STATEMENT OF CONSIDERATIONS

CLASS WAIVER OF THE GOVERNMENT'S DOMESTIC AND FOREIGN PATENT RIGHTS AND COPYRIGHT UNDER DOMESTIC FIRST AND SECOND TIER SUBCONTRACTS ISSUED BY LAWRENCE BERKELEY NATIONAL LABORATORY (LBNL) FOR NATIONAL ENERGY RESEARACH SCIENTIFIC COMPUTING CENTER (NERSC);
DOE WAIVER NO. W(C) 2022-002

The Department of Energy (DOE) has a long history of deploying leading-edge computing capability for science and national security. Going forward, DOE's compelling science, energy assurance and national security needs will require substantial increases in usable computing power, delivered as quickly and energy-efficiently as possible. Within DOE's Office of Science (SC), the mission of the Advanced Scientific Computing Research (ASCR) program is to discover, develop, and deploy computational and networking capabilities to analyze, model, simulate, and predict complex phenomena. A particular challenge of this program is fulfilling the science potential of emerging computing systems and other novel computing architectures, which will require numerous significant modifications to today's tools and techniques to deliver on the promise of exascale science.

LBNL NERSC 10

ASCR funds the operation of NERSC at LBNL to support the entire spectrum of SC research. Currently, NERSC supports over 8,000 scientists and over 1,000 projects using about 600 different application codes. NERSC's mission is to accelerate the pace of scientific discovery by providing advanced High Performance Computing (HPC), networking, data and support services for SC-sponsored research. During 2015-2017, DOE SC researchers chronicled their high-performance computing requirements in several meetings, reviews and studies including the Exascale Requirements Reviews conducted by ASCR. In these reviews, scientists forecasted their computational and data requirements in the 2020 and 2025 timeframes. Based on these user requirements, NERSC projects that the demand from SC's traditional simulation-based workloads in 2025 will be a factor of 100 beyond NERSC-9's capabilities. Analysis also reveals that the computational demands from experimental and observational facilities and artificial intelligence are increasing rapidly. From these reviews, NERSC-10 should provide a significant upgrade to current computational and workflow capabilities in 2025.

As the DOE and SC look ahead to the 2025 timeframe, a number of activities are being considered to take advantage of the changes in technology, such as the Integrated Research Infrastructure initiative, an RFI driven by the DOE Agency Priority Goal led by ASCR to sustain U.S. leadership in advanced computing technologies, potential follow-ons to the FastForward and DesignForward and Exascale Computing Project, as well as follow-on HPC acquisitions at other laboratories. The NERSC-10 system will be able to tie into these activities by building on successful innovations from these programs. With the delivery of the NERSC-10 platform in 2026 – early exploration of key concepts and technologies that will be essential for next-generation machines to be delivered during the 2024-2026 timeframe.

The use of Non-Recurring Engineering (NRE) funds to develop and deploy system functionality will enhance the user experience and allow us to take full advantage of the new technologies being deployed. NRE has been critical in tailoring computing technology to the needs of the broader HPC market as well as the SC workload in particular and build on the results of earlier NRE investments (such as FastForward, DesignForward, CORAL, CORAL2, ACES Crossroads and NERSC-9) which will be a major factor in successfully using the increased computational capabilities projected to be available in the FY2024-FY2026 timeframe. LBNL plans to award NRE Subcontracts to the selected vendor(s). The benefits of using NRE include a deeper and more productive partnership with vendors and risk mitigation because it allows for deeper and more fruitful consideration of all technology alternatives.

The Allocation of Patent Rights

A small business or non-profit organization will retain the patent rights to its subject inventions under the Bayh-Dole Act. See 35 USC 200-212. These subcontracts will contain the patent rights clause at 37 CFR 401.3(a) and 401.14 Standard Patent Rights modified accordingly for the Science and Energy Determination of Exceptional Circumstances Under the Bayh-Dole Act to Further Promote Domestic Manufacture of DOE Science and Energy Technologies.

For non-Bayh-Dole subcontractors, the Government retains title to subcontractor's subject inventions under DEAR 952.227-13 Patent Rights—Acquisition by the Government. However, a subcontractor that agrees to cost share by an amount of at least 40% of the total cost of the subcontract shall qualify for this advance class waiver where DOE agrees to waive, in advance, patent rights to the subcontractor such that it may elect its subject inventions. See Appendix A, paragraph (b) of 10 C.F.R. 784, DOE Patent Waiver Regulations. The patent rights waiver is subject to the retained government-use license, march-in rights, reporting requirements, DOE approval of assignments, 35 U.S.C. 204, and a U.S. Competitiveness provision (paragraph (t)), which are all contained in the clause. See Appendix A.

If a non-Bayh-Dole subcontractor under the subject RFP does not agree to cost-share at least 40% of the total contract cost, that subcontractor will receive the standard DEAR patent and FAR data clauses in connection with the R&D procurement. However, such a subcontractor can still seek DOE Headquarters Program approval to have this advance class waiver apply or petition the government for a separate advance waiver for its specific subcontract. If a subcontractor does not qualify for an advance waiver, there is a possibility that the subcontractor could petition for title for each subject invention by an Identified Invention Waiver process. However, the HQ Program may deny that option during negotiations and the clause DEAR 952.227-84 Notice of Right to Request Patent Waiver should not be included in the subcontract.

The Allocation of Rights in Computer Software

The Bayh-Dole Act only applies to the allocation of patent rights. However, many subcontractors prefer to have advance rights in technical data developed under their subcontracts. Therefore, this advance class waiver also allows a domestic subcontractor (small business, non-profit or for-profit organization) to assert copyright in computer software without DOE Contracting Officer's prior approval. ASCR agrees, in advance, to authorize the subcontractor to assert copyright, without DOE Contracting Officer's prior approval, in software produced under the subcontract by its employees subject to the requirements below. See Appendix B, paragraph (c)(1)(iii). However, ASCR policy is that all funded software should be released as Open-Source Software (OSS). This requirement shall apply to original software developed under the subcontract. If the software developed under the subcontract is a derivative work of existing subcontractor's software (i.e. Restricted Computer Software), the derivative work can be commercially licensed by the subcontractor. In this situation, the right to assert copyright in software is subject to a limited government-use license to allow the subcontractor sufficient time to commercialize the computer software. In the limited government-use license, the subcontractor grants to the Government and others acting on its behalf, a paid-up nonexclusive, irrevocable worldwide license in the portion of copyrighted computer software generated under the subcontract to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government. However, the limited government-use license in such copyrighted software will revert to a broad Government license, which allows the Government to distribute copies to the public, if either the subcontractor abandons the commercialization of the software or DOE march-in rights are exercised, for example, where the subcontractor has not taken effective steps to commercialize the software. If the ASCR policy on OSS applies, then the Government will release the software as OSS and the broad Government license applies to allow distribution to the public without any restrictions.

The deliverables expected will be detailed reports of technical activities, performance results, and lessons learned associated with the endeavor. It is not expected that any software or hardware will be delivered to the Laboratories under the subcontracts. However, The Laboratories should consult with the DOE Program to determine whether, if any, software developed under specific subcontracts should be delivered to DOE's Office of Technology Information (OSTI). DOE believes granting the copyright in software is warranted here in order to stimulate developed-end products to purchase in the future.

The Delayed Release of Unpublished Data—Other Data

Since these subcontracts are for long-term commercialization activity, many companies will want to protect their data generated under the subcontracts from public release. However, DOE's policy (and statutory provisions) is to publicly release technical data that is funded by

the U.S. Government. This policy promotes both the commercialization of the technology and the further development of knowledge in the academic/research community. However, many companies would be reluctant to allow their competitors immediate access to the technology. DOE could limit the data delivered to the Laboratories and DOE, but the Laboratories need to receive all the pertinent data necessary to carry out the objectives of the Government's program. Therefore, the DOE Program supports a delayed release of up to five years of technical data developed under the subcontracts to allow the subcontractor the opportunity for a competitive advantage to commercialize this technology. There are several exceptions where DOE may release the data, for example, when responding to a request under the Freedom of Information Act (FOIA). See Appendix B, Rights in Data (modified), paragraph (d)(3) for a full list of exceptions.

Foreign Subcontracts

The provisions of this advance class waiver do not automatically apply to any foreign owned or controlled subcontractors at any tier. However, the Laboratories should consult with DOE Patent Counsel and HQ Program to determine whether a foreign subcontractor could be granted the above rights or require the foreign subcontractor to submit a separate petition for an advance waiver to be approved by HQ.

Conclusion

This advance class waiver and the terms of the intellectual property clauses included within the subject subcontracts are meant to cover the scope of the work for NRE subcontracts under the NERSC-10 program and shall not serve as precedent for any follow-on work to be negotiated separately with the selected subcontractors. Also, this advance class waiver shall apply to second tier subcontracts that a first-tier subcontractor issues and will not apply to foreign owned or controlled companies.

DOE Patent Counsel will qualify each subcontractor by written certification by the Laboratory issuing the subcontract that this advance class waiver is applicable. Such certification will include verification of the minimum percentage cost share by the subcontractor, a determination that the subcontractor is a U.S. company, and verification of the acceptability of the terms and conditions of the subcontract.

If any company does not qualify for this advance class waiver or is not satisfied with the terms and conditions of the subcontract necessary to qualify for this Waiver, then that company may request to separately petition DOE for its own advance waiver and HQ Program will be consulted to determine if that is a possibility.

For the foregoing reasons, and in view of the objectives and considerations set forth in 10 CFR 784, it is recommended that the requested waiver be granted for domestic first tier and second tier subcontracts issued under the NRE subcontracts issued under NERSC-10 program.

[redacted]

Date: June 23, 2022

Gary Drew
Counsel for Intellectual Property
DOE Office of Science and Technology

Based on the foregoing Statement of Considerations, it is determined that the interests of the United States and the general public will best be served by waiver of the United States domestic and foreign patent rights, copyright in software copyright and delayed release of technical data as set forth herein, and therefore, the waiver is granted. Unless approved by DOE Program and DOE Patent Counsel, this waiver shall not apply to a modification or extension of the subcontracts where, through such modification or extension, the purpose, scope or DOE cost of the subcontracts has been substantially altered. This waiver shall not affect any waiver previously granted.

CONCURRENCE:

[redacted]

July 12, 2022
Date:

Barbara Helland
Associate Director
Advanced Scientific Computing Research
Office of Science

APPROVED:

[redacted]

Date:

Brian Lally
Assistant General Counsel
for Technology Transfer and Intellectual Property

APPENDIX A

Patent Rights - Waiver (10 C.F.R. 784, DOE Patent Waiver Regulations) (12/10/2021)

a. Definitions.
As used in this clause:

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 Contractor at any time through the completion of this contract:

i. Which the Contractor, 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.

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.

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

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 et seq.).

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

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.

Patent Counsel means the Department of Energy Patent Counsel assisting the procuring activity.

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.

Secretary means the Secretary of Energy.

Small business firm means a small business concern as defined at Section 2 of the 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 will be used.

Subject invention means any invention of the Contractor conceived or first actually reduced to practice in the course of or under this contract, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act (7 U.S.C. 2401(d)) 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 Contractor, the Contractor may elect to retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause. With respect to any subject invention in which the Contractor 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 Contractor.

1. The Contractor 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 Contractor. 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 Contractor 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 Contractor.

2. The Contractor 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 eight (8) months of disclosure, as to those countries (including the United States) in which the Contractor will retain title; provided, that in any case where publication, on sale, or public use has initiated the one (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 DOE to a date that is no more than 60 days prior to the end of the statutory period. The Contractor shall notify the Patent Counsel as to those countries (including the United States) in which the Contractor will retain title not later than 60 days prior to the end of the statutory period.

3. 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, 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. If the Contractor files a provisional application as its initial patent application, it shall file a non-provisional application within 10 months of the filing of the provisional application. The Contractor will file patent applications in additional countries or international patent offices within either ten months of the first filed patent application or six months from the date permission is granted by the Commissioner of Patents to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

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 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 Contractor shall assign and hereby assigns to DOE, title to any subject invention--

1. If the Contractor elects not to retain title to a subject invention;

2. If the Contractor fails to disclose or elect the subject invention within the times specified in paragraph (c) of this clause;

3. In those countries in which the Contractor fails to file patent applications within the times specified in paragraph (c) of this clause; provided, however, that if the Contractor 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 Contractor shall continue to retain title in that country;

4. 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 reexamination or opposition proceeding on, a patent on a subject invention;

5. If the waiver authorizing the use of this clause is terminated as provided in paragraph (p) of this clause; or

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

e. Minimum rights to Contractor when the Government retains title.

1. The Contractor 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 Contractor fails to disclose the subject invention within the times specified in paragraph (c) of this clause or breaches paragraph (t). The Contractor's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Contractor is a part 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. 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 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 Contractor 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 Contractor, 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 Contractor a written notice of its intention to revoke or modify the license, and the Contractor shall be allowed 30 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 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. Contractor action to protect the Government's interest.

1. The Contractor 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 Contractor elects to retain title, and

ii. convey or confirm the transfer of title to DOE in subject inventions when DOE obtains title (e.g. pursuant to paragraphs (d), (n)(2) and (p)) of this clause, and to enable the Government to obtain patent protection throughout the world in that subject invention.

2. The Contractor 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 Contractor each subject invention made under 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 paragraph (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. Not less than sixty (60) days before the expiration of any period required by the relevant patent office (including all extension requests available as a matter of right by the relevant patent office), the Contractor shall notify Patent Counsel of any decision <u>not</u> to:
(i) continue the prosecution of a patent application;
(ii) file a U.S. non-provisional patent application within the statutory period for claiming priority to the initial patent application; and
(iii) pay maintenance fees or defend in a reexamination or opposition proceeding on a patent, in any country.

4. The Contractor 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 Contractor shall establish and maintain active and effective procedures to assure that subject inventions are promptly identified and disclosed to Contractor personnel responsible for patent matters within six (6) months of conception 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 Contractor shall furnish the Patent Counsel a description of such procedures for evaluation and for determination as to their effectiveness.

6. The Contractor 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 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 Contractor shall furnish the Patent Counsel the following:

   i. Interim reports every twelve (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 three (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 Contractor shall promptly notify DOE in writing upon the award of any subcontract at any tier containing a patent rights clause by identifying 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 DOE, the Contractor shall furnish a copy of such subcontract, and no more frequently than annually, a listing of the subcontracts that have been awarded.

9. The Contractor shall provide 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 Contractor has retained title.

10. Upon request, the Contractor shall furnish the Government an irrevocable power to inspect and make copies of the patent application file.

g. Subcontracts.

1. The Contractor will include in the patent rights clause directed by the Contracting Officer.

2. The Contractor shall not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

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

h. Reporting on utilization of subject inventions.

(1) The Contractor agrees to submit annual reports on the utilization of each waived subject invention or on efforts at obtaining such that are being made by the Contractor and any of its licensees or assignees including compliance with paragraph (t) of this clause. Each report shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, products that embody or are made through the use of the waived subject invention, manufacturing locations of such products and such other data and information as DOE may reasonably specify.

(2) The Contractor 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 (j) of this clause.

(3) To the extent data or information supplied under this paragraph is considered by the Contractor, 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 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 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 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 48 CFR 27.304-1(g) 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. Background Patents [reserved]

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

m. 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.

1. DOE shall, until three (3) years after final payment under this contract, have the right to examine any books (including laboratory notebooks), records, and documents of the Contractor 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 Contractor has established and maintains the procedures required by paragraphs (f)(2) and (f)(5) of this clause; and

iii. The Contractor and its inventor have complied with the procedures.

2. If DOE learns of an unreported Contractor invention which DOE believes may be a subject invention, the Contractor may be required to disclose the invention to DOE for a determination of ownership rights.

3. 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 (RESERVED)

p. Waiver Terminations.

Any waiver granted to the Contractor authorizing the use of this clause (including any retention of rights pursuant thereto by the Contractor 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 Contractor 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 or the cost share requirement as set forth in the applicable statement of considerations is not met. Prior to any such termination, the Contractor 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 Contractor's minimum license as provided in paragraph (e) of this clause.

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 Contractor 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 contractor 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 contractor, 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 contractor, Patent Counsel may waive the right of prepublication review.

s. Forfeiture of rights in unreported subject inventions.

1. The contractor shall assign and hereby assigns to the Government, all rights in any subject invention which the contractor fails to report to Patent Counsel within six months after the time the contractor:
   i. Files or causes to be filed a United States or foreign patent application thereon; or
   ii. Submits the final report required by paragraph (f)(7)(ii) of this clause, whichever is later.

2. Pending written assignment of the patent application and patents on a subject invention determined by Patent Counsel to be forfeited (such determination to be a Final Decision under the Disputes clause of this contract), the contractor 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 Contractor agrees that any products embodying any subject invention or produced through the use of any subject invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of DOE that it is not commercially feasible. In the event DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., alternative binding commitments to provide an overall net benefit to the U.S. economy. The Contractor agrees that it will not license, assign or otherwise transfer any subject invention to any entity, at any tier, unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention(s): (1) undergo a change in ownership amounting to a controlling interest, or (2) sell, assign, or otherwise transfer title or exclusive rights in the invention(s), then the assignment, license, or other transfer of rights in the subject invention(s) is/are suspended until approved in writing by DOE. The Contractor and any successor assignee will convey to DOE, upon written request from DOE, title to any subject invention, upon a breach of this paragraph. The Contractor will include this paragraph in all subawards/contracts, regardless of tier, for experimental, developmental or research work.

(End of clause)

APPENDIX B

FAR 52.227-14 Rights in Data-General (Dec 2007) (modified)

(c) Copyright.

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

(i) Unless provided otherwise in paragraph (d) of this clause, the Contractor 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 Contractor 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 Contractor 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 Contractor 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 Contractor agrees to release original Computer Software developed under this Contract as open source software. For derivative works of Contractor's Restricted Computer Software, the Contractor may commercially license the derivative work. For the portion of Computer Software of derivative work developed under the Contract, the Contractor grants to the Government and others acting in its behalf during the period of Contractor'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 Contractor 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 Office of Scientific and Technical Information via osti.gov.

(iv) The Contractor 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 Contractor 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.

(v) After the time period set forth below in (d)(3) for Other Data or when he Contractor abandons commercialization of Computer Software, or if, prior to the end of such periods, the contractor 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 Contractor, or to meet requirements for public use specified by Federal Regulations and these requirements are not reasonably satisfied by the Contractor, the Contractor 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 Contractor 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 Contractor—
(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 Contractor shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor 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 Contractor receives or is given access to data necessary for the performance of this contract that contain restrictive markings, the Contractor shall treat the data in accordance with such markings unless specifically authorized otherwise in writing by the Contracting Officer.

(2) The Contractor 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 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 ASCR 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 Contractor has not taken effective steps to do so;

(vi) As required to alleviate health, safety or energy needs that are not reasonably satisfied by the Contractor; and

(vii) As required to meet requirements for public use specified by Federal Regulations and these requirements are not reasonably satisfied by the Contractor.