

**AMENDMENT NO. 2
RFP NO. 387935**

<p>ISSUED BY: Los Alamos National Security, LLC (LANS) Los Alamos National Laboratory PO Box 1663, MS D447 Los Alamos, NM 87545</p>	<p>LANS SUBCONTRACT ADMINISTRATOR: Darren Knox Email Address: dknox@lanl.gov</p>
<p>PROJECT NAME: Crossroads and NERSC-9 Supercomputer Systems</p>	
<p>DESCRIPTION OF CHANGES:</p> <ol style="list-style-type: none"> 1. Clauses were added to the LANS Sample NRE Subcontract to accommodate provisions for DOE Class Advance Waiver No. W(C) 2016-002, which is approved for this procurement (see Subcontract Form of Agreement ACES Non-Recurring Engineering (NRE), Rev. 1, Dated 10-17-16, Article 6 <i>Modifications to Appendix SFA-1 FAR & DEAR Clauses Incorporated By Reference</i>, which accompanies this amendment). 	
<p>Failure to acknowledge this amendment in accordance with Instruction 2. in the RFP Instructions to Offerors may result in rejection of your proposal. Acknowledgment begins with signing and returning this amendment to the LANS Subcontract Administrator. Except as provided herein, all terms and conditions of the Request for Proposal are unchanged and remain in full force and effect.</p>	
<p>ISSUED ON BEHALF OF LANS BY:</p> <p> _____</p> <p>Subcontract Administrator October 17, 2016 Date</p>	
<p>RECEIPT ACKNOWLEDGED BY:</p> <p>_____ Signature & Title _____ Date</p> <p>_____ Company Name</p>	

Subcontract Form of Agreement ACES Non-Recurring Engineering (NRE)

Subcontractor: TBD

Subcontract No.: *

Address: *

Contact: *

Telephone: *

E-mail: *

D-U-N-S No.: *

NAICS Code: 541712

This subcontract, effective on the date of signature by the last party to sign, is hereby made and entered into by and between Los Alamos National Security, LLC (CONTRACTOR), and the above named SUBCONTRACTOR who hereby agree that all Work specified below, which is a portion of the goods and services to be provided by CONTRACTOR for the United States Department of Energy National Nuclear Security Administration (OWNER), shall be performed by the SUBCONTRACTOR in accordance with all the provisions of this subcontract.

1. SUBCONTRACT DOCUMENTS: This subcontract consists of the following documents:

- Subcontract Form of Agreement [Dated 7-15-16]
- Appendix SFA-1, FAR & DEAR Clauses Incorporated by Reference [Dated 7-15-16]
- Exhibit "A" General Conditions [Dated 7-15-16]
- Exhibit "B" Special Conditions [Dated 7-15-16]
- Exhibit "C" Form A Quantities and Pricing Schedule [Dated 7-15-16]
- Exhibit "C" Form B Milestone and Payment Schedules [Dated 7-15-16]
- Exhibit "D" Scope of Work and Technical Specifications [Dated 7-15-16]
- Exhibit "F" Environmental, Safety and Health Requirements [Dated TBD] *
- Exhibit "G" Physical Security Requirements [Dated TBD] *
- Exhibit "G" Cyber Security Requirements [Dated TBD] *
- Exhibit "H" Quality Assurance Requirements [Dated TBD] *

** Requirements for Exhibits "F", "G", and "H" cannot be determined until Exhibit "D" is negotiated. These Exhibits may be similar to those included in the LANS Sample Build subcontract for Crossroads and will be included, as appropriate, in any LANS NRE Subcontract that results from this RFP.*

2. WORK TO BE PERFORMED (Work): In accordance with the subcontract documents, SUBCONTRACTOR shall furnish all administrative, technical and professional services, and perform all operations, including the furnishing and supervision of all technical personnel and labor, and the furnishing of any equipment, material, tools, supplies and transportation necessary and required to satisfactorily perform the Work in accordance with Exhibit "D" Scope of Work and Technical Specifications.

3. PERIOD OF PERFORMANCE AND SCHEDULE: The period of performance for this subcontract shall commence on the effective date as defined in the opening paragraph above. The subcontract shall expire on *. The Work shall be performed in accordance with the Subcontract Schedule set forth in Exhibit "C" Form B Milestone and Payment Schedule.

4. COMPENSATION:

- A. As full consideration for the satisfactory performance by SUBCONTRACTOR of this subcontract, CONTRACTOR shall pay to SUBCONTRACTOR the total sum of * (\$*). Payments will be in accordance with the payment provisions of this subcontract and with Payment Amounts set forth Exhibit "C" Form B Milestone and Payment Schedule.
- B. Cost sharing is a condition for Class Advance Waiver W(C) XXXXXXXX on intellectual property for a large business concern. SUBCONTRACTOR has asserted its intent to participate in the cost sharing arrangement by absorbing at least 40 percent of the Total Estimated ACES NRE Costs as follows:

CONTRACTOR Fixed Share	SUBCONTRACTOR Cost Share	Total Estimated ACES NRE Costs
\$XXX,XXX	\$XXX,XXX	\$XXX,XXX

In the event SUBCONTRACTOR does not share in the research costs at a minimum level of 40 percent, the Class A Advance Waiver W(C) XXXXXXXX will not be available and the existing FAR and DEAR intellectual property clauses as provided in Appendix SFA-1 of this subcontract shall apply.

All contributions, including cash and third party in-kind contributions, shall be accepted as part of the recipient's cost sharing or matching when such contributions meet all of the following criteria:

- Are verifiable from the recipient's records (General Provisions clause DEAR 970.5232-3 applies).
- Are not included as contributions for any other federal project or program.
- Are necessary and reasonable for proper and efficient accomplishment of project or program objectives.
- Are allowable under the applicable cost principles in Federal Acquisition Regulation (FAR) Subpart 31.2, as supplemented by DOE Acquisition Regulation (DEAR) Subpart 931.2.
- Are not paid by the Federal Government under another award, except where authorized by Federal statute to be used for cost sharing or matching.
- Are provided for in the approved budget when required by CONTRACTOR.

Unrecovered indirect costs may be included as part of cost sharing or matching only with the prior approval of CONTRACTOR. When an employer other than the SUBCONTRACTOR furnishes the services of an employee, these services shall be valued at the employee's regular rate of pay (plus an amount of fringe benefits that are reasonable, allowable, and allocable, but exclusive of overhead costs), provided these services are in the same skill for which the employee is normally paid.

- 5. JOINT VENTURE: In signing this subcontract as a Joint Venture comprised of *, *, and *, the parties agree that they shall be jointly and severally obligated to CONTRACTOR to fulfill all the SUBCONTRACTOR'S obligations and responsibilities set forth herein.
- 6. MODIFICATIONS TO APPENDIX SFA-1 FAR & DEAR CLAUSES INCORPORATED BY REFERENCE: The clauses listed below are substituted in lieu of the language contained in the similarly numbered and titled clause(s) contained in the above referenced Appendix SFA-1 FAR & DEAR Clauses Incorporated by Reference:

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- A. Since SUBCONTRACTOR shares in the total NRE project costs at a minimum level of 40 percent, the clause DEAR 952.227-13 Patent Rights – Acquisition by the Government is replaced with the following modified clause 10 CFR 784.12 Patent Rights – Waiver (JUL 1996) as modified by Class Waiver W(C)2016-002:

(a) Definitions.

As used in this clause:

- (1) "Background patent" means a domestic patent covering an invention or discovery which is not a Subject Invention and which is owned or controlled by the SUBCONTRACTOR at any time through the completion of this contract:
 - (i) Which the SUBCONTRACTOR, but not the Government, has the right to license to others without obligation to pay royalties thereon, and
 - (ii) Infringement of which cannot reasonably be avoided upon the practice of any specific process, method, machine, manufacture or composition of matter (including relatively minor modifications thereof) which is a subject of the research, development, or demonstration work performed under this contract.
- (2) "Contract" means any contract, grant, agreement, understanding, or other arrangement, which includes research, development, or demonstration work, and includes any assignment or substitution of parties.
- (3) "DOE patent waiver regulations" means the Department of Energy patent waiver regulations at 10 CFR Part 784.
- (4) "Invention" as used in this clause, 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 that is or may be protectable under the Plant Variety Protection Act (7 U.S.C.2321 ---).
- (5) "Made" when used in relation to any invention means the conception or first actual reduction to practice of such invention.
- (6) "Nonprofit organization" means a university or other institution of higher education or an organization of the type described in section 50J(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.
- (7) "Patent Counsel" means the Department of Energy Patent Counsel assisting the procuring activity.
- (8) "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.
- (9) "Secretary" means the Secretary of Energy.
- (10) "Small business firm" means a small business concern as defined at Section 2 of the Pub. L. 85-536 (15 U.S.C. 532) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, will be used.
- (11) "Subject invention" means any invention of the SUBCONTRACTOR conceived or first actually reduced to practice in the course of or under this contract, provided

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that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act (7 U.S.C. 2401(d)) must also occur during the period of contract performance.

(b) Allocation of principal rights.

Whereas DOE has granted a waiver of rights to subject inventions to the SUBCONTRACTOR, the SUBCONTRACTOR may elect to 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 SUBCONTRACTOR elects to retain title, the Federal Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.

(c) Invention disclosure, election of title, and filing of patent applications by SUBCONTRACTOR.

- (1) The SUBCONTRACTOR shall disclose each subject invention to the Patent Counsel within six months after conception or first actual reduction to practice, whichever occurs first in the course of or under this contract, but in any event, prior to any sale, public use, or public disclosure of such invention known to the SUBCONTRACTOR. The disclosure to the Patent Counsel shall be in the form of a written report and shall identify the inventors and the contract under which the invention was made. 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 physical, chemical, biological, or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale, or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the Patent Counsel, the SUBCONTRACTOR shall promptly notify the Patent Counsel of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the SUBCONTRACTOR.
- (2) The SUBCONTRACTOR shall elect in writing whether or not to retain title to any such invention by notifying the Patent Counsel at the time of disclosure or within 8 months of disclosure, as to those countries (including the United States) in which the SUBCONTRACTOR will retain title; provided, that in any case where publication, on sale, or public use has initiated the 1-year statutory period wherein valid patent protection can still be obtained in the United States, the period of 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. The SUBCONTRACTOR shall notify the Patent Counsel as to those countries (including the United States) in which the SUBCONTRACTOR will retain title not later than 60 days prior to the end of the statutory period.
- (3) The SUBCONTRACTOR shall file its initial patent application on an elected invention within 1 year after election, but not later than at least 60 days prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. The SUBCONTRACTOR shall file patent applications in additional countries (including the European Patent Office and under the Patent Cooperation Treaty) within either 10 months of the corresponding initial patent application or 6 months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where foreign filing has been prohibited by a Secrecy Order.
- (4) Requests for extension of the time for disclosure to the Patent Counsel, election, and filing may, at the discretion of DOE, be granted, and will normally be granted

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unless the Patent Counsel has reason to believe that a particular extension would prejudice the Government's interest.

(d) Conditions when the Government may obtain title notwithstanding an existing waiver.

The SUBCONTRACTOR shall convey to DOE, upon written request, title to any subject invention--

- (1) If the SUBCONTRACTOR elects not to retain title to a subject invention;
- (2) If the SUBCONTRACTOR fails to disclose or elect the subject invention within the times specified in paragraph (c) of this clause (provided that DOE may only request title within 60 days after learning of the SUBCONTRACTOR's failure to report or elect within the specified times);
- (3) In those countries in which the SUBCONTRACTOR fails to file patent applications within the times specified in paragraph (c) of this clause; provided, however, that if the SUBCONTRACTOR has filed a patent application in a country after the times specified in paragraph (c) of this clause, but prior to its receipt of the written request of DOE, the SUBCONTRACTOR shall continue to retain title in that country;
- (4) In any country in which the SUBCONTRACTOR decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention; or
- (5) If the waiver authorizing the use of this clause is terminated as provided in paragraph (p) of this clause.

(e) Minimum rights to SUBCONTRACTOR when the Government retains title.

- (1) The SUBCONTRACTOR shall retain a nonexclusive, royalty-free license throughout the world in each subject invention to which the Government obtains title under paragraph (d) of this clause except if the SUBCONTRACTOR fails to disclose the subject invention within the times specified in paragraph (c) of this clause. The SUBCONTRACTOR's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the SUBCONTRACTOR is a part and includes the right to grant sub licenses of the same scope to the extent the SUBCONTRACTOR 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 SUBCONTRACTOR's business to which the invention pertains.
- (2) The SUBCONTRACTOR'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 in 37 CFR part 404 and DOE licensing regulations. This license shall not be revoked in that field of use or the geographical areas in which the SUBCONTRACTOR has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of DOE to the extent the SUBCONTRACTOR, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.
- (3) Before revocation or modification of the license, DOE shall furnish the SUBCONTRACTOR a written notice of its intention to revoke or modify the license, and the SUBCONTRACTOR shall be allowed 30 days (or such other time as may be authorized by DOE for good cause shown by the SUBCONTRACTOR) after the notice to show cause why the license should not be revoked or modified.

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The SUBCONTRACTOR has the right to appeal, in accordance with applicable agency licensing regulations and 37 CFR part 404 concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

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

- (1) The SUBCONTRACTOR agrees to execute or to have executed and promptly deliver to DOE all instruments necessary to:
 - (i) establish or confirm the rights the Government has throughout the world in those subject inventions to which the SUBCONTRACTOR elects to retain title, and
 - (ii) convey title to DOE when requested under paragraph (d) and subparagraph (n)(2) of this clause, and to enable the Government to obtain patent protection throughout the world in that subject invention.
- (2) The SUBCONTRACTOR agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the SUBCONTRACTOR each subject invention made under contract in order that the SUBCONTRACTOR 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 paragraph (c)(1) of this clause. The SUBCONTRACTOR 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) The SUBCONTRACTOR shall notify DOE 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 30 days before the expiration of the response period required by the relevant patent office.
- (4) The SUBCONTRACTOR agrees to include, within the specification of any United States patent application 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 DOE. The Government has certain rights in this invention."
- (5) The SUBCONTRACTOR shall establish and maintain active and effective procedures to assure that subject inventions are promptly identified and disclosed to SUBCONTRACTOR personnel responsible for patent matters within 6 months of conception and/or first actual reduction to practice, whichever occurs first in the course of or under this contract. These procedures shall include the maintenance of laboratory notebooks or equivalent records and other records as are reasonably necessary to document the conception and/or the first actual reduction to practice of subject inventions, and records that show that the procedures for identifying and disclosing the inventions are followed. Upon request, the SUBCONTRACTOR shall furnish the Patent Counsel a description of such procedures for evaluation and for determination as to their effectiveness.
- (6) The SUBCONTRACTOR agrees, when licensing a subject invention, to arrange to avoid royalty charges on acquisitions involving Government funds, including funds derived through Military Assistance Program of the Government or

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otherwise derived through the Government; to refund any amounts received as royalty charges on the subject invention in acquisitions for, or on behalf of, the Government; and to provide for such refund in any instrument transferring rights in the invention to any party.

- (7) The SUBCONTRACTOR shall furnish the Patent Counsel the following:
- (i) Interim reports every 12 months (or such longer period as may be specified by the Patent Counsel) from the date of the contract, listing subject inventions during that period and certifying that all subject inventions have been disclosed or that there are no such inventions.
 - (ii) A final report, within 3 months after completion of the contracted work, listing all subject inventions or certifying that there were no such inventions, and listing all subcontracts at any tier containing a patent rights clause or certifying that there were no such subcontracts.
- (8) The SUBCONTRACTOR shall promptly notify the Patent Counsel in writing upon the award of any subcontract at any tier containing a patent rights clause by identifying the lower-tier 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 Patent Counsel, the SUBCONTRACTOR shall furnish a copy of such subcontract, and no more frequently than annually, a listing of the subcontracts that have been awarded.
- (9) In the event of a refusal by a prospective lower-tier subcontractor to accept one of the clauses in subparagraph (g)(i) or (2) below, the SUBCONTRACTOR-
- (i) shall promptly submit a written notice to the Contracting Officer setting forth the lower-tier subcontractor's reasons for such refusal and other pertinent information that may expedite disposition of the matter, and
 - (ii) shall not proceed with such subcontracting without the written authorization of the Contracting Officer.
- (10) The SUBCONTRACTOR shall provide, upon request, the filing date, serial number and title, a copy of the patent application (including an English-language version if filed in a language other than English), and patent number and issue date for any subject invention for which the SUBCONTRACTOR has retained title.
- (11) Upon request, the SUBCONTRACTOR shall furnish the Government an irrevocable power to inspect and make copies of the patent application file.

(g) Subcontracts.

- (1) Unless otherwise directed by the Contracting Officer, the SUBCONTRACTOR shall include the clause at 48 CFR 952.227-11, suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental, developmental, or research work to be performed by a small business firm or nonprofit organization, except where the work of the subcontract is subject to an Exceptional Circumstances Determination by DOE. For subcontracts with domestic entities that do not qualify as a small business firm or nonprofit organization, regardless of tier, for experimental, developmental, demonstration, or research work, the SUBCONTRACTOR shall insert this clause (suitably modified to identify the parties). For foreign subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work, the SUBCONTRACTOR shall include the patent rights clause at 48 CFR 952.227-13 (suitably modified to identify the parties).
- (2) The SUBCONTRACTOR shall not, as part of the consideration for awarding the subcontract, obtain rights in the lower-tier subcontractor's subject inventions.

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(3) In the case of lower-tier subcontractors at any tier, the Department, the lower-tier subcontractor, and SUBCONTRACTOR agree that the mutual obligations of the parties created by this clause constitute a contract between the lower-tier subcontractor and the Department with respect to those matters covered by this clause.

(h) Reporting on utilization of subject inventions.

The SUBCONTRACTOR agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the SUBCONTRACTOR and any of 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 SUBCONTRACTOR, and such other data and information as DOE may reasonably specify. The SUBCONTRACTOR also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceedings undertaken by DOE in accordance with paragraph U) of this clause. To the extent data or information supplied under this paragraph is considered by the SUBCONTRACTOR, its licensee or assignee to be privileged and confidential and is so marked, DOE agrees that, to the extent permitted by law, it shall not disclose such information to persons outside the Government.

(i) Preference for United States industry.

Notwithstanding any other provision of this clause, the SUBCONTRACTOR 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 products embodying 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 SUBCONTRACTOR 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 SUBCONTRACTOR agrees that with respect to any subject invention in which it has acquired title, DOE has the right in accordance with the procedures in 48 CFR 27.304-I(g) to require the SUBCONTRACTOR, 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 SUBCONTRACTOR, 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 SUBCONTRACTOR 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 SUBCONTRACTOR, 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 SUBCONTRACTOR, 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.

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(k) Background Patents.

(l) The SUBCONTRACTOR agrees:

- (i) to grant to the Government a royalty-free, nonexclusive license under any Background Patent for purposes of practicing a subject of this contract by or for the Government in research, development, and demonstration work only.
- (ii) that, upon written application by DOE, it will grant to responsible parties for purposes of practicing a subject of this contract, nonexclusive licenses under any Background Patent on terms that are reasonable under the circumstances. If, however, the SUBCONTRACTOR believes that exclusive or partially exclusive rights are necessary to achieve expeditious commercial development or utilization, then a request may be made to DOE for DOE approval of such 1icensing by the SUBCONTRACTOR.

(2) Notwithstanding paragraph (k)(l)(ii), the SUBCONTRACTOR shall not be obligated to license any Background Patent if the SUBCONTRACTOR demonstrates to the satisfaction of the Secretary or his designee that:

- (i) a competitive alternative to the subject matter covered by said Background Patent is commercially available from one or more other sources; or
- (ii) the SUBCONTRACTOR or its licensees are supplying the subject matter covered by said Background Patent in sufficient quantity and at reasonable prices to satisfy market needs, or have taken effective steps or within a reasonable time are expected to take effective steps to so supply the subject matter.

(l) Communications.

All reports and notifications required by this clause shall be submitted to the Patent Counsel unless otherwise instructed.

(m) Other inventions.

Nothing contained in this clause shall be deemed to grant to the Government any rights with respect to any invention other than a subject invention, except with respect to Background Patents, above.

(n) Examination of records relating to inventions.

(l) The Contracting Officer or any authorized representative shall, until 3 years after final payment under this contract, have the right to examine any books (including laboratory notebooks), records, and documents of the SUBCONTRACTOR relating to the conception or first actual reduction to practice of inventions in the same field of technology as the work under this contract to determine whether--

- (i) Any such inventions are subject inventions;
- (ii) The SUBCONTRACTOR has established and maintains the procedures required by paragraphs (f)(2) and (f)(3) of this clause; and
- (iii) The SUBCONTRACTOR and its inventors have complied with the procedures.

(2) If the Contracting Officer determines that an inventor has not disclosed a subject invention to the SUBCONTRACTOR in accordance with the procedures required by paragraph (f)(S) of this clause, the Contracting Officer may, within 60 days after the determination, request title in accordance with paragraphs (d)(2) and (d)(3) of this clause. However, if the SUBCONTRACTOR establishes that the failure to disclose did not result from the SUBCONTRACTOR's fault or negligence, the Contracting Officer shall not request title.

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- (3) If the Contracting Officer learns of an unreported SUBCONTRACTOR invention which the Contracting Officer believes may be a subject invention, the SUBCONTRACTOR may be required to disclose the invention to DOE for a determination of ownership rights.
- (4) Any examination of records under this paragraph shall be conducted in such a manner as to protect the confidentiality of the information involved.

(o) Withholding of payment.

NOTE: This paragraph does not apply to subcontracts or grants.

- (1) Any time before final payment under this contract, the Contracting Officer may, in the Government's interest, withhold payment until a reserve not exceeding \$50,000 or 5 percent of the amount of the contract, whichever is less, shall have been set aside if, in the Contracting Officer's opinion, the SUBCONTRACTOR fails to--
 - (i) Establish, maintain, and follow effective procedures for identifying and disclosing subject inventions pursuant to subparagraph (f)(5) of this clause;
 - (ii) Disclose any subject invention pursuant to subparagraph (c)(1) above;
 - (iii) Deliver acceptable interim reports pursuant to subdivision (f)(7)(i) above; or
 - (iv) Provide the information regarding subcontracts pursuant to subparagraph (f)(8) of this clause.
 - (v) Convey to the Government, using a DOE-approved form, the title and/or rights of the Government in each subject invention as required by this clause.
- (2) Such reserve or balance shall be withheld until the Contracting Officer has determined that the SUBCONTRACTOR has rectified whatever deficiencies exist and has delivered all reports, disclosures, and other information required by this clause.
- (3) Final payment under this contract shall not be made before the SUBCONTRACTOR delivers to the Patent Counsel all disclosures of subject inventions required by paragraph (c)(1) of this clause, an acceptable final report pursuant to paragraph (f)(7)(ii) of this clause, and all past due confirmatory instruments, and the Patent Counsel has issued a patent clearance certification to the Contracting Officer.
- (4) The Contracting Officer may decrease or increase the sums withheld up to the maximum authorized above. No amount shall be withheld under this paragraph while the amount specified by this paragraph is being withheld under other provisions of the contract. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government right.

(p) Waiver Terminations.

Any waiver granted to the SUBCONTRACTOR authorizing the use of this clause (including any retention of rights pursuant thereto by the SUBCONTRACTOR under paragraph (b) of this clause) may be terminated at the discretion of the Secretary or his designee in whole or in part, if the request for waiver by the SUBCONTRACTOR is found to contain false material statements or nondisclosure of material facts, and such were specifically relied upon by DOE in reaching the waiver determination. Prior to any such termination, the SUBCONTRACTOR will be given written notice stating the extent of such proposed termination and the reasons therefor, and a period of 30 days, or such longer period as the Secretary or his designee shall determine for good cause shown in writing, to show cause why the waiver of rights should not be so terminated. Any waiver termination shall be subject to the SUBCONTRACTOR's minimum license as provided in paragraph (e) of this clause.

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(q) Atomic Energy.

No claim for pecuniary award or compensation under the provisions of the Atomic Energy Act of 1954, as amended, shall be asserted by the SUBCONTRACTOR or its employees with respect to any invention or discovery made or conceived in the course of or under this contract.

(r) Publication.

It is recognized that during the course of work under this contract, the SUBCONTRACTOR or its employees may from time to time 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 interests of DOE or the SUBCONTRACTOR, approval for release of publication shall be secured from Patent Counsel prior to any such release or publication. In appropriate circumstances, and after consultation with the SUBCONTRACTOR, Patent Counsel may waive the right of prepublication review.

(s) Forfeiture of rights in unreported subject inventions.

(1) The SUBCONTRACTOR shall forfeit and assign to the Government, at the request of the Secretary of Energy or designee, all rights in any subject invention which the SUBCONTRACTOR fails to report to Patent Counsel within six months after the time the SUBCONTRACTOR:

- (i) Files or causes to be filed a United States or foreign patent application thereon; or
- (ii) Submits the final report required by paragraph (e)(2)(ii) of this clause, whichever is later.

(2) However, the SUBCONTRACTOR shall not forfeit rights in a subject invention if, within the time specified in paragraph (m)(1) of this clause, the SUBCONTRACTOR:

- (i) Prepares a written decision based upon a review of the record that the invention was neither conceived nor first actually reduced to practice in the course of or under the contract and delivers the decision to Patent Counsel, with a copy to the Contracting Officer; or
- (ii) Contending that the subject invention is not a subject invention, the SUBCONTRACTOR nevertheless discloses the subject invention and all facts pertinent to this contention to the Patent Counsel, with a copy to the Contracting Officer, or
- (iii) Establishes that the failure to disclose did not result from the SUBCONTRACTOR's fault or negligence.

(3) Pending written assignment of the patent application and patents on a subject invention determined by the Contracting Officer to be forfeited (such determination to be a Final Decision under the Disputes clause of this contract), the SUBCONTRACTOR shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Government. The forfeiture provision of this paragraph shall be in addition to and shall not supersede any other rights and remedies which the Government may have with respect to subject inventions.

(t) U.S. Competitiveness.

The waiver recipient agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially

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in the United States, unless the waiver recipient can show to the satisfaction of DOE that it is not commercially feasible to do so. The waiver recipient further agrees to make the above condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees.

- B. Paragraphs (c) and (d) of FAR 52.227-14 RIGHTS IN DATA – GENERAL (MAY 2014) are deleted in their entirety as written and substituted with the following:

(c) Copyright.

(1) Data first produced in the performance of this contract.

- (i) Unless provided otherwise in paragraph (d) of this clause, the SUBCONTRACTOR may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in scientific and technical articles based on or containing data (Published Data) first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings or similar works. For the published data, the SUBCONTRACTOR grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted Published Data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government.
- (ii) When authorized to assert copyright to the data, the SUBCONTRACTOR shall affix the applicable copyright notices of 17 U.S.C. 401 or 402, and an acknowledgment of Government sponsorship (including contract number).
- (iii) The SUBCONTRACTOR may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in Computer Software first produced in the performance of this contract. The SUBCONTRACTOR agrees to release original Computer Software developed under this Contract as open source software. For derivative works of SUBCONTRACTOR's Restricted Computer Software, the SUBCONTRACTOR may commercially license the derivative work. For any derivative works of Computer Software developed under the Contract, the SUBCONTRACTOR grants to the Government and others acting in its behalf during the period of SUBCONTRACTOR's commercialization of the software, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted Computer Software to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government. For original Computer Software, the Government retains a paid-up nonexclusive, irrevocable worldwide license to reproduce, prepare derivative works, and distribute copies to the public without restrictions. If required by DOE, the SUBCONTRACTOR will provide an Announcement Notice, AN 241.4 Software Announcement Notice, along with providing the source code, the executable object code and the minimum support documentation needed by a competent user to understand and use the Computer Software to DOE's Energy Science and Technology Software Center (ESTSC) via www.osti.gov/estsc.
- (iv) The SUBCONTRACTOR may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in all Other Data, which is data first produced in the performance of this contact that is neither Computer Software nor Published Data. For such Other Data the SUBCONTRACTOR grants to the Government and others acting in its behalf, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted non-published data to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government.

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- (v) After the time period set forth below in (d)(3) for Other Data or when he SUBCONTRACTOR abandons commercialization of Computer Software, or if, prior to the end of such periods, the SUBCONTRACTOR has not taken effective steps to commercialize the software, or where it is necessary to alleviate health, safety or energy needs that are not reasonably satisfied by the SUBCONTRACTOR, or to meet requirements for public use specified by Federal Regulations and these requirements are not reasonably satisfied by the SUBCONTRACTOR, the SUBCONTRACTOR grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted software to reproduce, distribute copies to the public, prepare derivative works, perform publicly and display publicly, and to permit others to do so.
- (2) Data not first produced in the performance of this contract.
- The SUBCONTRACTOR shall not, without prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract unless the SUBCONTRACTOR-
- (i) identifies such data; and
 - (ii) grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (c)(1) of this clause, or if such data are restricted computer software, the Government shall acquire a copyright license as set forth in paragraph (g)(4) of this clause (if included in this contract) or as otherwise provided in a collateral agreement incorporated in or made part of this contract.
- (3) Removal of copyright notices.
- The Government will not remove any authorized copyright notices placed on data pursuant to this paragraph (c), and will include such notices on all reproductions of the data.
- (d) Release, publication and use of data.
- (1) The SUBCONTRACTOR shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the SUBCONTRACTOR in the performance of this contract, except-
 - (i) As prohibited by Federal law or regulation (e.g., export control or national security laws or regulations);
 - (ii) As expressly set forth in this contract; or
 - (iii) If the SUBCONTRACTOR receives or is given access to data necessary for the performance of this contract that contain restrictive markings, the SUBCONTRACTOR shall treat the data in accordance with such markings unless specifically authorized otherwise in writing by the Contracting Officer.
 - (2) The SUBCONTRACTOR shall promptly deliver to the Contracting Officer or to the DOE Patent Counsel designated by the Contracting Officer a duly executed and approved instrument fully confirmatory of all rights to which the Government is entitled, and other terms pertaining to the Computer Software to which claim to copyright is made.
 - (3) For Other Data that is copyrighted in subparagraph (c)(1)(iv) above, the Government will have the right to provide to third parties such Other Data delivered to the Government in performance of this contract after five years from the date that such data is first produced. The Government shall have the right to provide Other Data to third parties sooner provided that such data (1) are generally known or available from other sources without obligation concerning its

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confidentiality, (2) have been made available by the owner to others without obligation concerning its confidentiality, or (3) are otherwise already available to the Government without obligation concerning its confidentiality. Interim disclosure or use also may be made for the following purposes:

- (i) As required for evaluation by APEX Program personnel at DOE/NNSA and DOE/NNSA Laboratories;
- (ii) As required to support the Advanced Scientific Computing Research (ASCR) and Advanced Simulation and Computing (ASC) Program objectives;
- (iii) As required to respond to a request under the Freedom of Information Act (5 U.S.C. 552), and other applicable laws or regulations, if any;
- (iv) As required to meet the Government's obligations under international agreements and treaties;
- (v) As required to commercialize the data if the SUBCONTRACTOR has not take effective steps to do so;
- (vi) As required to alleviate health, safety or energy needs that are not reasonably satisfied by the SUBCONTRACTOR; and
- (vii) As required to meet requirements for public use specified by Federal Regulations and these requirements are not reasonably satisfied by the SUBCONTRACTOR.

This subcontract embodies the entire agreement between CONTRACTOR and SUBCONTRACTOR and supersedes all other writings. The parties shall not be bound by or be liable for any statement, representation, promise, inducement or understanding not set forth herein.

For the CONTRACTOR:

For the SUBCONTRACTOR:

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____