FAR 52.227-12 Patent Rights - Waiver (JUL 1996), as modified by 10 C.F.R. 784, DOE Patent Waiver Regulations and U.S. Competitiveness clause

PATENT RIGHTS - WAIVER (JUL 1996)

(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 121.3-8 and 13 CFR 121.3-12, respectively, 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 and 35 U.S.C. "202 and 203. 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 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 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 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 shall file its United States 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 Contractor 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 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 convey to DOE, upon written request, 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 (provided that DOE may only request title within 60 days after learning of the Contractor's failure to report or elect within the specified times);

(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; 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 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. 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 title to DOE when requested under paragraphs (d) and (n) (2) 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) The Contractor 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 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 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 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 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 Contractor 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 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 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, 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 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) Unless otherwise directed by the Contracting Officer, the Contractor 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. In all other subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work, the Contractor shall include the patent rights clause at 48 CFR 952.227-13 (suitably modified to identify the parties).

(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, the Department, the subcontractor, and Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and the Department with respect to those matters covered by this clause.

(4) The Contractor shall promptly notify the Contracting Officer 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 the Contracting Officer, the Contracting Officer shall furnish a copy of such subcontract, and, no more frequently than annually, a listing of the subcontracts that have been awarded.

(h) Reporting on utilization of subject inventions.

The Contractor 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 Contractor 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 Contractor, and such other data and information as DOE may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceedings undertaken by DOE in accordance with paragraph (j) of this clause. 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.

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.

(1) 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 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 the Contracting Officer determines that an inventor has not disclosed a subject invention to the Contractor in accordance with the procedures required by paragraph (f)(5) 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 Contractor establishes that the failure to disclose did not result from the Contractor's fault or negligence, the Contracting Officer shall not request title.

(3) If the Contracting Officer learns of an unreported Contractor invention which the Contracting Officer believes may be a subject invention, the Contractor 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 Contractor fails to--

(i) Establish, maintain, and follow effective procedures for identifying and disclosing subject inventions pursuant to paragraph (f)(5) of this clause;

(ii) Disclose any subject invention pursuant to paragraph (c)(1) of this clause;

(iii) Deliver acceptable interim reports pursuant to paragraph (f)(7)(I) of this clause;

(iv) Provide the information regarding subcontracts pursuant to paragraph (f) (6) of this clause; or

(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 Contractor 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 Contractor 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. If the maximum amount authorized above is already being withheld under other provisions of the contract, no additional amount shall be withheld under this paragraph. 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 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. Prior to any such termination, the Contractor will be given written notice stating the extent of such proposed termination and the reasons therefore, 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 forfeit and assign to the Government, at the request of the Secretary of Energy or designee, 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) However, the Contractor shall not forfeit rights in a subject invention if, within the time specified in paragraph (n)(1) of this clause, the contractor:

(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 contractor 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 contractor'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 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 waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the 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.*, recoupment of the Government's investment, etc. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment,

license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.

(End of clause)

CDSB-1003
Intellectual Property Provisions (CDSB-1003)
Cooperative Agreement - Special Data Statute
Research, Development, or Demonstration
Domestic Small Businesses

01. FAR 52.227-1	Authorization and Consent (JUL 1995)-Alternate I (APR 1984)
02. FAR 52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement (AUG 1996) *This clause is not applicable if the award is for less than $100,000, in aggregate*
03. 10 CFR 600.325 Appendix A	Rights in Data - Programs Covered Under Special Data Statutes (OCT 2003) *If the contracting officer, in consultation with DOE patent counsel and the DOE program official, determines that delivery of limited rights data or restricted computer software is necessary, Alternates I and II may be inserted into the clause after negotiations with the applicant.*
04. FAR 52.227-23	Rights to Proposal Data (Technical) (JUN 1987)
05. 10 CFR 600.325 Appendix A	Patent Rights (Small Business Firms and Nonprofit Organizations) (OCT 2003)

NOTE: In reading these provisions, any reference to "contractor" shall mean "recipient," and any reference to "contract" or "subcontract" shall mean "award" or "subaward."

01. FAR 52.227-1 Authorization and Consent (JUL 1995)-Alternate I (APR 1984)

(a) The Government authorizes and consents to all use and manufacture of any invention described in and covered by a United States patent in the performance of this contract or any subcontract at any tier.

(b) The Contractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for research and development expected to exceed the simplified acquisition threshold; however, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.

(End of clause)

02. FAR 52.227-2 Notice and Assistance Regarding Patent and Copyright Infringement (AUG 1996)

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

(c) The Contractor agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the simplified acquisition threshold at FAR 2.101.

(End of clause)

03. 10 CFR 600.325 Appendix A, Rights in Data - Programs Covered Under Special Data Statutes (OCT 2003)

(a) Definitions

Computer Data Bases, as used in this clause, means a collection of data in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.

Computer software, as used in this clause, means (i) computer programs which are data comprising a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations and (ii) data comprising source code listings, design details, algorithms, processes, flow charts, formulae and related material that would enable the computer program to be produced, created or compiled. The term does not include computer data bases.

Data, as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to administration, such as financial, administrative, cost or pricing or management information.

Form, fit, and function data, as used in this clause, means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability as well as data identifying source, size, configuration, mating and attachment characteristics, functional characteristics, and performance requirements except that for computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithm, process, formulae, and flow charts of the software.

Limited rights data, as used in this clause, means data (other than computer software) developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged.

Restricted computer software, as used in this clause, means computer software developed at private expense and that is a trade secret; is commercial or financial and confidential or privileged; or is published copyrighted computer software; including modifications of such computer software.

Protected data, as used in this clause, means technical data or commercial or financial data first produced in the performance of the award which, if it had been obtained from and first produced by a non-federal party, would be a trade secret or commercial or financial information that is privileged or confidential under the meaning of 5 U.S.C. 552(b)(4) and which data is marked as being protected data by a party to the award.

Protected rights, as used in this clause, mean the rights in protected data set forth in the Protected Rights Notice of paragraph (g) of this clause.

Technical data, as used in this clause, means that data which are of a scientific or technical nature. Technical data does not include computer software, but does include manuals and instructional materials and technical data formatted as a computer data base.

Unlimited rights, as used in this clause, means the right of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose whatsoever, and to have or permit others to do so.

(b) Allocation of Rights

(1) Except as provided in paragraph (c) of this clause regarding copyright, the Government shall have unlimited rights in--

(i) Data specifically identified in this agreement as data to be delivered without restriction;

(ii) Form, fit, and function data delivered under this agreement;

(iii) Data delivered under this agreement (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under this agreement; and

(iv) All other data delivered under this agreement unless provided otherwise for protected data in accordance with paragraph (g) of this clause or for limited rights data or restricted computer software in accordance with paragraph (h) of this clause.

(2) The Recipient shall have the right to--

(i) Protect rights in protected data delivered under this agreement in the manner and to the extent provided in paragraph (g) of this clause;

(ii) Withhold from delivery those data which are limited rights data or restricted computer software to the extent provided in paragraph (h) of this clause;

(iii) Substantiate use of, add, or correct protected rights or copyrights notices and to take other appropriate action, in accordance with paragraph (e) of this clause; and

(iv) Establish claim to copyright subsisting in data first produced in the performance of this agreement to the extent provided in subparagraph (c)(1) of this clause.

(c) Copyright

(1) Data first produced in the performance of this agreement. Except as otherwise specifically provided in this agreement, the Recipient may establish, without the prior approval of the Contracting Officer, claim to copyright subsisting in any data first produced in the performance of this agreement. If claim to copyright is made, the Recipient shall affix the applicable copyright notice of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including agreement number) to the data when such data are delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. For such copyrighted data, including computer software, the Recipient grants to the Government, and others acting on its behalf, a paid-up nonexclusive, irrevocable, worldwide license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government, for all such data.

(2) Data not first produced in the performance of this agreement. The Recipient shall not, without prior written permission of the Contracting Officer, incorporate in data delivered under this agreement any data that are not first produced in the performance of this agreement and that contain the copyright notice of 17 U.S.C. 401 or 402, unless the Recipient identifies such data and 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; provided, however, that if such data are computer software, the Government shall acquire a copyright license as set forth in subparagraph (h)(3) of this clause if included in this agreement or as otherwise may be provided in a collateral agreement incorporated or made a part of this agreement.

(3) Removal of copyright notices. The Government agrees not to remove any copyright notices placed on data pursuant to this paragraph (c), and to include such notices on all reproductions of the data.

(d) Release, Publication and Use of Data

(1) The Recipient shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Recipient in the performance of this contract, except to the extent such data may be subject to the Federal export control or national security laws or regulations, or unless otherwise provided in this paragraph of this clause or expressly set forth in this contract.

(2) The Recipient agrees that to the extent it receives or is given access to data necessary for the performance of this agreement which contain restrictive markings, the Recipient shall treat the data in accordance with such markings unless otherwise specifically authorized in writing by the Contracting Officer.

(e) Unauthorized Marking of Data

(1) Notwithstanding any other provisions of this agreement concerning inspection or acceptance, if any data delivered under this agreement bears any restrictive or limiting markings or notices not authorized by this agreement, the Contracting Officer may at any time either return the data to the Recipient or cancel or ignore the markings. However, the following procedures shall apply prior to canceling or ignoring the markings.

(i) The Contracting Officer shall make written inquiry to the Recipient affording the Recipient 30 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;

(ii) If the Recipient fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 30-day period (or a longer time not exceeding 90 days approved in writing by the Contracting Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will no longer be made subject to any disclosure prohibitions.

(iii) If the Recipient provides written justification to substantiate the propriety of the markings within the period set in subdivision (e)(1)(i) of this clause, the Contracting Officer shall consider such written justification and determine whether or not the markings are to be cancelled or ignored. If the Contracting Officer determines that the markings are authorized, the Recipient shall be so notified in writing. If the Contracting Officer determines, with concurrence of the head of the contracting activity, that the markings are not authorized, the Contracting Officer shall furnish the Recipient a written determination, which determination shall become the final agency decision regarding the appropriateness of the markings unless the Recipient files suit in a court of competent jurisdiction within 90 days of receipt of the Contracting Officer's decision. The Government shall continue to abide by the markings under this subdivision (e)(1)(iii) until final resolution of the matter either by the Contracting Officer's determination become final (in which instance the Government shall thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.

(2) The time limits in the procedures set forth in subparagraph (e)(1) of this clause may be modified in accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.

(f) Omitted or Incorrect Markings

(1) Data delivered to the Government, without any restrictive or limiting markings or notices authorized by this agreement, shall be deemed to have been furnished with unlimited rights, and the Government assumes no liability for the disclosure, use, or reproduction of such data. However, to the extent the data has not been disclosed without restriction outside the Government, the Recipient may request, within 6 months (or a longer time approved by the Contracting Officer for good cause shown) after delivery of such data, permission to have notices placed on qualifying data at the Recipient's expense, and the Contracting Officer may agree to do so if the Recipient--

(i) Identifies the data to which the omitted notice is to be applied;

(ii) Demonstrates that the omission of the notice was inadvertent;

(iii) Establishes that the use of the proposed notice is authorized; and

(iv) Acknowledges that the Government has no liability with respect to the disclosure, use, or reproduction of any such data made prior to the addition of the notice or resulting from the omission of the notice.

(2) The Contracting Officer may also:

(i) Permit correction at the Recipient's expense of incorrect notices if the Recipient identifies the data on which correction of the notice is to be made, and demonstrates that the correct notice is authorized; or

(ii) Correct any incorrect notices.

(g) Rights to Protected Data:

(1) The Recipient may, with the concurrence of DOE, claim and mark as protected data, any data first produced in the performance this award that would have been treated as a trade secret if developed at private expense. Any such claimed "Protected Data" will b clearly marked with the following Protected Rights Notice, and will be treated in accordance with such Notice, subject to the provisio of paragraphs (e) and (f) of this clause.

PROTECTED RIGHTS NOTICE
These protected data were produced under Agreement No. DE-EE0002867 with the U.S. Department of Energy and may not be published, disseminated, or disclosed to others outside the Government until, unless express written authorization is obtained from the recipient. Upon expiration of the period of protection set forth in this Notice, the Government shall have unlimited rights this data. This Notice shall be marked on any reproduction of this data, in whole or in part.
(End of notice).

(2) Any such marked Protected Data may be disclosed under obligations of confidentiality for the following purposes:
(a) For internal DOE evaluation and planning purposes under the restriction that the Protected Data be retained in confidence a not be further disclosed; or
(b) To DOE staff members or authorized DOE contractors or subcontractors performing work under the Government's program under the restriction that the Protected Data be retained in confidence and not be further disclosed.

(3) The obligations of confidentiality and restrictions on publication and dissemination shall end for any Protected Data:
(a) At the end of the protected period;
(b) If the data become publicly known or available from other sources without a breach of the obligation of confidentiality with respect to the Protected Data;
(c) If the same data are independently developed by someone who did not have access to the Protected Data and such data are made available without obligations of confidentiality; or
(d) If the Recipient disseminates or authorizes another to disseminate such data without obligations of confidentiality.

(4) However, the Recipient agrees that the following types of data are not considered to be protected and shall be provided to the Government when required by this award without any claim that the data are Protected Data: General test results and data that demonstrate progress toward meeting DOE's technical goals to design, construct, build, and operate a demonstration- or pilot-scale integrated biorefinery employing lignocellulosic or algal feedstocks, and in certain special cases starch feedstocks, for the production of (i) liquid transportation fuels, (ii) biobased chemicals, products or co-products, or (iii) substitutes for petroleum-bas feedstocks and products. These results and data will be made available to the public and included in the final project report, an in other reports and presentations, as appropriate. The parties agree that notwithstanding the data enumerated above, nothing precludes the Government from seeking delivery of additional data in accordance with this award, or from making publicly available additional nonprotected data, nor does the preceding enumerated data constitute any admission by the Government th technical data not so enumerated are Protected Data. The general data described above shall not include the following types of data, which Recipient intends, without limitation, to claim and mark as Protected Data:

a) Process Flow Diagrams
b) Mass & Energy Balances
c) Process Performance Parameters and Costs by Unit Operation, including the quality of the data used for those performance parameters, (e.g., scale, replication, degree of integration, range of values, etc.)
d) Capital Cost Estimate and Basis thereof: e.g. factored, vendor quotes, actual purchase prices, etc.
e) Pro Forma with best reproducible results to date with all assumptions listed and the basis/rationale behind all pro forma input parameters explained, including but not necessarily limited to:
    i. Production cost parameters: e.g. consumables, utilities, labor, etc.
    ii. Water consumption requirements and costs
    iii. Waste disposal requirements and costs
f) Any additional financial and technical project information necessary and sufficient to validate the current and actual conversion costs associated with the facility or system as constructed and projected to be operated for converting lignocellulosic or algal feedstocks, and in certain special cases starch feedstocks, into (i) liquid transportation fuels, or (i biobased chemicals, products or co-products, or (iii) substitutes for petroleum-based feedstocks and products.

g) Technical results based on data collected, to enable the analysis, assessment and evaluation of other areas of interest, including but not necessarily limited to life cycle assessments, green house gas emissions, and sustainability metrics.

(5) The Government's sole obligation with respect to any protected data shall be as set forth in this paragraph (g).

(h) Protection of Limited Rights Data

(1)When data other than that listed in subparagraphs (b)(1)(i), (ii), and (iii) of this clause are specified to be delivered under this agreement and such data qualify as either limited rights data or restricted computer software, the Recipient, if the Recipient desires continue protection of such data, shall withhold such data and not furnish them to the Government under this agreement. As a condition to this withholding the Recipient shall identify the data being withheld and furnish form, fit, and function data in lieu thereof.

(2) Notwithstanding subparagraph (h)(1) of this clause, the agreement may identify and specify the delivery of limited rights data, or the Contracting Officer may require by written request the delivery of limited rights data that has been withheld or would otherwise b withholdable. If delivery of such data is so required, the Recipient may affix the following "Limited Rights Notice" to the data and the Government will thereafter treat the data, in accordance with such Notice:

LIMITED RIGHTS NOTICE
(a) These data are submitted with limited rights under Government Agreement No. DE-EE0002867. These data may be reproduced and used by the Government with the express limitation that they will not, without written permission of the Recipient, be used for purposes of manufacture nor disclosed outside the Government; except that the Government may disclose these data outside the Government for the following purposes, if any, provided that the Government makes such disclosure subject to prohibition against further use and disclosure:
(1) Use (except for manufacture) by Federal support services contractors within the scope of their contracts;
(2) These "limited rights data" may be disclosed for evaluation purposes under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;
(3) These "limited rights data" may be disclosed to other contractors participating in the Government's program, of which this Recipient is a part, for information or use (except for manufacture) in connection with the work performed under their awards, an under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;
(4) These "limited rights data" may be used by the Government or others on its behalf for emergency repair or overhaul work under the restriction that the "limited rights data" be retained in confidence and not be further disclosed; and
(5) Release to a foreign government, or instrumentality thereof, as the interests of the United States Government may require, f information or evaluation, or for emergency repair or overhaul work by such government.
(b) This Notice shall be marked on any reproduction of these data, in whole or in part.

(End of notice)

(i) Subaward/Contract

The Recipient has the responsibility to obtain from its subrecipients/contractors all data and rights therein necessary to fulfill the Recipient's obligations to the Government under this agreement. If a subrecipient/contractor refuses to accept terms affording the Government such rights, the Recipient shall promptly bring such refusal to the attention of the Contracting Officer and not proceed with subaward/contract award without further authorization.

(j) Additional Data Requirements

In addition to the data specified elsewhere in this agreement to be delivered, the Contracting Officer may, at anytime during agreement performance or within a period of 3 years after acceptance of all items to be delivered under this agreement, order any data first produced or specifically used in the performance of this agreement. This clause is applicable to all data ordered under this subparagraph. Nothing contained in this subparagraph shall require the Recipient to deliver any data the withholding of which is authorized by this clause or data which are specifically identified in this agreement as not subject to this clause. When data are to be delivered under this subparagraph, the Recipient will be compensated for converting the data into the prescribed form, for reproduction, and for delivery.

(k) The Recipient agrees, except as may be otherwise specified in this agreement for specific data items listed as not subject to this paragraph, that the Contracting Officer or an authorized representative may, up to 3 years after acceptance of all items to be delivered under this contract, inspect at the Recipient's facility any data withheld pursuant to paragraph (h) of this clause, for purposes of verifying the Recipient's assertion pertaining to the limited rights or restricted rights status of the data or for evaluating work performance. Where the Recipient whose data are to be inspected demonstrates to the Contracting Officer that there would be a possible conflict of interest if the inspection were made by a particular representative, the Contracting Officer shall designate an alternate inspector.

(End of clause)

04. FAR 52.227-23 Rights to Proposal Data (Technical) (JUN 1987)

Except for data contained on pages 6-10 of the Project Narrative, it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data--General" clause contained in this contract) in and to the technical data contained in the proposal upon which this contract is based.

05. 10 CFR 600.325 Appendix A, Patent Rights (Small Business Firms and Nonprofit Organizations) (OCT 2003)

(a) Definitions

Invention means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).

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

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.

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.

Small business firm means a small business concern as defined at section 2 of Public Law 85-536 (16 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3 through 121.8 and 13 CFR 121.3 through 121.12, respectively, will be used.

Subject invention means any invention of the Recipient conceived or first actually reduced to practice in the performance of work under this award, 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 award performance.

(b) Allocation of Principal Rights

The Recipient may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this Patent Rights clause and 35 U.S.C. 203. With respect to any subject invention in which the Recipient retains title, the Federal Government shall have a non-exclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the U.S. the subject invention throughout the world.

(c) Invention Disclosure, Election of Title and Filing of Patent Applications by Recipient

(1) The Recipient will disclose each subject invention to DOE within two months after the inventor discloses it in writing to Recipient personnel responsible for the administration of patent matters. The disclosure to DOE shall be in the form of a written report and shall identify the award under which the invention was made and the inventor(s). It shall be

sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to DOE, the Recipient will promptly notify DOE of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Recipient.

(2) The Recipient will elect in writing whether or not to retain title to any such invention by notifying DOE within two years of disclosure to DOE. However, in any case where publication, on sale, or public use has initiated the one year statutory period wherein valid patent protection can still be obtained in the U.S., the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period.

(3) The Recipient will file its initial patent application on an invention to which it elects to retain title within one year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the U.S. after a publication, on sale, or public use. The Recipient will file patent applications in additional countries or international patent offices within either ten months of the corresponding initial patent application, or six months from the date when permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications when such filing has been prohibited by a Secrecy Order.

(4) Requests for extension of the time for disclosure to DOE, election, and filing under subparagraphs (c)(1), (2), and (3) of this clause may, at the discretion of DOE, be granted.

(d) Conditions When the Government May Obtain Title

The Recipient will convey to DOE, upon written request, title to any subject invention:

(1) If the Recipient fails to disclose or elect the subject invention within the times specified in paragraph (c) of this patent rights clause, or elects not to retain title; provided that DOE may only request title within 60 days after learning of the failure of the Recipient to disclose or elect within the specified times;

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

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

(e) Minimum Rights to Recipient and Protection of the Recipient Right to File

(1) The Recipient will retain a non-exclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the Recipient fails to disclose the subject invention within the times specified in paragraph (c) of this Patent Rights clause. The Recipient's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Recipient is a party and includes the right to grant sublicenses of the same scope of the extent the Recipient was legally obligated to do so at the time the award was awarded. The license is transferable only with the approval of DOE except when transferred to the successor of that part of the Recipient's business to which the invention pertains.

(2) The Recipient's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR part 404 and the agency's licensing regulation, if any. This license will not be revoked in that field of use or the geographical areas in which the Recipient 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 discretion of the funding Federal agency to the extent the Recipient, 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, the funding Federal agency will furnish the Recipient a written notice of its intention to revoke or modify the license, and the Recipient will be allowed thirty days (or such other time as may be authorized by DOE for good cause shown by the Recipient) after the notice to show cause why the license should not be revoked or modified. The Recipient has the right to appeal, in accordance with applicable regulations in 37 CFR part 404 and the agency's licensing regulations, if any, concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

(f) Recipient Action to Protect Government's Interest

(1) The Recipient 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 for which the Recipient retains title; and

(ii) Convey title to DOE when requested under paragraph (d) of this Patent Rights clause, and to enable the government to obtain patent protection throughout the world in that subject invention.

(2) The Recipient agrees to require, by written agreement, its employees, other than clerical and non-technical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Recipient each subject invention made under this award in order that the Recipient can comply with the disclosure provisions of paragraph (c) of this Patent Rights 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. The disclosure format should require, as a minimum, the information requested by paragraph (c)(1) of this Patent Rights clause. The Recipient shall instruct such employees through the 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 Recipient will notify DOE of any decision not to continue 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 Recipient agrees to include, within the specification of any U.S. patent application and any patent issuing thereon covering a subject invention, the following statement: ``This invention was made with Government support under (identify the award) awarded by (identify DOE). The Government has certain rights in this invention."

(g) Subaward/Contract

(1) The Recipient will include this Patent Rights clause, suitably modified to identify the parties, in all subawards/contracts, regardless of tier, for experimental, developmental or research work to be performed by a small business firm or nonprofit organization. The subrecipient/contractor will retain all rights provided for the Recipient in this Patent Rights clause, and the Recipient will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractors' subject inventions.

(2) The Recipient will include in all other subawards/contracts, regardless of tier, for experimental, developmental or research work, the patent rights clause required by 10 CFR 600.325(c).

(3) In the case of subawards/contracts at any tier, DOE, the Recipient, and the subrecipient/contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subrecipient/contractor and DOE with respect to those matters covered by the clause.

(h) Reporting on Utilization of Subject Inventions

The Recipient 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 Recipient or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Recipient and such other data and information as DOE may reasonably specify. The Recipient also agrees to provide additional reports in connection with any march-in proceeding undertaken by DOE in accordance with paragraph (j) of this Patent Rights clause. As required by 35 U.S.C. 202(c)(5), DOE agrees it will not disclose such information to persons outside the Government without the permission of the Recipient.

(i) Preference for United States Industry.

Notwithstanding any other provision of this Patent Rights clause, the Recipient agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the U.S. unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the U.S. However, in individual cases, the requirement for such an agreement may be waived by DOE upon a showing by the Recipient 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 U.S. or that under the circumstances domestic manufacture is not commercially feasible.

(j) March-in-Rights

The Recipient agrees that with respect to any subject invention in which it has acquired title, DOE has the right in accordance with procedures at 37 CFR 401.6 and any supplemental regulations of the Agency to require the Recipient, an assignee or exclusive licensee of a subject invention to grant a non-exclusive, 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 Recipient, 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 Recipient 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 Recipient, 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 Recipient, assignee, or licensee; or

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

(k) Special Provisions for Awards with Nonprofit Organizations

If the Recipient is a nonprofit organization, it agrees that:

(1) Rights to a subject invention in the U.S. may not be assigned without the approval of DOE, except where such assignment is made to an organization which has as one of its primary functions the management of inventions, provided that such assignee will be subject to the same provisions as the Recipient;

(2) The Recipient will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when DOE deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;

(3) The balance of any royalties or income earned by the Recipient with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, will be utilized for the support of scientific or engineering research or education; and

(4) It will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms and that it will give preference to a small business firm if the Recipient determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided that the Recipient is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Recipient. However, the Recipient agrees that the Secretary of Commerce may review the Recipient's licensing program and decisions regarding small business applicants, and the Recipient will negotiate changes to its licensing policies, procedures or practices with the Secretary when the Secretary's review discloses that the Recipient could take reasonable steps to implement more effectively the requirements of this paragraph (k)(4).

(l) Communications

All communications required by this Patent Rights clause should be sent to the DOE Patent Counsel address listed in the Award Document.

(m) Electronic Filing

Unless otherwise Specified in the award, the information identified in paragraphs (f)(2) and (f)(3) may be electronically filed.

[End of clause]

MODIFICATIONS:

Add 'Electronic Signature Defined' statement

Add 'Federal Reporting.gov Admin OFC' statement
(administrative office = 03601)

The purposes of this modification are to:

1) Delete and replace the Special Terms and Conditions;

2) Add the Intellectual Property Provisions, CDSB-1003 (Attachment 1);

3) Add the Statement of Project Objectives (Attachment 2);

4) Add the Federal Assistance Reporting Checklist and Instructions, DOE F 4600.2 (Attachment 3);

5) Add the Budget Information, SF-424A (Attachment 4);

6) Add the Requirements For Contingency Funds for Integrated Biorefinery Projects, Appendix (Attachment 5); and

7) This modification approved only Budget Period 1 of the Project.

All other terms and conditions remain unchanged.

In Block 7 of the Assistance Agreement, the Period of Performance reflects the beginning of the Project Period through the end of the current Budget Period, shown as 01/28/2010 through 09/30/2010. For multiple Budget Periods, see Special Terms and Conditions, Provision 4, "Award Project Period and Budget Periods."

The total amounts reflected in Blocks 12 and 13 of the Assistance Agreement do not include the Federally Funded Research and Development Center (FFRDC) funding amount of $424,480, which will be funded directly.

DOE Award Administrator: Molly Hames
E-mail: molly.hames@go.doe.gov
Phone: 303-275-4864

DOE Project Officer: Christy Sterner
E-mail: christy.sterner@go.doe.gov
Phone: 303-275-4720

Recipient Business Officer: Craig Smith
E-mail: craig.smith@algenolbiofuels.com
Phone: 239-498-2000

Recipient Principal Investigator: Craig Smith
E-mail: craig.smith@algenolbiofuels.com
Phone: 239-498-2000

Department of Energy
Golden Field Office
1617 Cole Boulevard
Golden, Colorado 80401-3305

February 16, 2010

Mr. Michael Schledorn
Branch Chief
U.S. Department of Energy
Golden Field Office
1617 Cole Blvd.
Golden, CO 80401

Via e-mail: michael.schledorn@go.doe.gov

Dear Mike:

SUBJECT: REQUEST FOR A CLASS WAIVER OF PATENT RIGHTS FOR INVENTIONS DEVELOPED BY AWARDEES UNDER FUNDING OPPORTUNITY ANNOUNCEMENT DE-FOA-0000096, RECOVERY ACT: DEMONSTRATION OF INTEGRATED BIOREFINERY OPERATIONS, W(C)2009-018

REDACTED
EXEMPTION 5

- deliberative process
- attorney-client privilege

Federal Recycling Program Printed on Recycled Paper

REDACTED
EXEMPTION 5
- deliberative process
- attorney-client privilege

Sincerely,

Glen R. Drysdale

Glen R. Drysdale
Patent Attorney
U.S. Department of Energy
Golden Field Office

STATEMENT OF CONSIDERATIONS

ADVANCE CLASS WAIVER OF PATENT RIGHTS FOR TECHNOLOGY DEVELOPED UNDER THE OFFICE OF BIOMASS PROGRAM FUNDING OPPORTUNITY ANNOUNCEMENT, "RECOVERY ACT: DEMONSTRATION OF INTEGRATED BIOREFINERY OPERATIONS" DE-FOA-0000096, W(C) 2009-018

REDACTED
EXEMPTION 5

- deliberative process
- attorney-client privilege

REDACTED
EXEMPTION 5

- deliberative process
- attorney-client privilege

REDACTED
EXEMPTION 5

- deliberative process
- attorney-client privilege

- deliberative process
- attorney - client privilege

REDACTED
EXEMPTION 5

/Glen R. Drysdale/
Glen R. Drysdale
Patent Counsel
Golden Field Office

Date: November 27, 2009

- deliberative process
- attorney - client privilege

REDACTED
EXEMPTION 5

CONCURRENCE:

John Ferrell
Acting Program Manager
Office of the Biomass Program

Date: 11/15/2010

APPROVAL:

Paul A. Gottlieb
Assistant General Counsel for
Technology, Transfer, and
Intellectual Property, GC-62

Date: 1-28-10

(t) U.S. COMPETITIVENESS

REDACTED
EXEMPTION 5

- deliberative process
- attorney-client privilege

PMC 112.2
(08/27/2009)

U.S. DEPARTMENT OF ENERGY
PROJECT MANAGEMENT CENTER

REQUEST FOR REVIEW

☐ Normal Review ☒ Expedited Review Date: 03/15/2010

Justification for Expedited Review ARRA March 31st Deadline

Award Number: DE-EE0002867 – Algenol Biofuels FOA Number, if new award: N/A

Item(s) For Review: Lift Budget Period 1 Conditions

Total Project: $ REDACTED EXEMPTION 4
Federal Funds: $ 24,331,431

Specialist Listed on Award: Molly Hames Phone: 303-275-4864

Specialist Who Prepared Award: _____ Phone: _____

Note to Specialist: Send 72 Hour Congressional Notification for FOA action reviews, as required.

☐ PEER REVIEW

Comments:

Signature: _____ Date: _____

☐ CONTRACTING OFFICER REVIEW

☐ Approved ☐ Approved subject to comments below/attached ☐ Not Approved; Comments below/attached

Comments:

Signature: _____ Date: _____

☐ INDEPENDENT REVIEW

Comments:

Signature: _____ Date: _____

☐ LEGAL REVIEWS – SEE PAGE 2 (Delete page 2 if not required)

☐ OAFA BRANCH CHIEF REVIEW

☐ Approved ☐ Approved subject to comments below/attached ☐ Not Approved; Comments below/attached

Comments:

Signature: _____ Date: _____

☐ DIRECTOR FINANCIAL ASSISTANCE REVIEW – SEE PAGE 3 (Delete page 3, if not required)

☐ HEAD OF CONTRACTING ACTIVITY REVIEW – SEE PAGE 3 (Delete page 3, if not required)

IPLD REVIEW FOR FUNDING OPPORTUNITY ANNOUNCEMENTS

Comments: IPLD Review Results e-mails on: [insert date]

Signature: _____

IPLD REVIEW FOR NEW AWARDS & MAJOR MODS

Comments: IPLD Review Results e-mails on: [insert date]

LEGAL REVIEW FOR NEW AWARDS, MAJOR MODS & OTHER ACTIONS

Type of Review:
- ☐ New Award
- ☐ Mod, include short explanation:
- ☐ Novation/Name Change
- ☐ Other Action

Total Project: $
Federal Funds: $

Tailored Provisions Require Review for New Awards:
- ☐ Substantial Involvement Provision for Cooperative Agreements
- ☐ At Risk
- ☐ Conditional Availability of Funds
- ☐ NEPA
- ☐ Subcontractor Approval
- ☐ Specify other:

FOA Number: Title:

☐ Legally Sufficient ☐ Legally Sufficient subject to comments below/attached ☐ Legally Insufficient; Comments below/attached

Comments:

Signature: _____ Date: _____

☐ **FINANCIAL ASSISTANCE DIRECTOR REVIEW** **(Required for award actions greater than $25M)**

☐ Approved ☐ Approved subject to comments below/attached ☐ Not Approved; Comments below/attached

Comments:

Signature: _____ Date: _____

☐ **HEAD OF CONTRACTING ACTIVITY REVIEW** **(Required for award actions greater than $25M)**

☐ Approved ☐ Approved subject to comments below/attached ☐ Not Approved; Comments below/attached

Comments:

Signature: _____ Date: _____

PMC 120.1
(2/08)

U.S. DEPARTMENT OF ENERGY
GOLDEN FIELD OFFICE

FINANCIAL ASSISTANCE COMBINED COST/TECHNICAL EVALUATION AND NEGOTIATION MEMORANDUM

SECTION I - GENERAL INFORMATION

This technical evaluation/negotiation memorandum will be prepared jointly by the assigned DOE/Golden OCPM AND OAFA personnel, to document the specific action being evaluated and supported. Each office is responsible for certain sections of this document. The assigned OCPM and OAFA personnel responsible for the action will both sign this document upon its completion, demonstrating their agreement on its contents.

1. Recipient: Algenol Biofuels Inc.

2. Grant/Cooperative Agreement No.: EE0002867 Modification No. 001
   Requisition No: 10EE003109
   Project Title: Recovery Act: Integrated Pilot-Scale Biorefinery for Producing Ethanol from Hybrid Algae

3. Type of Action: ☐ New Award ☐ Renewal ☐ Continuation ☒ Revision

Description of this Action: (NOTE: Indicate what is addressed by this Action only):

The purpose of this action is to lift the conditions for Budget Period 1 for the Algenol Biofuels project entitled, "Recovery Act: Pilot-Scale Integrated Biorefinery for Producing Ethanol from Hybrid Algae" (DE-EE0002867). Specifically, this action approves the scope, budget, and schedule associated with all Phase 1, or Budget Period 1,
Exemption 4

4. Award type, as determined at Procurement Strategy Meeting (for new awards): ☐ Grant ☒ Cooperative Agreement
   If Cooperative Agreement, provide the specifics of the Substantial Involvement. (Note: This language will be used in the Substantial Involvement provision of the award.):

1. Government Insight

   In order to adequately monitor project progress and provide technical direction and/or redirection to the Recipient, DOE must be provided an adequate level of insight into various Recipient activities. Government Insight activities by DOE include attendance at Recipient meetings, reviews and tests, as well as access for DOE's consultants to perform independent evaluations of Recipient's plans and processes. Recipient shall notify the DOE Project Officer of meetings, reviews, and tests in sufficient time to permit DOE participation, and provide all appropriate documentation for DOE review.

2. Specific activities to be conducted by DOE:

   a. Risk Evaluation – DOE will review the Recipient's initial Risk Mitigation Plan (RMP) for quality and completeness. DOE will also monitor updates to the RMP and actions taken by the Recipient during the performance of its award to mitigate risks and improve the probability of successful execution of the integrated Biorefinery project. At DOE's discretion, additional independent risk analyses of the project by DOE consultants may be requested.

   b. Independent Engineering Assessments – DOE will engage a private, independent engineering (IE) firm to assist in assessing the progress of the project and provide timely and accurate reports to DOE. The Recipient will ensure that the IE has access to any and all relevant documentation sufficient to allow the IE

to provide independent evaluations to DOE on the progress of the project. Such documentation includes but is not limited to the following:

- Drawings and specifications
- Construction and Execution plans
- Resource loaded schedules
- Design functions and requirements for the site final design review
- Risk management plans
- Value management and engineering studies and/or plans
- Acquisition strategies
- Project execution plans
- Project controls including earned value management systems
- Qualifications of the integrated project team.
- Financial strategy for funding the construction project
- Updated marketing and business plan
- Invoices submitted to DOE

DOE will evaluate the quality and completeness of information and documentation provided by the Recipient to DOE and its consultants in order to allow DOE to provide technical direction and/or redirection to the Recipient about how best to achieve the purposes of the award. Consultants to DOE may not provide technical direction and/or redirection to the Recipient.

5. New/Revised Project Period for this Award: From: 01/29/2010 To: 12/31/2014
   New/Revised Budget Period 1 for this Award: From: 01/29/2010 To: 9/30/2010
   New/Revised Budget Period 2 for this Award: From: 10/01/2010 To: 12/31/2014

6. Compliance Assessment (skip if new award):
   a. Deliverables
   The Recipient is current in submitting required reports: ☐ Yes ☐ No
   If no, identify the delinquent report(s), indicate what action(s) have been taken to remedy the situation, and identify what further action(s) are necessary, if any:

N/A

   b. Financial
   The Recipient is current in meeting the cost share requirement: ☐ Yes ☐ No
   If no, indicate what action(s) have been taken to remedy the situation and validate why this new action should proceed:

N/A

7. Check the applicable box for Funding Appropriation: ☒ Energy and Water ☐ Other _____

8. Check the applicable box for Statutory Authority:
   ☒ 109-58, Energy Policy Act 2005
   ☐ 110-140, Energy Independence and Security Act 2007
   ☒ 109-58, Recovery Act (2009)
   ☐ Other: _____

9. Per 10 CFR 600, the preferred payment method for State/Local Governments, Institutions of Higher Education, Hospitals, or Other Non-Profit Organizations is **Advance**. The preferred Payment Method for For-Profit organizations is **Reimbursement**. If the preferred payment method is not planned for a new award, provide an explanation below. Also explain below if the payment method for the award is being changed by this action.

The recipient is receiving ARRA funds and will continue to be on the ACH payment method to monitor their funds to ensure costs outside of Budget Period 1 are not charged to the award.

10. Is the proposed Recipient on the debarred or suspended list? Yes ☐ No ☒
    Are any of the proposed subrecipients/subcontractors on the debarred or suspended list? Yes ☐ No ☒
    Is the Project Director on the debarred or suspended list? Yes ☐ No ☒
    If yes for either response above, award cannot be made without obtaining a waiver. See attached waiver.
    The review was conducted on the Internet on 03/15/2010 (Include Printout in permanent STRIPES file)
    (Date)

11. A risk determination has been completed on the PMC Form 460.2 Yes ☒ N/A ☐

12. Negotiation:

	Government Negotiator(s)		Recipient Negotiator(s)	
	Name	**Organization**	**Name**	**Position**
1.	Molly Hames	Contract Specialist	Dr. Craig Smith	COO
2.	Christy Sterner	Project Officer	Pat Alm	Assistant Project Manager
3.	Christine English	Navarro Project Engineer	Dax Denman	Assistant Project Manager

SECTION II – NEGOTIATION SUMMARY

1. Please record any significant application or budget submissions that resulted in a revised budget in the Negotiation History Table below (including SF424A, budget justifications, e-mails, etc.):

Application/Budget Submission	Reference Document(s)	Date of Submission	Summary of Change
Original		Jun-09	
Revision #1	123.1; SF424A	1/10/2010	Updated budget to remove some BP2 activities and contigency
Final	123.1;SF424A, SOPO	3/2/2010	Budget and SOPO were adjusted to reflect expedited schedule.

2. Complete Budget Table below (only include the original budget and final negotiated costs – the Percent of Total Negotiated Budget will calculate automatically)
Note: List proposed amounts by category even if there are no differences in the dollar amount.

Element of Cost	Original BP1 Budget Submission	Final BP1 Negotiated Costs (3/2/10)	Percent of Total Negotiated Budget	Fringe Benefits and Indirects	
				Proposed Rate	Negotiated Rate
Personnel Fringe Benefits Travel Equipment Supplies Contractual Construction Other Total Direct Charges Indirect Charges	Exemption 4				
TOTAL					
Program Income	0	0	0%		
DOE Share (non-FFRDC) DOE Share (FFDRC) Total DOE Share	$9,669,386 $0 $9,669,386	$10,668,903 $424,480 $11,093,383	Exemption 4		
Non-Federal Cost Share	Exemption 4				

SEE ATTACHED SF 424A FOR BUDGET PERIOD BREAKDOWN

3. Total Allowable Adjustment without Concurrence from the Selection Official per the Selection Statement: 10%
   Actual Total Adjustment based on Budget Table Above: 0%

Total Project Costs have not changed from Selection Statement – these are BP1 costs only.

Is the original budget the same as the negotiated budget: ☐ Yes ☒ No

If No, please check all boxes that apply:

☒ Change in the Project Scope
☒ Changes due to Time Delays
☐ Math Errors in Budget
☒ Changes in Indirect/Fringe Costs Caused Changes in Direct Costs or Total Project Costs
☐ Indirect/Fringe Rates incorrectly applied
☐ Other (explain) _____

4. Briefly describe and explain any substantial change(s) to the original Statement of Project Objectives submitted by the recipient:

Project Officer commentary: The original scope and schedule for the project exceeded allowable timelines for Budget Period 1 activities. Therefore, when the Recipient revised the scope and schedule to accommodate the accelerated timeframe for Budget Period 1, the SOPO and associated costs changed. Progress between the original application submittal and negotiations was accounted for in the revised SOPO and budget. All 'final' activities related to engineering and designs were moved to BP2 as were all site/facility related activities. The SOPO, as submitted on 3/2/10, is the final, approved SOPO for BP1. The associated costs for that SOPO are being evaluated here.

SECTION III – TECHNICAL EVALUATION SUMMARY

A. For each cost category, the Project Officer and the Specialist will complete his/her Technical Evaluation of the Negotiated Costs to confirm that they are all reasonable, allowable, and allocable. Additional comments should be added as necessary and as indicated below.

1. Personnel:

Total Negotiated Personnel Costs: $Exemption 4 Not Applicable, the recipient did not propose personnel costs: ☐

Project Officer:

The labor hours proposed in the negotiated budget are reasonable for the scope of work: ☒

The labor mix proposed in the negotiated budget is reasonable: ☒
The supporting documentation detailing labor positions, hours, and rates totals to slightly less than the cost proposed – Exemption 4

positions, experience levels, and rates for technology positions in the industry, the rates are reasonable. While some may seem high, such as the VPs, PI, Mgrs, etc., these positions are for highly experienced personnel and their rates are comparable to higher end rates for these types of positions.

Specialist:

Please fill out the following table with the negotiated costs:

Labor Type	Budget Period 1		
	Hours	Rate	Total
Regulatory/Legal	Exemption 4		
Principal Investigator			
Sr. Prog. Mgr.			
Eng/Construct Mgr.			
Principal Scientist			
Scientists (x3)			
Research Associates (x6)			
Lab Technicians (x2)			
VP R&D			
Sr. Scientists (x2)			
Engineers (x3)			
Sr. Engineers (x2)			
Program Managers (x2)			
Plant Manager			
VP Engineering			
Project Accountant			
Head of Fac. Maint.			
Total:			

Negotiated labor rates are reasonable: ☒
Please detail the basis for the reasonable determination: The Specialist concurs with the discussion above regarding the minor difference in the calculated and requested amounts as well as the basis for determining the rates as reasonable. The Principal Investigator and Construction Manager for this project are leading professionals in the industry and the founders of Algenol. They are very hands on with their project management and oversight efforts for this integrated demonstration-scale biorefinery; therefore, their time and personnel costs are reasonable and essential to the viability of this project.

2. Fringe Benefits:

Total Negotiated Fringe Benefit Costs: $Exemption 4 Not Applicable, the recipient did not propose fringe benefit costs: ☐

Specialist:

Does the Recipient have an approved rate agreement: ☐ Yes ☒ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:
☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach Cost/Price Analyst Determination)
☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination)
List Date of review_____
☐ Specialist determined that rate was reasonable
☒ Other: **Due to time constraints, the "Reopener Clause" will be placed into the Special Terms and Conditions of the award. These costs will be addressed and approved at a later date.**

The fringe benefit costs in the negotiated budget are reasonable: ☐

3. Travel:

Total Negotiated Travel Costs: $Exemption 4 Not Applicable, the recipient did not propose travel costs: ☐

Project Officer:

The number and type of trips proposed in the negotiated budget are reasonable for the scope of work: ☒

The costs per trip proposed in the negotiated budget are reasonable: ☒

Is foreign travel included in the negotiated budget: ☐ Yes ☒ No

☒ Specialist concurs: These costs are necessary for budget period 1 activities.

4. Equipment:

Total Negotiated Equipment Costs: $Exemption 4 Not Applicable, the recipient did not propose equipment costs: ☒

Project Officer:

The type(s) of equipment proposed in the negotiated budget is/are reasonable for the scope of work: ☒

The cost of equipment proposed in the original budget are reasonable: ☒

Is there any proposed equipment with a total cost exceeding $50,000: ☐ Yes ☒ No

☒ Specialist concurs.

5. Supplies:

Total Negotiated Supplies Costs: $Exemption 4 Not Applicable, the recipient did not propose supplies costs: ☒

Project Officer:

The types /quantities of supplies proposed in the negotiated budget are reasonable based on the scope of work: ☒

The costs of supplies proposed in the negotiated budget are reasonable: ☒

☒ Specialist concurs.

6. Contractual:

Total Negotiated Contractual Costs: $Exemption 4 Not Applicable, the recipient did not propose contractual costs: ☐

Project Officer:

The subrecipients proposed in the negotiated budget are appropriate for the scope of work: ☒

The contractual costs proposed in the negotiated budget are reasonable: ☒ Yes

Did the Recipient propose any subrecipients with total costs above $100,000? ☒ Yes ☐ No (If Yes, a separate Technical Evaluation/Negotiation Memorandum is required for each subrecipient/vendor – see below)

☒ Specialist concurs: These costs are covered in a separate Technical Evaluation/Negotiation Memorandum.

7. Construction:

Total Negotiated Construction Costs: $Exemption 4 Not Applicable, the recipient did not propose construction costs: ☒

Project Officer:

The type of construction proposed in the original budget is appropriate for the scope of work: ☒

The construction costs proposed in the original budget are reasonable: ☒

☒ Specialist concurs.

8. Other Direct Costs:

Total Negotiated Other Direct Costs: $Exemption 4 Not Applicable, the recipient did not propose other direct costs: ☒

Project Officer:

The other direct costs proposed in the original budget are reasonable for the scope of work: ☒

The costs proposed in the original budget for other direct costs are reasonable for the scope of work: ☒

☒ Specialist concurs.

9. Indirect Charges:

Total Negotiated Indirect Costs: $Exemption 4 Not Applicable, the recipient did not propose indirect costs: ☐

Specialist:

Does the Recipient have an approved rate agreement: ☐ Yes ☒ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:

☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach Cost/Price Analyst Determination)

☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination) List Date of review_____.

☐ Specialist determined that rate was reasonable

☒ Other: **Due to time constraints, the "Reopener Clause" will be placed into the Special Terms and Conditions of the award. These costs will be addressed and approved at a later date.**

The indirect costs proposed in the original budget are reasonable: ☐

10. Cost Share:

Project Officer:

Project is a: ☒ Research ☒ Development ☐ Demonstration ☐ Other: Pilot Project, BP1 (Explain)

The minimum recipient's cost share required for thi Exemption 4
The recipient proposed cost share for this award is:

Does the proposed cost share meet the minimum requirement: ☒ Yes ☐ No

Specialist:

Is the proposed cost share: ☒ Cash ☐ In-kind (detail the amount and category below for in-kind cost share, if applicable)

All proposed cost share is proposed as cash contributions: Exemption 4
from Membrane Technology and Research, Inc.

	Organization	Type of Cost Share (Cash or in-kind)	Cost Share Amount	Basis of Value (how the recipient calculated value)
	Solazyme, Inc.	Exemption 4		
	DOW Chemical Company			
	Membrane Technology and Research, Inc.			
Total				

Third Party cost share commitment letters have been obtained: ☒ (Please include letters in permanent STRIPES file)
Both MTR and DOW's cost share letters state they will commit Exemption 4 be working on for the duration of the project, which they have met in their budget, MT and DOW=Exemption 4

B. The following Project Officer and Specialist evaluation and negotiation commentary and recommendations address their agreement on all additional considerations for this award.

1. Please list any other special provisions agreed upon for inclusion in this award and describe the rationale for their inclusion below.

This recipient is receiving ARRA funds, and the Davis Bacon Act applies; therefore, the ARRA provisions have been included in the award. The indirect rates have not been negotiated for the prime and the Reopener provision clause has been added to the Special Terms and Conditions of the award, so that we may address these at a later date. Continuation provision, Funding of Budget Periods, Blanket CX NEPA provision, and Contingency provision have also been included in the special terms and conditions of this award, due to the holds on budget period 2 for the prime and subrecipients.

2. If a negotiation strategy, or strategies, is/are specified in the selection statement, provide a discussion below of how this was addressed and resolved.

Exemption 4 of Total Project Costs must be kept aside from the project budget as contingency for the project. This contingency is applicable total project costs and will be verified by the Project Officer as requested and discussed in the Contingency Appendix that will be attached to the award. Contingency will be reported and tracked as well to address the Exemption 4 requirement per the Selection Statement.

3. Any other comments or concerns of the Project Officer and/or Specialist for this award, and the recommended approach to mitigating them, will be explained and addressed below.

All comments and concerns have been previously noted.

4. Is this a Recovery Act award? ☒ Yes ☐ No

   - If Yes, does the Buy American Act apply (see applicability below)? ☐ Yes ☒ No
   - If Yes, does Davis Bacon Act apply (see applicability below)? ☒ Yes ☐ No

   If the answer to either the Buy American Act or Davis Bacon Act questions is Yes, provide a short discussion below on: 1) the type of entity; 2) what applies; Davis Bacon, Buy American, or both; 3) whether it applies to the prime, subrecipient, or both; and 4) work to be performed that requires applicability of Buy American and/or Davis Bacon.

Algenol Biofuels Inc. is subject to the Davis Bacon Act, particularly in Budget Period 2. It will apply to the Recipient and their subrecipients. Budget Period 2 will include construction activities that are subject to the Davis Bacon Act.

Subrecipient: Georgia Institute of Technology

SECTION II – NEGOTIATION SUMMARY

1. Please record any significant application or budget submissions that resulted in a revised budget in the Negotiation History Table below (including SF424A, budget justifications, e-mails, etc.):

Application/Budget Submission	Reference Document(s)	Date of Submission	Summary of Change
Original		Jun-09	
Revision #1	123.1.; SF424A	1/10/2010	Updated budget to remove some BP2 activities and contigency
Final	123.1: SF424A	3/11/2010	Provided 123.1

2. Complete Budget Table below (only include the original budget and final negotiated costs – the Percent of Total Negotiated Budget will calculate automatically)
Note: List proposed amounts by category even if there are no differences in the dollar amount.

Element of Cost	**Original BP1 Budget Submission**	**Final BP1 Negotiated Costs**	**Percent of Total Negotiated Budget**	**Fringe Benefits and Indirects**	
				Proposed Rate	**Negotiated Rate**
Personnel Fringe Benefits Travel Equipment Supplies Contractual Construction Other Total Direct Charges Indirect Charges	Exemption 4				
TOTAL					
Program Income	0	0	0%		
DOE Share (non-FFRDC)	$484,400	$484,400	Exemption 4		
DOE Share (FFDRC)	$0	$0			
Total DOE Share	$484,400	$484,400			
Non-Federal Cost Share	Exemption 4				

SEE ATTACHED SF 424A FOR BUDGET PERIOD BREAKDOWN

3. Is the original budget the same as the negotiated budget: ☒ Yes ☐ No

If No, please check all boxes that apply:

☐ Change in the Project Scope
☐ Changes due to Time Delays
☐ Math Errors in Budget
☐ Changes in Indirect/Fringe Costs Caused Changes in Direct Costs or Total Project Costs
☐ Indirect/Fringe Rates incorrectly applied
☐ Other (explain) _____

4. Briefly describe and explain any substantial change(s) to the original Statement of Project Objectives submitted by the recipient:

Project Officer commentary: The scope of work proposed by Georgia Institute of Technology within Algenol's project has not changed since the original application.

SECTION III – TECHNICAL EVALUATION SUMMARY

A. For each cost category, the Project Officer and the Specialist will complete his/her Technical Evaluation of the Negotiated Costs to confirm that they are all reasonable, allowable, and allocable. Additional comments should be added as necessary and as indicated below.

1. Personnel:

Total Negotiated Personnel Costs: $Exemption 4 Not Applicable, the recipient did not propose personnel costs: ☐

Project Officer:

The labor hours proposed in the negotiated budget are reasonable for the scope of work: ☒

The labor mix proposed in the negotiated budget is reasonable: ☒

Specialist:

Please fill out the following table with the negotiated costs:

Labor Type	Budget Period 1		
	Hours	Rate	Total
Co-PI	Exemption 4		
Co-PI			
Co-PI			
Post-Doc (x3)			
Total:			

Negotiated labor rates are reasonable: ☒ (Please attach supporting documentation e.g. www.salary.com, if applicable)
The calculated total personnel costs are slightly less than the estimated costs due to rounding. The difference is $117 and is considered negligible. Therefore, the recommended approved amount is $Exemption 4

2. Fringe Benefits:

Total Negotiated Fringe Benefit Costs: $Exemption 4 Not Applicable, the recipient did not propose fringe benefit costs: ☐

Specialist:

Does the Recipient have an approved rate agreement: ☒ Yes ☐ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:
☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach

Cost/Price Analyst Determination)
☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination)
List Date of review_____
☐ Specialist determined that rate was reasonable
☒ Other: **Due to time constraints, the "Reopener Clause" will be placed into the Special Terms and Conditions of the award. These costs will be addressed and approved at a later date.**

The fringe benefit costs in the negotiated budget are reasonable: ☐

3. Travel:

Total Negotiated Travel Costs: $Exemption 4 Not Applicable, the recipient did not propose travel costs: ☐

Project Officer:

The number and type of trips proposed in the negotiated budget are reasonable for the scope of work: ☒

The costs per trip proposed in the negotiated budget are reasonable: ☒

Is foreign travel included in the negotiated budget: ☐ Yes ☒ No

☒ Specialist concurs.

4. Equipment:

Total Negotiated Equipment Costs: $Exemption 4 Not Applicable, the recipient did not propose equipment costs: ☐

Project Officer:

The type(s) of equipment proposed in the negotiated budget is/are reasonable for the scope of work: ☒

The cost of equipment proposed in the original budget are reasonable: ☒

Is there any proposed equipment with a total cost exceeding $50,000: ☒ Yes ☐ No (If yes, please fill out the following table with the negotiated costs and basis of cost, i.e. historical price or vendor quote)

Equipment	Total Cost	Justification	Basis of Cost
Exemption 4			

☒ Specialist concurs: This equipment is reasonable and necessary for the tasks in Budget Period 1 of this award. The appropriate documentation has been received.

5. Supplies:

Total Negotiated Supplies Costs: $Exemption 4 Not Applicable, the recipient did not propose supplies costs: ☐

Project Officer:

The types /quantities of supplies proposed in the negotiated budget are reasonable based on the scope of work: ☒

The costs of supplies proposed in the negotiated budget are reasonable: ☒

☒ Specialist concurs.

6. Contractual:

Total Negotiated Contractual Costs: $Exemption 4 Not Applicable, the recipient did not propose contractual costs: ☐

Project Officer:

The subrecipients proposed in the negotiated budget are appropriate for the scope of work: ☒

The contractual costs proposed in the negotiated budget are reasonable: ☒ Yes

Please fill out the following table with the negotiated costs:

Subrecipient/Vendor Name	Cost 1	Cost 2	Total Cost (BP1)	Role in Project (Identify SOPO Tasks)
Exemption 4				

Did the Recipient propose any subrecipients with total costs above $100,000? ☒ Yes ☐ No (The University of Colorado is a subrecipient of a subrecipient. The costs are reasonable for the work being performed by CU.)

☒ Specialist concurs: This subrecipient is necessary for the scope of work within Budget Period 1 of this award.

7. Construction:

Total Negotiated Construction Costs: $Exemption 4 Not Applicable, the recipient did not propose construction costs: ☒

Project Officer:

The type of construction proposed in the original budget is appropriate for the scope of work: ☒

The construction costs proposed in the original budget are reasonable: ☒

☒ Specialist concurs.

8. Other Direct Costs:

Total Negotiated Other Direct Costs: $Exemption 4 Not Applicable, the recipient did not propose other direct costs: ☒

Project Officer:

The other direct costs proposed in the original budget are reasonable for the scope of work: ☒

The costs proposed in the original budget for other direct costs are reasonable for the scope of work: ☒

☒ Specialist concurs.

9. Indirect Charges:

Total Negotiated Indirect Costs: $Exemption 4 Not Applicable, the recipient did not propose indirect costs: ☐

Specialist:

Does the Recipient have an approved rate agreement: ☒ Yes ☐ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:

☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach Cost/Price Analyst Determination)

☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination)
List Date of review_____

☐ Specialist determined that rate was reasonable

☒ Other: **Due to time constraints, the "Reopener Clause" will be placed into the Special Terms and Conditions of the award. These costs will be addressed and approved at a later date.**

The indirect costs proposed in the original budget are reasonable: ☐

10. Cost Share:

Project Officer: Georgia Institute of Technology is not providing cost share within Algenol's project. Project is a: ☒ Research ☒ Development ☐ Demonstration ☐ Other: Pilot Project, BP1 (Explain) The Prime Recipient's cost share required for this award is: Exemption 4 The Prime Recipient proposed cost share for this award is: Does the proposed cost share meet the minimum requirement: ☒ Yes ☐ No
Specialist: Is the proposed cost share: ☒ Cash ☐ In-kind (detail the amount and category below for in-kind cost share, if applicable) All proposed cost share is proposed as cash contributions: $ Exemption 4 from Membrane Technology and Research, Inc. Third Party cost share commitment letters have been obtained: ☒ (Please include letters in permanent STRIPES file)

Subrecipient: The Dow Chemical Company

SECTION II – NEGOTIATION SUMMARY

1. Please record any significant application or budget submissions that resulted in a revised budget in the Negotiation History Table below (including SF424A, budget justifications, e-mails, etc.):

Application/Budget Submission	Reference Document(s)	Date of Submission	Summary of Change
Original		Jun-09	
Revision #1	123.1.; SF424A	1/10/2010	Updated budget to remove some BP2 activities and contigency
Final	123.1: SF424A	3/11/2010	Provided 123.1

2. Complete Budget Table below (only include the original budget and final negotiated costs – the Percent of Total Negotiated Budget will calculate automatically)
Note: List proposed amounts by category even if there are no differences in the dollar amount.

Element of Cost	Original BP1 Budget Submission	Final BP1 Negotiated Costs	Percent of Total Negotiated Budget	Fringe Benefits and Indirects	
				Proposed Rate	Negotiated Rate
Personnel	Exemption 4				
Fringe Benefits					
Travel					
Equipment					
Supplies					
Contractual					
Construction					
Other					
Total Direct Charges					
Indirect Charges					
TOTAL					
Program Income	0	0	0%		
DOE Share (non-FFRDC)	$2,150,008	$2,150,008	Exemption 4		
DOE Share (FFDRC)	$0	$0			
Total DOE Share	$2.150.008	$2,150,008			
Non-Federal Cost Share	Exemption 4				

SEE ATTACHED SF 424A FOR BUDGET PERIOD BREAKDOWN

3. Is the original budget the same as the negotiated budget: ☒ Yes ☐ No

If No, please check all boxes that apply:

☐ Change in the Project Scope
☐ Changes due to Time Delays
☐ Math Errors in Budget
☐ Changes in Indirect/Fringe Costs Caused Changes in Direct Costs or Total Project Costs
☐ Indirect/Fringe Rates incorrectly applied
☐ Other (explain)_____

4. Briefly describe and explain any substantial change(s) to the original Statement of Project Objectives submitted by the recipient:

Project Officer commentary: The scope of work proposed by Dow Chemical Company within Algenol's project has not changed since the original application. However, based on the budget details, it appears that Dow may have still included site preparation activities in their Budget Period 1 work Clarification is being sought

SECTION III – TECHNICAL EVALUATION SUMM

A. For each cost category, the Project Officer and the Specialist will complete his/her Te egotiated Costs to confirm that they are all reasonable, allowable, and allocable. Additional co necessary and as indicated below.

1. Personnel:

Total Negotiated Personnel Costs: $ Exemption 4 Not Applicable, the recipi el costs: ☐

Project Officer: Dow proposed numerous positions by staff name rather than posi al hours and total compensation. The average rate based on this information calculates to ~$53.77. This a reasonable rate for the type of work Dow staff will be performing. Additional detail is being requested regarding actual positions and compensation rates per position. Based on the budget details presented, it appears that there may be budget allotted to activities that are not included in BP1. While clarification is sought, Dow's budget should remain conditional.

The labor hours proposed in the negotiated budget are reasonable for the scope of work: ☐

The labor mix proposed in the negotiated budget is reasonable: ☐

☒ Specialist concurs: The proposed costs for The Dow Chemical Company have been removed from BP1.

2. Fringe Benefits:

Total Negotiated Fringe Benefit Costs: $ Exemption 4 Not Applicable, the recipient did not propose fringe benefit costs: ☒

Specialist:

Does the Recipient have an approved rate agreement: ☐ Yes ☒ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:
☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach Cost/Price Analyst Determination)
☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination)
List Date of review_____
☐ Specialist determined that rate was reasonable
☐ Other_____

The fringe benefit costs in the negotiated budget are reasonable: ☐

3. Travel:

Total Negotiated Travel Costs: $Exemption 4 Not Applicable, the recipient did not propose travel costs: ☒

Project Officer:
The number and type of trips proposed in the negotiated budget are reasonable for the scope of work: ☒
The costs per trip proposed in the negotiated budget are reasonable: ☒
Is foreign travel included in the negotiated budget: ☐ Yes ☒ No
☒ Specialist concurs:

4. Equipment:

Total Negotiated Equipment Costs: $Exemption 4 Not Applicable, the recipient did not propose equipment costs: ☒

Project Officer:
The type(s) of equipment proposed in the negotiated budget is/are reasonable for the scope of work: ☒
The cost of equipment proposed in the original budget are reasonable: ☒
Is there any proposed equipment with a total cost exceeding $50,000: ☐ Yes ☒ No
☒ Specialist concurs.

5. Supplies:

Total Negotiated Supplies Costs: $Exemption 4 Not Applicable, the recipient did not propose supplies costs: ☒

Project Officer:
The types /quantities of supplies proposed in the negotiated budget are reasonable based on the scope of work: ☒
The costs of supplies proposed in the negotiated budget are reasonable: ☒
☒ Specialist concurs.

6. Contractual:

Total Negotiated Contractual Costs: $Exemption 4 Not Applicable, the recipient did not propose contractual costs: ☒

Project Officer:
The subrecipients proposed in the negotiated budget are appropriate for the scope of work: ☒
The contractual costs proposed in the negotiated budget are reasonable: ☒ Yes
Did the Recipient propose any subrecipients with total costs above $100,000? ☐ Yes ☒ No
☒ Specialist concurs.

7. Construction:

Total Negotiated Construction Costs: $Exemption 4 Not Applicable, the recipient did not propose construction costs: ☒

Project Officer:
The type of construction proposed in the original budget is appropriate for the scope of work: ☒
The construction costs proposed in the original budget are reasonable: ☒
☒ Specialist concurs.

8. Other Direct Costs:

Total Negotiated Other Direct Costs: $Exemption 4 Not Applicable, the recipient did not propose other direct costs: ☐

Project Officer:

The other direct costs proposed in the original budget are reasonable for the scope of work: ☐

The costs proposed in the original budget for other direct costs are reasonable for the scope of work: ☐

These proposed costs are for activities no longer included under Budget Period 1. Therefore, these funds should be held conditional under the subcontractor approval clause.

☒ Specialist concurs: The proposed costs for The Dow Chemical Company have been removed from BP1.

9. Indirect Charges:

Total Negotiated Indirect Costs: $Exemption 4 Not Applicable, the recipient did not propose indirect costs: ☐

Specialist:

Does the Recipient have an approved rate agreement: ☐ Yes ☒ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:
☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach Cost/Price Analyst Determination)
☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination)
List Date of review_____
☐ Specialist determined that rate was reasonable
☒ Other: The proposed costs for The Dow Chemical Company have been removed from BP1.

The indirect costs proposed in the original budget are reasonable: ☐

10. Cost Share:

Project Officer:

Project is a: ☒ Research ☒ Development ☐ Demonstration ☐ Other: Pilot Project, BP1 (Explain)

The minimum recipient's cost share required for this award is: Exemption 4
The recipient proposed cost share for this award is: Exemption 4 of their Budget Period 1 costs as cash cost share, totaling $Exemption 4

Does the proposed cost share meet the minimum requirement: ☒ Yes ☐ No

Specialist:

Is the proposed cost share: ☒ Cash ☐ In-kind (detail the amount and category below for in-kind cost share, if applicable)

All proposed cost share is proposed as cash contributions: $Exemption 4
from Membrane Technology and Research, Inc.

Third Party cost share commitment letters have been obtained: ☒ (Please include letters in permanent STRIPES file)

Subrecipient: Membrane Technology and Research, Inc.

SECTION II – NEGOTIATION SUMMARY

1. Please record any significant application or budget submissions that resulted in a revised budget in the Negotiation History Table below (including SF424A, budget justifications, e-mails, etc.):

Application/Budget Submission	Reference Document(s)	Date of Submission	Summary of Change
Original		Jun-09	
Revision #1	123.1.; SF424A	1/10/2010	Updated budget to remove some BP2 activities and contigency
Final	123.1: SF424A	3/11/2010	Provided 123.1

2. Complete Budget Table below (only include the original budget and final negotiated costs – the Percent of Total Negotiated Budget will calculate automatically)
Note: List proposed amounts by category even if there are no differences in the dollar amount.

Element of Cost	Original BP1 Budget Submission	Final BP1 Negotiated Costs	Percent of Total Negotiated Budget	Fringe Benefits and Indirects	
				Proposed Rate	Negotiated Rate
Personnel Fringe Benefits Travel Equipment Supplies Contractual Construction Other Total Direct Charges Indirect Charges	Exemption 4				
TOTAL					
Program Income	0	0	0%		
DOE Share (non-FFRDC) DOE Share (FFDRC) Total DOE Share	$148,854 $0 $148,854	$148,854 $0 $148,854	Exemption 4		
Non-Federal Cost Share	Exemption 4				

SEE ATTACHED SF 424A FOR BUDGET PERIOD BREAKDOWN

3. Is the original budget the same as the negotiated budget: ☒ Yes ☐ No

If No, please check all boxes that apply:

- ☐ Change in the Project Scope
- ☐ Changes due to Time Delays
- ☐ Math Errors in Budget
- ☐ Changes in Indirect/Fringe Costs Caused Changes in Direct Costs or Total Project Costs
- ☐ Indirect/Fringe Rates incorrectly applied
- ☐ Other (explain)_____

4. Briefly describe and explain any substantial change(s) to the original Statement of Project Objectives submitted by the recipient:

Project Officer commentary: The scope of work proposed by MTR within Algenol's project has not changed since the original application.

SECTION III – TECHNICAL EVALUATION SUMMARY

A. For each cost category, the Project Officer and the Specialist will complete his/her Technical Evaluation of the Negotiated Costs to confirm that they are all reasonable, allowable, and allocable. Additional comments should be added as necessary and as indicated below.

1. Personnel:

Total Negotiated Personnel Costs: $Exemption 4 Not Applicable, the recipient did not propose personnel costs: ☐

Project Officer:

The labor hours proposed in the negotiated budget are reasonable for the scope of work: ☒

The labor mix proposed in the negotiated budget is reasonable: ☒

Specialist:

Please fill out the following table with the negotiated costs:

Labor Type	Budget Period 1		
	Hours	Rate	Total
P1	Exemption 4		
Co-PI			
Co-PI			
Design Engineer			
Total:			

Negotiated labor rates are reasonable: ☒ (Please attach supporting documentation e.g. www.salary.com, if applicable)
The proposed personnel costs are reasonable and necessary according to www.salary.com and the bureau of labor statistics for the scope of work under budget period 1.

2. Fringe Benefits:

Total Negotiated Fringe Benefit Costs: $ Not Applicable, the recipient did not propose fringe benefit costs: ☐

Specialist:

Does the Recipient have an approved rate agreement: ☐ Yes ☒ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:
☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach Cost/Price Analyst Determination)
☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination)
List Date of review_____
☐ Specialist determined that rate was reasonable
☒ Other: **Due to time constraints, the "Reopener Clause" will be placed into the Special Terms and Conditions of the award. These costs will be addressed and approved at a later date.**

The fringe benefit costs in the negotiated budget are reasonable: ☐

3. Travel:

Total Negotiated Travel Costs: $Exemption 4 Not Applicable, the recipient did not propose travel costs: ☐

Project Officer:

The number and type of trips proposed in the negotiated budget are reasonable for the scope of work: ☒ The costs per trip proposed in the negotiated budget are reasonable: ☒ Is foreign travel included in the negotiated budget: ☐ Yes ☐ No
☒ Specialist concurs: The proposed travel costs are reasonable.

4. Equipment:

Total Negotiated Equipment Costs: $Exemption 4 Not Applicable, the recipient did not propose equipment costs: ☒

Project Officer: The type(s) of equipment proposed in the negotiated budget is/are reasonable for the scope of work: ☒ The cost of equipment proposed in the original budget are reasonable: ☒ Is there any proposed equipment with a total cost exceeding $50,000: ☐ Yes ☒ No
☒ Specialist concurs.

5. Supplies:

Total Negotiated Supplies Costs: $Exemption 4 Not Applicable, the recipient did not propose supplies costs: ☒

Project Officer: The types /quantities of supplies proposed in the negotiated budget are reasonable based on the scope of work: ☒ The costs of supplies proposed in the negotiated budget are reasonable: ☒
☒ Specialist concurs.

6. Contractual:

Total Negotiated Contractual Costs: $Exemption 4 Not Applicable, the recipient did not propose contractual costs: ☒

Project Officer: The subrecipients proposed in the negotiated budget are appropriate for the scope of work: ☒ The contractual costs proposed in the negotiated budget are reasonable: ☒ Yes Did the Recipient propose any subrecipients with total costs above $100,000? ☐ Yes ☒ No
☒ Specialist concurs.

7. Construction:

Total Negotiated Construction Costs: $Exemption 4 Not Applicable, the recipient did not propose construction costs: ☒

Project Officer: The type of construction proposed in the original budget is appropriate for the scope of work: ☒ The construction costs proposed in the original budget are reasonable: ☒
☒ Specialist concurs.

8. Other Direct Costs:

Total Negotiated Other Direct Costs: $Exemption 4 Not Applicable, the recipient did not propose other direct costs: ☒

Project Officer:

The other direct costs proposed in the original budget are reasonable for the scope of work: ☒

The costs proposed in the original budget for other direct costs are reasonable for the scope of work: ☒

☒ Specialist concurs.

9. Indirect Charges:

Total Negotiated Indirect Costs: $Exemption 4 Not Applicable, the recipient did not propose indirect costs: ☐

Specialist:

Does the Recipient have an approved rate agreement: ☐ Yes ☒ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:
☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach Cost/Price Analyst Determination)
☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination)
List Date of review_____
☐ Specialist determined that rate was reasonable
☒ Other: **Due to time constraints, the "Reopener Clause" will be placed into the Special Terms and Conditions of the award. These costs will be addressed and approved at a later date.**

The indirect costs proposed in the original budget are reasonable: ☐

10. Cost Share:

Project Officer:

Project is a: ☒ Research ☒ Development ☐ Demonstration ☐ Other: Pilot Project, BP1 (Explain)

The minimum recipient's cost share required for this award is: Exemption 4
The recipient proposed cost share for this award is: Exemption 4 cost share related to their total project costs ($Exemption 4 for subsequent Budget Periods).

Does the proposed cost share meet the minimum requirement: ☒ Yes ☐ No

Specialist:

Is the proposed cost share: ☒ Cash ☐ In-kind (detail the amount and category below for in-kind cost share, if applicable)

All proposed cost share is proposed as cash contributions: $Exemption 4
from Membrane Technology and Research, Inc.

Third Party cost share commitment letters have been obtained: ☒ (Please include letters in permanent STRIPES file)

SECTION IV – RECOMMENDATIONS/APPROVAL

Signatures of the Project Officer and Specialist, indicating their recommendations, as indicated below, will occur after their mutual agreement on the contents of this document, and before the review and approval process for the action. The signatures below indicate that the costs in the negotiated budget are reasonable, allowable, and allocable.

1. Technical Recommendation

The project costs are acceptable and should be considered for a financial assistance award. The resources have been reviewed relative to the Statement of Project Objectives and are found to be reasonable, except as previously noted herein.

Christy Sterner — Signature
3/17/10 — Date

Christy Sterner
Project Officer

2. Specialist Recommendation

In view of the above analysis, the technical evaluation, and considering all known factors, this Award is recommended.

Molly Hames — Signature
03/17/10 — Date

Molly Hames
Grants and Agreements Specialist

3. Contracting Officer Approval *

☒ I concur with the above recommendation and have determined that the Recipient is responsible. I consider this Award to be in the best interest of the Government, and approve the award documents. (Select this box if the preparer is not the contracting officer)

☐ In view of the analysis, the technical evaluation, and considering all known factors, I have determined that the Recipient is responsible. This Award is considered to be in the best interest of the Government and approved. (Select this box if the preparer is also the contracting officer and indicate N/A in Block 2.)

Michael Schledorn — Signature
3/19/2010 — Date

Michael Schledorn
Contracting Officer

U.S. Department of Energy
Project Management Center

FINANCIAL ASSISTANCE AWARD
INDEX and CHECKLIST
(BUYER USE ONLY)

Award #:	**DE-EE0002867 / 001 - Budget Period 1**	**Program:**	The Office of the Biomass Program
Recipient Name:	**Algenol Biofuels, Inc.**		
FOA #:	**DE-FOA-0000096**		
Specialist:	**Molly Hames**	**Phone:**	303-275-4864
Contracting Officer:	**Michael Schledorn**	**Phone:**	303-275-4993
Project Officer:	**Christy Sterner**	**Phone:**	303-275-4720

ion Item	*Indicate Completion of Action Item by inserting a date in the applicable box below*	
1	Verify Recipient's registration with the Central Contractor Registration (CCR) (http://www.ccr.gov)	CCR Registration Valid through: 06/23/2010
2	Verify Recipient's registration with FedConnect (goto P:\STRIPES\Fedconnect Reports)	Registration Confirmed on: 03/15/2010
3	ASAP Enrollment; if Recipient is not enrolled in ASAP, send .pdf of completed PMC 121.1 to 'GO Finance' mailbox	PMC 121.1 sent to 'GO Finance' on: N/A
4	Vendor Supplier/Site Information Form; send completed PMC 128.8 to 'GO Finance' mailbox (MS 2007)	Vendor Supplier/Site Information Form sent to 'GO Finance' on: N/A

STRIPES Index #	Supporting Document		Form #	applicable	not applicable	Supporting Document Naming Convention	pdf. required
AWD-001	Award Index and Checklist		PMC 128.1	X		**AWD-001 AWDChecklist**	
AWD-002	Selection Statement		n/a		X	**AWD-002 SelStat**	.pdf
AWD-003	Determination of Non-Competitive Financial Assistance (DNFA) Documentation (include Request for Review PMC.112.2)		PMC 109.x		X	**AWD-003 DNFADocs**	batch .pdf
AWD-004	HCA Approval (Total Project Value greater than $25M and less than $50M) (include Request for Review PMC.112.2)		n/a	X		**AWD-004 HCAApvl**	.pdf
AWD-005	HQ Business Clearance Documentation (Total Project Value greater than or equal to $50M)						
	AWD-005a	HQ Business Clearance Worksheet	PMC 107.1	X		**AWD-005 HQBusClrDocs**	batch .pdf
	AWD-005b	HQ Business Clearance Transmittal Letter(s)	PMC 107.4	X			
	AWD-005c	HQ Business Clearance; Correspondence received from HQ	n/a	X			
AWD-006	Congressional Affairs Notification		DOE F 4220.10		X	**AWD-006CongNotification**	.pdf
AWD-007	Successful Application Documentation (Prime) - Algenol Biofuels, Inc.						
	AWD-007a	Application for Federal Assistance	SF-424		X	**AWD-007a AppDocsPrime (Algenol)**	batch .pdf
		SF424A Budget Information	SF-424A	X			
		Budget Justification	PMC 123.1	X			
		Disclosure of Lobbying Activities	SF-LLL		X		
		Cost Share Commitment Ltrs from Third Parties	n/a	X			
	Successful Application Documentation (Sub #1) Georgia Institute of Technology						
	AWD-007b	SF-424A Budget Information	SF-424A	X		**AWD-007b AppDocsSub [GA Tech]**	batch .pdf
		Budget Justification	PMC 123.1	X			
	Successful Application Documentation (Sub #2) Membrane Technology and Research, Inc.						
	AWD-007c	SF-424A Budget Information	SF-424A	X		**AWD-007c AppDocsSub [MTR]**	batch .pdf
		Budget Justification	PMC 123.1	X			
	Successful Application Documentation (Sub #3) The Dow Chemical Company						
	AWD-007d	SF-424A Budget Information	SF-424A	X		**AWD-007d AppDocsSub [Dow]**	batch .pdf
		Budget Justification	PMC 123.1	X			
	Successful Application Documentation (Sub #4) National Renewable Energy Laboratory (NREL)						
		SF-424A Budget Information	SF-424A	X			

STRIPES Index #	Supporting Document		Form #	applicable	not applicable	Supporting Document Naming Convention	pdf. required
	AWD-007e	Budget Justification	PMC 123.1	X		AWD-007e AppDocsSub [NREL]	batch .pdf
		Authorization for non-DOE or DOE FFRDCs	n/a	X			
AWD-008	National Environmental Policy Act (NEPA) Documentation						
	AWD-008a	NEPA Checklist	EF-1	X		AWD-008 NEPADocs	batch .pdf
	AWD-008b	NEPA Review	EF-2	X			
	AWD-008c	NEPA Determination	EF-2a	X			
AWD-009	Pre-Award Information Sheet		PMC 121.1	X		AWD-009 PreAwardInfo	.pdf
AWD-010	Dun&Bradstreet Risk Assessment		PMC 460.2		X	AWD-010 D&BAssessment	.pdf
AWD-011	Combined Technical Evaluation / Negotiation Memorandum		PMC 120.2	X		AWD-011 TechEvalNegMem	.pdf
AWD-012	Intellectual Property Law Division (IPLD) Documentation						
	AWD-012a	IPLD Petition for Advance Waiver of Patent Rights	PMC 133.2		X	AWD-012 IPLDDocs	batch .pdf
	AWD-012b	IPLD Pre-Award Review Request	PMC 133.3	X			
	AWD-012c	IPLD Recommendation	e-mail	X			
	AWD-012d	IPLD Limited Rights Data and Restricted Computer Software	n/a	X			
'D-013	Cost Share Determination Documentation						
	AWD-013a	Cost Share Determination	PMC 112.2		X	AWD-013a CostShareDet	.pdf
	AWD-013b	Cost Share Waiver	PMC 142.2		X	AWD-013b CostShareWaiver	.pdf
AWD-014	Cost / Price Documentation						
	AWD-014a	Financial Information	PMC 410.1		X	AWD-014 CostPriceDocs	batch .pdf
	AWD-014b	Indirect Rate Agreement or Rate Proposal	n/a		X		
	AWD-014c	Response from C/P Analyst regarding Indirect Rates	PMC 420.3		X		
AWD-015	Excluded Parties List System (EPLS) Query (https://www.epls.gov)		n/a	X		AWD-015 EPLS	
AWD-016	Pre-Award Cost Request and Authorization		n/a		X	AWD-016 PreAwdCostAuth	.pdf
AWD-017	Justification for Use of Conditional Availability of Funds Provision		PMC 132.2		X	AWD-017 JustificationCondAvail	.pdf
AWD-018	Correspondence to Recipients (use this section for correspondence not issued at FOA level)						
	AWD-018a	Correspondence			X	AWD-018a Correspondence	batch .pdf
AWD-019	Internal Review(s)						
	AWD-019a	Request for Review (Review of Award Package)	PMC 112.2	X		AWD-019a RvwAwdPkg	.pdf
	AWD-019b	HCA Approval and Business Clearance	n/a	X		AWD-019b DDRvw	.pdf
AWD-020	Deviations		n/a		X	AWD-020 GuideLtr	.pdf
Cover Page	Assistance Agreement Form		n/a	X			
Body	Special Terms and Conditions		n/a	X			
chment 1	Intellectual Property Provisions		n/a	X			
Attachment 2	Statement of Project Objectives		n/a	X			
Attachment 3	Federal Assistance Reporting Checklist and Instructions		DOE F 4600.2	X			
Attachment 4	Budget Information		n/a	X			
Attachment 5	Congintency Appendix		n/a	X			

PMC 133.3

(12/09)

U.S. DEPARTMENT OF ENERGY
PROJECT MANAGEMENT CENTER

IPLD PRE-AWARD REVIEW REQUEST

TO: IPLD E-Mail: IPLegalReviews@go.doe.gov Attachments: (1) Financial Assistance Pre-Award Information Sheet (PMC 121.1) (2) Scope of Work or Statement of Project Objectives	Date Submitted:	01/08/2010
	Request Reply By:	03/31/2009

FROM: Molly Hames	PHONE: 303-275-4864
Name of Specialist (if different from submitter):	PHONE:

Awardee:	Algenol Biofuels, Inc.		
Project Title:	**Recovery Act - Integrated Pilot-Scale Biorefinery for Producing Ethanol from Hybrid Algae**		
Award/Mod/Amendment No:	**DE-EE0002867 / 001**	Awardee POC:	Craig Smith
FOA Title: Recovery Act - Demonstration of Integrated Biorefinery Operations		Phone:	239-498-2000
Topic Area(s): Topic Area 1		E-mail Address:	craig.smith@algenolbiofuels.com
Date of Application (including any modifications): 01/04/2010		Business Type: ☐ Large, For-Profit ☒ Small, For-Profit ☐ 501(c)(3) Nonprofit ☐ Other Nonprofit ☐ Other:_____	
Type of Instrument:	☐ Grant ☒ Cooperative Agreement ☐ Other		

Project Officer:	Christy Sterner	DOE PO Phone:	303-275-4720

Response to B.3 on PMC 121.1 indicates Limited Rights Data or Restricted Computer Software will be used in the Award:	☒ YES		☐ NO	
Will 5-year data protection under EPAct apply for the Topic Areas included in this Award?	☒ YES	☐ NO	☐ This is a CDP	

IPLD USE ONLY:

PMC 420.3
(12/09)

U.S. DEPARTMENT OF ENERGY
PROJECT MANAGEMENT CENTER

REQUEST FOR COST PRICE ASSISTANCE

Award No./DUNS	DE-EE0002867/80-039-9904	Awardee: (Legal Name in CCR)	ALGENOL BIOFUELS INC.
Specialist:	Molly Hames	Project Officer:	Christy Sterner
Requestor:		Project Monitor:	Christine English
Business Contact Name:	Craig Smith	Business Contact Ph. No:	239-498-2000
Business Contact Email:	craig.smith@algenolbiofuels.com	Date of Request:	04/12/2010
Program Area:	Biomass Program	Award Type: ☒ Recovery	☐ CDP ☐ Other_____

Complete Section and Forward to Analyst for Completion

SPECIALIST: Mark below whether pre-award, post award, or audit and provide any comments or special needs:

1) ☒ Pre-award Proposal- submitted documents should include budget documents summary and detail, additional supporting information to support proposed calculations. **Comments:**

This is a Recovery Act, Integrated Biorefinery (IBR) project in the Biomass Program. The Total Project Cost is $ Ex. 4 , the DOE Share is $24,331,431, Recipient Share is $ Ex. 4 and FFRDC Funding is $ Ex. 4 udget Period 1 was awarded with the re-opener provision included. This request is to approve the indirect rates so that we may remove this provision from the award.

This is the first federal award for Algenol Biofuels, Inc. and they are unsure whether their financial system is in compliance with 10 CFR 600. They answered "yes" to every question on the Accounting System Survey, except for "e. A timekeeping system that identifies employees' labor by intermediate and final cost objectives." Algenol Biofuels, Inc. has had previous audits; RSM McGladrey, Inc. is the company's accounting and auditing firm. They have not submitted a copy of the audit yet.

There are three sub-recipients for this project: Georgia Institute of Technology ($ Ex. 4 Membrane Technology and Research Inc. ($ Ex. 4 and the Dow Chemical Company ($ Ex. 4). These budgets are included with this request. Georgia Tech already has an existing rate agreement with DHHS, it appears that Membrane TRI had a previous rate agreement in 2004, and it also appears that there was a previous rate agreement with the Dow Chemical Company in 2006 in the W Drive.

2) ☐ Post Award Review- actual cost true up or other related data needed for incurred cost type review. **Comments:**

3) ☐ Audit: ☐ Project Specific ☐ Systems: Accounting, Billing etc. ☐ Annual Incurred/Indirect ☐ Other_____
Comments:

4) Save this request in the corresponding award on the S: drive and then **email this completed form, along with any/all attachments needed** to complete the requested review, to CostPrice@go.doe.gov

COST PRICE ANALYST: Upon receipt from the requestor, the assigned C/P Analyst will analyze and make recommendations. The analysis will include reviewing and evaluating elements of cost included in the calculation of the indirect rates to determine reasonableness, allocability and allowabilty of the proposed rates based on guidance in the appropriate cost principles in OMB circulars and/or FAR 31-205.

Findings, Recommendations & Comments:

Completed by: _____ Date: _____

Reviewed by: _____ Date: _____

SPECIAL TERMS AND CONDITIONS

Table of Contents

Number	Subject	Page
1.	RESOLUTION OF CONFLICTING CONDITIONS	3
2.	AWARD AGREEMENT TERMS AND CONDITIONS	3
3.	ELECTRONIC AUTHORIZATION OF AWARD DOCUMENTS	3
4.	AWARD PROJECT PERIOD AND BUDGET PERIODS	3
5.	PAYMENT PROCEDURES - REIMBURSEMENT THROUGH THE AUTOMATED CLEARING HOUSE (ACH) VENDER INQUIRY PAYMENT ELECTRONIC REPORTING SYSTEM (VIPERS)	4
6.	COST SHARING	5
7.	REBUDGETING AND RECOVERY OF INDIRECT COSTS	5
8.	FINAL INCURRED COST AUDIT	6
9.	STATEMENT OF FEDERAL STEWARDSHIP	6
10.	STATEMENT OF SUBSTANTIAL INVOLVEMENT	6
11.	SITE VISITS	7
12.	REPORTING REQUIREMENTS	7
13.	PUBLICATIONS	8
14.	FEDERAL, STATE, AND MUNICIPAL REQUIREMENTS	8
15.	INTELLECTUAL PROPERTY PROVISIONS AND CONTACT INFORMATION	8
16.	NATIONAL SECURITY: CLASSIFIABLE RESULTS ORIGINATING UNDER AN AWARD	9
17.	CONTINUATION APPLICATION AND FUNDING	10
18.	LOBBYING RESTRICTIONS	11
19.	NOTICE REGARDING THE PURCHASE OF AMERICAN-MADE EQUIPMENT AND PRODUCTS -- SENSE OF CONGRESS	11
20.	FUNDING OF BUDGET PERIODS	11
21.	PROPERTY	11
22.	DECONTAMINATION AND/OR DECOMMISSIONING (D&D) COSTS	12
23.	AT RISK FOR FINANCIAL CAPABILITY	12
24.	INSOLVENCY, BANKRUPTCY OR RECEIVERSHIP	13
25.	NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REQUIREMENTS	13
26.	INDEMNITY	14
27.	SUBCONTRACT APPROVALS	14
28.	SPECIAL PROVISIONS RELATING TO WORK FUNDED UNDER AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (May 2009)	15
29.	REPORTING AND REGISTRATION REQUIREMENTS UNDER SECTION 1512 OF THE RECOVERY ACT	19
30.	REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS – SECTION 1605 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009	19
31.	REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS (COVERED UNDER INTERNATIONAL AGREEMENTS) – SECTION 1605 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009	22
32.	RECOVERY ACT TRANSACTIONS LISTED IN SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS AND RECIPIENT RESPONSIBILITIES FOR INFORMING SUBRECIPIENTS	26

33. WAGE RATE REQUIREMENTS UNDER SECTION 1606 OF THE RECOVERY ACT 27
34. DAVIS BACON ACT AND CONTRACT WORK HOURS AND SAFETY STANDARDS ACT 28
35. REOPENER TERM – PENDING INDIRECT RATES – FINANCIAL ASSISTANCE 38
36. CONTINGENCY 39

1. RESOLUTION OF CONFLICTING CONDITIONS

Any apparent inconsistency between Federal statutes and regulations and the terms and conditions contained in this award must be referred to the DOE Award Administrator for guidance.

2. AWARD AGREEMENT TERMS AND CONDITIONS

This award/agreement consists of the Assistance Agreement, plus the following:

a. Special Terms and Conditions.
b. Attachments:

Attachment Number	Title
1.	Intellectual Property Provisions
2.	Statement of Project Objectives
3.	Federal Assistance Reporting Checklist and Instructions
4.	Budget Pages (SF 424A)
5.	Requirements for Contingency Funds for Integrated Biorefinery Projects

c. Applicable program regulations.
d. DOE Assistance Regulations, 10 CFR Part 600 at http://ecfr.gpoaccess.gov.
e. Application/proposal as approved by DOE.
f. National Policy Assurances to be incorporated as award terms in effect on date of award at http://management.energy.gov/business_doe/1374.htm.

3. ELECTRONIC AUTHORIZATION OF AWARD DOCUMENTS

Acknowledgement of award documents by the Recipient's authorized representative through electronic systems used by the Department of Energy, specifically FedConnect, constitutes the Recipient's acceptance of the terms and conditions of the award. Acknowledgement via FedConnect by the Recipient's authorized representative constitutes the Recipient's electronic signature.

4. AWARD PROJECT PERIOD AND BUDGET PERIODS

The Project Period for this award is 12/04/2009 through 12/31/2014, consisting of the following Budget Periods:

Budget Period	Start Date	End Date
1	01/29/2010	09/30/2010
2	10/01/2010	12/31/2014

5. PAYMENT PROCEDURES - REIMBURSEMENT THROUGH THE AUTOMATED CLEARING HOUSE (ACH) VENDER INQUIRY PAYMENT ELECTRONIC REPORTING SYSTEM (VIPERS)

a. Method of Payment. Payment will be made by reimbursement through ACH.

b. Requesting Reimbursement. Requests for reimbursements must be made electronically through Department of Energy's Oak Ridge Financial Service Center (ORFSC) VIPERS. To access and use VIPERS, you must enroll at https://finweb.oro.doe.gov/vipers.htm. Detailed instructions on how to enroll are provided on the web site.

For non-construction awards, you must submit a Standard Form (SF) 270, "Request for Advance or Reimbursement," at https://finweb.oro.doe.gov/vipers.htm and attach a file containing appropriate supporting documentation. The file attachment must show the total Federal share claimed on the SF 270, the non-Federal share claimed for the billing period if cost sharing is required, and cumulative expenditures to date (both Federal and non-Federal) for each of the following categories: salaries/wages and fringe benefits; equipment; travel; participant/training support costs, if any; other direct costs, including subawards/contracts; and indirect costs. For construction awards, you must submit a SF 271, "Outlay Report and Request for Reimbursement for Construction Programs," through VIPERS.

c. Timing of submittals. Submittal of the SF 270 or SF 271 should coincide with your normal billing pattern, but not more frequently than every two weeks. Requests for reimbursement must be limited to the amount of disbursements made during the billing period for the Federal share of direct project costs and the proportionate share of any allowable indirect costs incurred during that billing period.

d. Adjusting payment requests for available cash. You must disburse any funds that are available from repayments to and interest earned on a revolving fund, program income, rebates, refunds, contract settlements, audit recoveries, credits, discounts, and interest earned on any of those funds before requesting additional cash payments from DOE.

e. Payments. The DOE approving official will approve the invoice as soon as practical, but not later than 30 days after your request is received, unless the billing is improper. Upon receipt of an invoice payment authorization from the DOE approving official, the ORFSC will disburse payment to you. You may check the status of payments at the VIPER web site. All payments are made by electronic funds transfer to the bank account identified on the ACH Vendor/Miscellaneous Payment Enrollment Form (SF 3881) that you filed.

6. COST SHARING

a. Total Estimated Project Cost is the sum of the Federal Government share, including Federally Funded Research and Development Center (FFRDC) contractor costs, and Recipient share of the estimated project costs. The DOE FFRDC contractor cost is not included in the total approved budget for this award, because DOE will pay the DOE FFRDC contractor portion of the effort under an existing DOE contract. The Recipient is not responsible for reporting on that portion of the total estimated cost that is paid directly to the DOE FFRDC contractor.

The Recipient's cost share must come from non-Federal sources unless otherwise allowed by law. By accepting Federal funds under this award, you agree that you are liable for your percentage share of allowable project costs, on a budget period basis, even if the project is terminated early or is not funded to its completion. This cost is shared as follows:

Budget Period	DOE Cost Share, including FFRDC Costs		Recipient Cost Share	Total Estimated Costs
	DOE $ / %	FFRDC $ / %	$ / %	
1	$10,668,903 /	$424,480 /	REDACTED EXEMPTION 4	
2	TBD	TBD	TBD	TBD
Total Project	TBD	TBD	TBD	TBD

b. If you discover that you may be unable to provide cost sharing of at least the amount identified in paragraph a of this Article, you should immediately provide written notification to the DOE Award Administrator, indicating whether you will continue the project or phase out the project. If you plan to continue the project, the notification must describe how replacement cost sharing will be secured.

c. You must maintain records of all project costs you claim as cost sharing, including in-kind costs, as well as records of costs to be paid by DOE. Such records are subject to audit.

d. Failure to provide the cost share required by this Article may result in the subsequent recovery by DOE of some or all the funds provided under the award.

7. REBUDGETING AND RECOVERY OF INDIRECT COSTS

a. If actual allowable indirect costs are less than those budgeted and funded under the award, you may use the difference to pay additional allowable direct costs during the project period. If at the completion of the award the Government's share of total allowable costs (i.e., direct and indirect), is less than the total costs reimbursed, you must refund the difference.

b. Recipients are expected to manage their indirect costs. DOE will not amend an award solely to provide additional funds for changes in indirect cost rates. DOE recognizes that the inability to obtain full reimbursement for indirect costs means the Recipient must absorb the underrecovery. Such underrecovery may be allocated as part of the organization's required cost sharing.

8. FINAL INCURRED COST AUDIT

In accordance with 10 CFR 600, DOE reserves the right to initiate a final incurred cost audit on this award. If the audit has not been performed or completed prior to the closeout of the award, DOE retains the right to recover an appropriate amount after fully considering the recommendations on disallowed costs resulting from the final audit.

9. STATEMENT OF FEDERAL STEWARDSHIP

DOE will exercise normal Federal stewardship in overseeing the project activities performed under this award. Stewardship activities include, but are not limited to, conducting site visits; reviewing performance and financial reports; providing technical assistance and/or temporary intervention in unusual circumstances to correct deficiencies which develop during the project; assuring compliance with terms and conditions; and reviewing technical performance after project completion to ensure that the award objectives have been accomplished.

10. STATEMENT OF SUBSTANTIAL INVOLVEMENT

1. Government Insight

   In order to adequately monitor project progress and provide technical direction and/or redirection to the Recipient, DOE must be provided an adequate level of insight into various Recipient activities. Government Insight activities by DOE include attendance at Recipient meetings, reviews and tests, as well as access for DOE's consultants to perform independent evaluations of Recipient's plans and processes. Recipient shall notify the DOE Project Officer of meetings, reviews, and tests in sufficient time to permit DOE participation, and provide all appropriate documentation for DOE review.

2. Specific activities to be conducted by DOE:

   a. Risk Evaluation – DOE will review the Recipient's initial Risk Mitigation Plan (RMP) for quality and completeness. DOE will also monitor updates to the RMP and actions taken by the Recipient during the performance of its award to mitigate risks and improve the probability of successful execution of the integrated Biorefinery project. At DOE's discretion, additional independent risk analyses of the project by DOE consultants may be requested.

   b. Independent Engineering Assessments – DOE will engage a private, independent engineering (IE) firm to assist in assessing the progress of the project and provide

timely and accurate reports to DOE. The Recipient will ensure that the IE has access to any and all relevant documentation sufficient to allow the IE to provide independent evaluations to DOE on the progress of the project. Such documentation includes but is not limited to the following:

- Drawings and specifications
- Construction and Execution plans
- Resource loaded schedules
- Design functions and requirements for the site final design review
- Risk management plans
- Value management and engineering studies and/or plans
- Acquisition strategies
- Project execution plans
- Project controls including earned value management systems
- Qualifications of the integrated project team.
- Financial strategy for funding the construction project
- Updated marketing and business plan
- Invoices submitted to DOE

DOE will evaluate the quality and completeness of information and documentation provided by the Recipient to DOE and its consultants in order to allow DOE to provide technical direction and/or redirection to the Recipient about how best to achieve the purposes of the award. Consultants to DOE may not provide technical direction and/or redirection to the Recipient.

11. SITE VISITS

DOE's authorized representatives have the right to make site visits at reasonable times to review project accomplishments and management control systems and to provide technical assistance, if required. You must provide, and must require your subawardees to provide, reasonable access to facilities, office space, resources, and assistance for the safety and convenience of the government representatives in the performance of their duties. All site visits and evaluations must be performed in a manner that does not unduly interfere with or delay the work.

12. REPORTING REQUIREMENTS

a. Requirements. The reporting requirements for this award are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, attached to this award. Failure to comply with these reporting requirements is considered a material noncompliance with the terms of the award. Noncompliance may result in withholding of future payments, suspension or termination of the current award, and withholding of future awards. A willful failure to perform, a history of failure to perform, or unsatisfactory performance of this and/or other financial assistance awards, may also result in a debarment action to preclude future awards by Federal agencies.

b. Dissemination of scientific/technical reports. Scientific/technical reports submitted under this award will be disseminated on the Internet via the DOE Information Bridge (www.osti.gov/bridge), unless the report contains patentable material, protected data or SBIR/STTR data. Citations for journal articles produced under the award will appear on the DOE Energy Citations Database (www.osti.gov/energycitations).

c. Restrictions. Reports submitted to the DOE Information Bridge must not contain any Protected Personal Identifiable Information (PII), limited rights data (proprietary data), classified information, information subject to export control classification, or other information not subject to release.

13. PUBLICATIONS

a. You are encouraged to publish or otherwise make publicly available the results of the work conducted under the award.

b. An acknowledgment of DOE support and a disclaimer must appear in the publication of any material, whether copyrighted or not, based on or developed under this project, as follows:

Acknowledgment: "This material is based upon work supported by the Department of Energy [National Nuclear Security Administration] [add name(s) of other agencies, if applicable] under Award Number(s) [enter the award number(s)]."

Disclaimer: "This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof."

14. FEDERAL, STATE, AND MUNICIPAL REQUIREMENTS

You must obtain any required permits and comply with applicable federal, state, and municipal laws, codes, and regulations for work performed under this award.

15. INTELLECTUAL PROPERTY PROVISIONS AND CONTACT INFORMATION

a. The intellectual property provisions applicable to this award are provided as an attachment to this award.

b. Questions regarding intellectual property matters should be referred to the DOE Award Administrator identified and the Patent Counsel designated as the service provider for the DOE office that issued the award.

The Patent Counsel for the Golden Field Office is Julia Moody, who may be reached at julia.moody@go.doe.gov or 303-275-4867.

16. NATIONAL SECURITY: CLASSIFIABLE RESULTS ORIGINATING UNDER AN AWARD

a. This award is intended for unclassified, publicly releasable research. You will not be granted access to classified information. DOE does not expect that the results of the research project will involve classified information. Under certain circumstances, however, a classification review of information originated under the award may be required. The Department may review research work generated under this award at any time to determine if it requires classification.

b. Executive Order 12958 (60 Fed. Reg. 19,825 (1995)) states that basic scientific research information not clearly related to the national security shall not be classified. Nevertheless, some information concerning (among other things) scientific, technological, or economic matters relating to national security or cryptology may require classification. If you originate information during the course of this award that you believe requires classification, you must promptly:

1. Notify the DOE Project Officer and the DOE Award Administrator;

2. Submit the information by registered mail directly to the Director, Office of Classification and Information Control, SO-10.2; U.S. Department of Energy; P.O. Box A; Germantown, MD 20875-0963, for classification review.

3. Restrict access to the information to the maximum extent possible until you are informed that the information is not classified, but no longer than 30 days after receipt by the Director, Office of Classification and Information Control

c. If you originate information concerning the production or utilization of special nuclear material (i.e., plutonium, uranium enriched in the isotope 233 or 235, and any other material so determined under section 51 of the Atomic Energy Act) or nuclear energy, you must:

1. Notify the DOE Project Officer and the DOE Award Administrator;

2. Submit the information by registered mail directly to the Director, Office of Classification and Information Control, SO-10.2; U.S. Department of Energy; P. O. Box A; Germantown, MD 20875-0963 for classification review within 180 days of the date the Recipient first discovers or first has reason to believe that the information is useful in such production or utilization; and

3. Restrict access to the information to the maximum extent possible until you are informed that the information is not classified, but no longer than 90 days after receipt by the Director, Office of Classification and Information Control.

d. If DOE determines any of the information requires classification, you agree that the Government may terminate the award by mutual agreement in accordance with 10 CFR 600.25(d). All material deemed to be classified must be forwarded to DOE, in a manner specified by DOE.

e. If DOE does not respond within the specified time periods, you are under no further obligation to restrict access to the information.

17. CONTINUATION APPLICATION AND FUNDING

a. Continuation Application. A continuation application is a non-competitive application for an additional budget period within a previously approved project period. At least 60 days before the end of each budget period, your continuation application must be submitted to the DOE Project Officer and the DOE Award Administrator identified in the Assistance Agreement, to be eligible to receive a continuation award for the next budget period. The continuation application must include the following information:

1. Application for Federal Assistance, SF-424.

2. A continuation report, which must provide a summary of the progress towards meeting the objectives of the award, including any significant findings, conclusions, or developments, a comparison of actual accomplishment with the objectives established for the reporting period (milestones, deliverables, decision point criteria and stage gates), reasons for slippage if goals were not met, an estimate of any unobligated balances remaining at the end of the budget period, and when applicable an explanation of cost overruns or underruns. A description of your plans for the award during the upcoming budget period and any variance from the DOE approved objectives needs to be included in the continuation application package.

3. A detailed budget and supporting justification for the upcoming budget period with the supporting documentation below, including an estimate of DOE funds expected to be remaining at the end of the current budget period:

   a) Budget Information – Non Construction Programs, SF-424A.

   b) Cost Reasonableness Determination, PMC 123.1 (Excel Version).

4. Environmental Checklist, EF1, (This form should be completed on-line at https://www.eere-pmc.energy.gov/).

5. Commitment Letters from Third Parties Contributing to Cost Sharing, if applicable.

6. Statement of Project Objectives (SOPO), if revision is required.

b. Continuation Funding. Continuation funding is contingent on: (1) availability of funds; (2) meeting the objectives, milestones, deliverables, decision point criteria and stage gates of your award and obtaining approval from DOE to continue work on the project (DOE authorizing either Pass or Redirect through a stage-gate review); (3) submittal of required reports; or (4) compliance with the terms and conditions of the award.

18. LOBBYING RESTRICTIONS

By accepting funds under this award, you agree that none of the funds obligated on the award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

19. NOTICE REGARDING THE PURCHASE OF AMERICAN-MADE EQUIPMENT AND PRODUCTS -- SENSE OF CONGRESS

It is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available under this award should be American-made.

20. FUNDING OF BUDGET PERIODS

DOE has obligated $24,331,431 for completion of the project authorized by this agreement; however, only $8,518,895 is available for work performed by the Recipient during Budget Period 1 of the project. An additional $2,687,510 in Federal Funds is restricted by Subcontract Approval Clause for Budget Period 1 and may be released pending the conditions of the clause are met and the subcontract approval clause is lifted. For Budget Period 2, the remainder or $13,125,026 will be available contingent upon the submission by the Recipient of a continuation application and written approval of the continuation application by the DOE Contracting Officer.

In the event that the Recipient does not submit a continuation application for subsequent Budget Periods, or DOE disapproves a continuation application for subsequent Budget Periods, the maximum DOE liability to the Recipient is the funds that are available for the current approved Budget Period. In such event, DOE reserves the right to deobligate any remaining funds.

21. PROPERTY

Real property and equipment acquired by the Recipient shall be subject to the rules set forth in 10 CFR 600.130-137, 10 CFR 600.231-233, or 10 CFR 600.320-324, as applicable.

Consistent with the goals and objectives of this project, the Recipient may continue to use Recipient acquired property beyond the Period of Performance, without obligation, during the period of such use, to extinguish DOE's conditional title to such property as described in 10 CFR 600.132-135, 10 CFR 600.231-233, or 600.321-324, subject to the following: (a) the Recipient continues to utilize such property for the objectives of the project as set forth in the Statement of Project Objectives; (b) DOE retains the right to periodically ask for, and the Recipient agrees to provide, reasonable information concerning the use and condition of the property; and (c) the Recipient follows the property disposition rules set forth in the applicable sections of 10 CFR Part 600, if the property is no longer used by the Recipient for the objectives of the project, and the fair market value of property exceeds $5,000.

Once the per unit fair market value of the property is less than $5,000, pursuant to the applicable sections of 10 CFR Part 600, DOE's residual interest in the property shall be extinguished and the Recipient shall have no further obligation to the DOE with respect to the property.

The regulations as set forth in 10 CFR Part 600 and the requirements of this article shall also apply to property in the possession of any team member, sub-recipient or other entity where such property was acquired in whole or in part with funds provided by DOE under this award or where such property was counted as cost-sharing under the award.

22. DECONTAMINATION AND/OR DECOMMISSIONING (D&D) COSTS

Notwithstanding any other provisions of this Agreement, the Government shall not be responsible for or have any obligation to the Recipient for (i) Decontamination and/or Decommissioning (D&D) of any of the Recipient's facilities, or (ii) any costs which may be incurred by the Recipient in connection with the D&D of any of its facilities due to the performance of the work under this Agreement, whether said work was performed prior to or subsequent to the effective date of the Agreement.

23. AT RISK FOR FINANCIAL CAPABILITY

You have been determined to be at risk for financial capability based on the Dun & Bradstreet (D&B) Business Information Report (BIR).

Based on this determination the following requirement has been incorporated into this award: Method of payment will be reimbursement through the Automated Clearing House (ACH) Vendor Inquiry Payment Electronic Reporting System (VIPERS).

You may report any change in circumstances that impact DOE's determination of your financial capability. If you feel that your circumstances have changed to this degree, you may request a re-evaluation at any time after 6 months from the initial determination. Please provide a written request and support to the DOE Award Administrator.

DOE will remove this provision by modification to the award if the conditions that prompted it have been corrected, as approved by the Contracting Officer.

24. INSOLVENCY, BANKRUPTCY OR RECEIVERSHIP

a. You shall immediately notify the DOE of the occurrence of any of the following events: (i) you or your parent's filing of a voluntary case seeking liquidation or reorganization under the Bankruptcy Act; (ii) your consent to the institution of an involuntary case under the Bankruptcy Act against you or your parent; (iii) the filing of any similar proceeding for or against you or your parent, or your consent to the dissolution, winding-up or readjustment of your debts, appointment of a receiver, conservator, trustee, or other officer with similar powers over you, under any other applicable state or federal law; or (iv) your insolvency due to its inability to pay debts generally as they become due.

b. Such notification shall be in writing and shall: (i) specifically set out the details of the occurrence of an event referenced in paragraph (a); (ii) provide the facts surrounding that event; and (iii) provide the impact such event will have on the project being funded by this award.

c. Upon the occurrence of any of the four events described in paragraph a. of this provision, DOE reserves the right to conduct a review of your award to determine your compliance with the required elements of the award (including such items as cost share, progress towards technical project objectives, and submission of required reports). If the DOE review determines that there are significant deficiencies or concerns with your performance under the award, DOE reserves the right to impose additional requirements, as needed, including (i) change of payment method; or (ii) institute payment controls.

d. Failure of the Recipient to comply with this provision may be considered a material noncompliance of this financial assistance award by the Contracting Officer.

25. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REQUIREMENTS

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include: This NEPA determination applies to Budget Period 1 only. Budget Period 1 includes administrative tasks and some research and development activities. This NEPA determination does NOT apply to any Budget Period 2 activities. Additional NEPA review is required prior to beginning any Budget Period 2 activities.

This restriction does not preclude you from: Budget Period 1.

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

If this award includes construction activities, you must submit an environmental evaluation report/evaluation notification form addressing NEPA issues prior to DOE initiating the NEPA process.

26. INDEMNITY

The Recipient shall indemnify the Government and its officers, agents, or employees for any and all liability, including litigation expenses and attorneys' fees, arising from suits, actions, or claims of any character for death, bodily injury, or loss of or damage to property or to the environment, resulting from the project, except to the extent that such liability results from the direct fault or negligence of Government officers, agents or employees, or to the extent such liability may be covered by applicable allowable costs provisions.

27. SUBCONTRACT APPROVALS

a. At Risk Notice: The Recipient must obtain written approval by the Contracting Officer for reimbursement of costs associated with the subcontractors listed in paragraph b. below for Budget Period 1. If the subcontract is under $250,000, the Recipient must submit a Statement of Project Objectives, and basis of cost estimate. If the subcontract is $250,000 or more, the Recipient must submit (1) Statement of Project Objectives; (2) SF424A Budget Information, (3) PMC 123.1 Cost Reasonableness Determination for Financial Assistance, (4) approved rate agreement or proposal, (5) EF1 and Environmental Questionnaire. No funds shall be expended on the subcontracts supporting the tasks identified in Budget Period 2 unless DOE approval is provided. DOE does not guarantee or assume any obligation to reimburse costs incurred by the Recipient or subcontractor for these tasks, until approval is provided in writing by the Contracting Officer. Provision 22, "Reopener Term – Pending Indirect Rates – Financial Assistance" requirements apply to all subcontractors on this award.

b. Contracting Officer approval as set out above is requested for the following:

Budget Period	Subcontractors	Proposed Total Amount ($)
Budget Period 1	Dow Chemical Company	REDACTED EXEMPTION 4

The DOE Contracting Officer may require additional information concerning these tasks prior to providing written approval.

c. Upon written approval by the Contracting Officer, the Recipient may then receive payment for the tasks identified in paragraph b. above for allowable costs incurred, or DOE will recognize costs incurred toward cost share requirements, if any, in accordance with the payment provisions contained in the Special Terms and Conditions of this agreement.