(2) The Contracting Officer will determine if the Performance Direction is within the SOW and WA. This determination will be issued in writing and the Contractor shall promptly comply with the Contracting Officer's direction. If it is not within the SOW
or WA, the Contracting Officer may issue a change order pursuant to the Contract’s Section I Clause entitled “Changes.”

(f) The Parties agree to maintain full and open communication at all times, and on all issues affecting Contract performance, during the term of this Contract.

2) PART II, CONTRACT CLAUSES, SECTION I - CONTRACT CLAUSES, TABLE OF CONTENTS, is hereby modified as follows:

a) The TABLE OF CONTENTS is modified by revising the following reference under SECTION I: CONTRACT CLAUSES, C FAR and DEAR Clauses Incorporated in Full Text:

I-23 DEAR 970.5227-3 TECHNOLOGY TRANSFER MISSION (AUG 2002) ALTERNATE I (AUG 2002), ALTERNATE II (DEC 2000) (NNSA CLASS DEVIATION OCT 2011)

b) The TABLE OF CONTENTS is modified by deleting the following reference under SECTION I: CONTRACT CLAUSES, C FAR and DEAR Clauses Incorporated in Full Text:

I-24 DEAR 970.5227-12 PATENT RIGHTS-MANAGEMENT AND OPERATING CONTRACTS, FOR-PROFIT CONTRACTOR, ADVANCE CLASS WAIVER (AUG 2000) ALTERNATE I (NNSA CLASS DEVIATION OCT 2011)

c) The TABLE OF CONTENTS is modified by adding the following references under SECTION I: CONTRACT CLAUSES, C FAR and DEAR Clauses Incorporated in Full Text:

I-29 FAR 52.250-1 INDEMNIFICATION UNDER PUBLIC LAW 85-804 (APR 1984) ALTERNATE I (APR 1984)

I-30 FAR 52.204-23 PROHIBITION ON CONTRACTING FOR HARDWARE, SOFTWARE, AND SERVICES DEVELOPED OR PROVIDED BY KASPERSKY LAB AN OTHER COVERED ENTITIES (Jul 2018)

I-31 DEAR 970.5227-10 PATENT RIGHTS-MANAGEMENT AND OPERATING CONTRACTS, NONPROFIT ORGANIZATION OR SMALL BUSINESS FIRM CONTRACTOR (DEC 2000) ALTERNATE I (DEC 2000)

d) Paragraph C, FAR AND DEAR CLAUSES INCORPORATED IN FULL TEXT, is modified by deleting the following clause in its entirety:

I-24 DEAR 970.5227-12 PATENT RIGHTS-MANAGEMENT AND
OPERATING CONTRACTS, FOR-PROFIT CONTRACTOR, ADVANCE CLASS WAIVER (AUG 2000) ALTERNATE I (NNSA CLASS DEVIATION OCT 2011)

e) Paragraph C, FAR AND DEAR CLAUSES INCORPORATED IN FULL TEXT, is modified by adding clauses 1-29 through I-31 in their entirety, as set forth below.


(a) “Contractor’s principal officials,” as used in this clause, means directors, officers, managers, superintendents, or other representatives supervising or directing—

(1) All or substantially all of the Contractor’s business;

(2) All or substantially all of the Contractor’s operations at any one plant or separate location in which this contract is being performed; or

(3) A separate and complete major industrial operation in connection with the performance of this contract.

(b) Under Public Law 85-804 (50 U.S.C. 1431-1435) and Executive Order 10789, as amended, and regardless of any other provisions of this contract, the Government shall, subject to the limitations contained in the other paragraphs of this clause, indemnify the Contractor against—

(1) Claims (including reasonable expenses of litigation or settlement) by third persons (including employees of the Contractor) for death; personal injury; or loss of, damage to, or loss of use of property;

(2) Loss of, damage to, or loss of use of Contractor property, excluding loss of profit; and

(3) Loss of, damage to, or loss of use of Government property, excluding loss of profit.

(c) This indemnification applies only to the extent that the claim, loss, or damage (1) arises out of or results from a risk defined in this contract as unusually hazardous or nuclear and (2) is not compensated for by insurance or otherwise. Any such claim, loss, or damage, to the extent that it is within the deductible amounts of the Contractor’s insurance, is not covered under this clause. If insurance coverage or other financial protection in effect on the date the approving official authorizes use of this clause is reduced, the Government’s liability under this clause shall not increase as a result.
(d) When the claim, loss, or damage is caused by willful misconduct or lack of good faith on the part of any of the Contractor’s principal officials, the Contractor shall not be indemnified for—

(1) Government claims against the Contractor (other than those arising through subrogation); or

(2) Loss or damage affecting the Contractor’s property.

(e) With the Contracting Officer’s prior written approval, the Contractor may, in any subcontract under this contract, indemnify the subcontractor against any risk defined in this contract as unusually hazardous or nuclear. This indemnification shall provide, between the Contractor and the subcontractor, the same rights and duties, and the same provisions for notice, furnishing of evidence or proof, and Government settlement or defense of claims as this clause provides. The Contracting Officer may also approve indemnification of subcontractors at any lower tier, under the same terms and conditions. The Government shall indemnify the Contractor against liability to subcontractors incurred under subcontract provisions approved by the Contracting Officer.

(f) The rights and obligations of the parties under this clause shall survive this contract’s termination, expiration, or completion. The Government shall make no payment under this clause unless the agency head determines that the amount is just and reasonable. The Government may pay the Contractor or subcontractors, or may directly pay parties to whom the Contractor or subcontractors may be liable.

(g) The Contractor shall—

(1) Promptly notify the Contracting Officer of any claim or action against, or any loss by, the Contractor or any subcontractors that may be reasonably be expected to involve indemnification under this clause;

(2) Immediately furnish to the Government copies of all pertinent papers the Contractor receives;

(3) Furnish evidence or proof of any claim, loss, or damage covered by this clause in the manner and form the Government requires; and

(4) Comply with the Government’s directions and execute any authorizations required in connection with settlement or defense of claims or actions.

(h) The Government may direct, control, or assist in settling or defending any claim or action that may involve indemnification under this clause.
(i) The cost of insurance (including self-insurance programs) covering a risk defined in this contract as unusually hazardous or nuclear shall not be reimbursed except to the extent that the Contracting Officer has required or approved this insurance. The Government’s obligations under this clause are—

(1) Excepted from the release required under this contract’s clause relating to allowable cost; and

(2) Not affected by this contract’s Limitation of Cost clause or Limitation of Funds clause.

(End of clause)

I-30 FAR 52.204-23 PROHIBITION ON CONTRACTING FOR HARDWARE, SOFTWARE, AND SERVICES DEVELOPED OR PROVIDED BY KASPERSKY LAB AN OTHER COVERED ENTITIES (Jul 2018)

(a) Definitions. As used in this clause—

Covered article means any hardware, software, or service that—

(1) Is developed or provided by a covered entity;

(2) Includes any hardware, software, or service developed or provided in whole or in part by a covered entity; or

(3) Contains components using any hardware or software developed in whole or in part by a covered entity.

Covered entity means—

(1) Kaspersky Lab;

(2) Any successor entity to Kaspersky Lab;

(3) Any entity that controls, is controlled by, or is under common control with Kaspersky Lab; or

(4) Any entity of which Kaspersky Lab has a majority ownership.

(1) Providing any covered article that the Government will use on or after October 1, 2018; and

(2) Using any covered article on or after October 1, 2018, in the development of data or deliverables first produced in the performance of the contract.

(c) Reporting requirement.

(1) In the event the Contractor identifies a covered article provided to the Government during contract performance, or the Contractor is notified of such by a subcontractor at any tier or any other source, the Contractor shall report, in writing, to the Contracting Officer or, in the case of the Department of Defense, to the website at https://dibnet.dod.mil. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at https://dibnet.dod.mil.

(2) The Contractor shall report the following information pursuant to paragraph (c)(1) of this clause:

   (i) Within 1 business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; brand; model number (Original Equipment Manufacturer (OEM) number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

   (ii) Within 10 business days of submitting the report pursuant to paragraph (c)(1) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of a covered article, any reasons that led to the use or submission of the covered article, and any additional efforts that will be incorporated to prevent future use or submission of covered articles.

(d) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts, including subcontracts for the acquisition of commercial items.

(End of clause)
(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 121.3-8 and 13 CFR 121.3-12, 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) 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 responsible for patent matters 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) 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 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. 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—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 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; or

(4) Such action is necessary because the agreement required by paragraph (i) of this clause has not been obtained or waived, or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

(k) Special provisions for 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)

3) PART III, LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS, SECTION J, LIST OF ATTACHMENTS, is hereby modified as follows:

a) PART III – SECTION J APPENDIX A STATEMENT OF WORK TABLE OF CONTENTS, CHAPTER II WORK SCOPE STRUCTURE is modified by *adding* the following references:

2.22 Contractor Services Provided to DOE Environmental Management Contractor and Contractor Acquisition of Services from EM Contractor

2.22.1 Site Services the Contractor Obtains From N3B

2.22.2 Changes to Service Agreement/Work Authorizations

b) SECTION J APPENDIX A STATEMENT OF WORK, CHAPTER II Work Scope is modified by *adding* Section 2.22 Contractor Services Provided to DOE Environmental Management Contractor and Contractor Acquisition of Services from EM Contractor, Section 2.22.1 Site Services the Contractor Obtains from N3B, and Section 2.22.2 Changes to Service Agreement/Work Authorizations, as set forth below:

2.22 Contractor Services Provided to DOE Environmental Management Contractor and Contractor Acquisition of Services from EM Contractor.
Contractor may provide certain limited direct funded services to the Department of Energy (DOE) Environmental Management Contractor (EMC). The DOE EMC at Los Alamos National Laboratory is Newport News Nuclear BWXT-Los Alamos, LLC (N3B) hereinafter referred to as the Federal Prime Contractor. Services will be performed in accordance with each Contractor's applicable DOE prime contract, policies, procedures, and quality assurance programs.

The Parties agree to the following regarding Contractor's entitlement to cost for the provision of shared services to N3B in support of their Environmental Management Contract (DOE Contract# 8930331 8CEM000007). Contractor reserves the right to claim entitlement to fee associated with this change in the character of work described in the Statement of Work of Contract No. Contract No. 89233218CNA000001 and may file a claim for equitable adjustment under DEAR 970.5243-1 CHANGES (DEC 2000). Such claim for fee is not limited by this Modification, enabling the Contractor to claim a fee that is not duplicative of the CLIN 002 “Fixed Fee” and “Award Fee” contained elsewhere within this Contract.

All services the Contractor is authorized to provide will be as described in the resultant Service Agreement/Work Authorizations (SAWAs). The Contractor may make minor and administrative changes to the SAWAs without further modifications to this Prime Contract.

The SAWAs consist of the following areas:

- SAWA M&O-001 - Emergency Management Services
- SAWA M&O-002 - Security and Safeguard Services
- SAWA M&O-003 - Environmental Services
- SAWA M&O-004 - Radiation Protection Support Services
- SAWA M&O-005 - Utility, Road, Utility, Road, Transportation, and Planning Services
- SAWA M&O-006 - Facilities Management Support Services
- SAWA M&O-007 - Communications, Information Technology Infrastructure, Training, and Historical Records Support Services
- SAWA M&O-008 - Waste Support Services
- SAWA M&O-009 - Access Control and Coordinated Data Support Services
- SAWA M&O-010 - Short Term Services

### 2.22.1 Site Services the Contractor Obtains from N3B

The Contractor is authorized to obtain the services under the following Service Agreement/Work Authorizations:

- SAWA LLCC-001 - Support Services from N3B
- SAWA LLCC-002 - Access Control and Coordinated Data Support from N3B
2.22.2 Changes to Service Agreement/Work Authorizations

All changes to a Service Agreement/Work Authorization must be authorized and signed by the Contractor, N3B, NNSA Los Alamos Field Office Contracting Officer, and DOE/EM Field Office Contracts Officer, before the Contractor may perform work associated with the change. The Contractor is not required to agree or perform any change inconsistent with DOE/NNSA direction or its obligations under its Prime Contract. The Contractor will provide timely notification to N3B of its inability to perform a requested change due to inconsistency with its Prime Contract obligations or DOE/NNSA direction.

All other terms and conditions remain unchanged.