

ATTACHMENT 1:
SPECIAL TERMS AND CONDITIONS
FOR FORO ENERGY

FUNDING OPPORTUNITY ANNOUNCEMENT NUMBER DE-FOA-0000065

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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 assistance agreement consists of the Cover Page (i.e., the Assistance Agreement Form which includes the award number, the effective date, the name of the awardee, etc.) and the following as attachments:

Attachment No.	Title
1	Special Terms and Conditions
2	ARPA-E Intellectual Property Provisions
3	Statement of Project Objectives (<i>Awardees' submitted technical abstract & the negotiated milestones and deliverable schedule</i>)
4	Federal Financial Assistance Reporting Checklist and Instructions
5	Budget Information (<i>Awardees' submitted SF-424A</i>)

- a. DOE Assistance Regulations, 10 CFR Part 600 and 603 at <http://ecfr.gpoaccess.gov>.
- b. National Policy Assurances to Be Incorporated as Award Terms in effect on date of award at http://management.energy.gov/business_doe/1374.htm. (see Appendix A)

3. ELECTRONIC ACKNOWLEDGEMENT OF AWARD DOCUMENTS

Acknowledgement of award documents by the Recipient's authorized representative through electronic systems used by the Department of Energy, specifically FedConnect, is required.

4. AWARD PROJECT PERIOD

The period of performance for this award is 30 months and shall not exceed 36 months.

5. PAYMENT PROCEDURES - REIMBURSEMENT THROUGH THE AUTOMATED CLEARING HOUSE (ACH) VENDOR 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.

c. Timing of submittals. Submittal of the SF 270 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 – the ARPA-E Budget Director – will approve the invoice as soon as practicable 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 your 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. MAXIMUM OBLIGATION

The maximum obligation of DOE is limited to the amount shown on Agreement Cover Page. You are not obligated to continue performance of the project beyond the total amount obligated.

7. COST SHARING FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS (FFRDC'S) NOT INVOLVED

a. Total Estimated Project Cost is the sum of the Government share and Recipient share of the estimated project costs. 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 total 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:

The recipient must provide cost share of at least 50% of the total allowable costs for

R&D projects of an applied nature (i.e., the sum of the Government share and the recipient share of allowable costs equals the total allowable cost of the project).

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 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 that 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 sharing required by this Article may result in the subsequent recovery by DOE of some or all the funds provided under the award.

8. REBUDGETING AND RECOVERY OF INDIRECT COSTS - REIMBURSABLE INDIRECT COSTS AND FRINGE BENEFITS

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.

9. PRE-AWARD COSTS (IF APPLICABLE)

Any work performed prior to the effective date of award is done at risk. DOE will not reimburse costs if an award is not made. If an award is made you are able to recoup costs incurred up to ninety calendar (90) days prior to the effective date of the award without advance approval by the Contracting Officer. The Contracting Officer must provide written approval for pre-award costs for a period greater than the ninety (90) calendar days immediately preceding the date of award. All pre-award costs must be in accordance with the applicable Federal Cost principles referenced in 10 C.F.R. 600.

10. USE OF PROGRAM INCOME - COST SHARING

If you earn program income during the project period as a result of this award, you may use the program income to meet your cost sharing requirement.

11. 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.

12. SITE VISITS

DOE 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.

13. REPORTING REQUIREMENTS

a. Requirements. The reporting requirements for this award are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2 (see Attachment 4 of this Model Agreement). 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.

14. PUBLICATIONS

An acknowledgment of Federal 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 [*Add Other Agencies*] 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."

15. 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.

16. INTELLECTUAL PROPERTY PROVISIONS AND CONTACT INFORMATION

- a. The intellectual property provisions applicable to this award are provided in Attachment 2 to this award and are referenced in the Assistance Agreement document.
- b. Questions regarding intellectual property matters should be referred to the DOE Award Administrator and the Patent Counsel designated as the service provider for the DOE office that issued the award. The IP Service Providers List is found at [http://www.gc.doe.gov/documents/Intellectual_Property_\(IP\)_Service_Providers_for_Acquisition.pdf](http://www.gc.doe.gov/documents/Intellectual_Property_(IP)_Service_Providers_for_Acquisition.pdf). The IP Service Provider for DOE Headquarters is Linda P. Field, who may be reached at linda.field@hq.doe.gov or (202) 586-3440.

17. 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 the 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.

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. ENVIRONMENTAL, SAFETY AND HEALTH (ES&H) PERFORMANCE OF WORK AT DOE FACILITIES (IF APPLICABLE TO THE AWARDEE)

With respect to the performance of any portion of the work under this award which is performed at a DOE-owned or controlled site, the recipient agrees to comply with all State and Federal ES&H regulations and with all other ES&H requirements of the operator of such site.

Prior to the performance on any work at a DOE-Owned or controlled site, the recipient shall contact the site facility manager for information on DOE and site specific ES&H requirements.

The recipient shall apply this provision to its sub-recipients and contractors.

21. 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 its 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 your inability to pay your 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 the first paragraph, 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 your 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.

22. PERFORMANCE OF WORK IN UNITED STATES

The Recipient agrees that at least a minimum of 90% of the work, as defined by the total project costs (excluding items that are not available in the United States) will be performed on United States soil, which includes the United States proper and its territories.

If a foreign entity (entity that is directly or indirectly owned or controlled by a foreign company or government) participates in the proposed R&D project, the recipient agrees that at least 75% of the ARPA-E funds will be expended by the combination of all domestic entities on the project (excluding project costs for items that are not available in the United States). This restriction applies to the combined performance of the foreign entities, regardless of whether the work is performed in the United States or a foreign location.

23. REIMBURSEMENT OF GOVERNMENT FUNDING

If Foro Energy should choose to reclaim certain patent license rights arising during this project by reimbursement of the government's financial assistance, as set forth in Attachment 2, ARPA-E Intellectual Property Provisions, Appendix A, Patent Rights, paragraph (k), Foro must repay the Federal funding received for this project with interest. The interest repaid will be based upon the Internal Revenue Service's Applicable Federal Rates (AFR) terms and regulations as published with the rate compounded monthly. Rates are published monthly, and are available on the IRS website at <http://www.irs.gov/app/picklist/list/federalRates.html>.

24. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REQUIREMENTS

A NEPA review has been completed by the ARPA-E NEPA Compliance Officer, and the Phases I, II and III (Tasks 1- 7) - stated in Attachment 3, Technical Milestones and Deliverables - have been determined to qualified for a categorical exclusion (B3.6) under DoE NEPA regulations.

For Phase III, Tasks 8 and greater (involving drilling of wells to depths of between 10 and 15,000 feet depth from surface), an additional ARPA-E NEPA determination is required. The determination must be completed by the ARPA-E NEPA compliance officer before any work on these Tasks may begin, and before any funding commitment by Foro Energy. Six months before such work or funding commitment is scheduled to begin, Foro Energy will submit a completed ARPA-E Environmental Questionnaire concerning these Tasks, for a determination by the ARPA-E NEPA compliance officer of whether a categorical exclusion applies, or whether an EA or EIS must be prepared.

25. PATENT COSTS

The following governs the allowability of patent costs. Patent costs are allowable to the extent they are incurred as a requirement under the award. The costs enumerated in subparagraphs (1), (2) and (3) below are deemed to be required by the award, and therefore are allowable, subject to the limits set forth therein.

(1) Costs of preparing invention disclosures of subject inventions that are submitted to DOE, and related reports and other documents in accordance with the Patent Rights Clause;

(2) Costs for searching the art to the extent reasonable and necessary to make the invention disclosures submitted to DOE in accordance with the Patent Rights Clause; and

(3) Other costs and fees in connection with the filing and prosecution of U.S. patent applications on subject inventions disclosed to DOE in accordance with the Patent Rights clause, subject to a limitation of \$15,000 total of allowability for all such filed U.S. patent applications.

Patent costs, including the cost of filing any foreign patent applications, not required by the award as set forth above are unallowable.

26. IDENTIFICATION OF LIMITED RIGHTS DATA AND RESTRICTED COMPUTER SOFTWARE

Any Limited Rights Data or Restricted Computer Software that you plan to use to carry out your work under the award must be identified. Limited Rights Data 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 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 the computer software.

Please note that these data do not include data that you will produce under the award. Data that is first produced under the award is treated separately under the data rights clause of your award. This clause covers only those data that you bring into the award that were privately funded.

No Limited Rights Data will be utilized in the performance of this award.

Applicant Restricted Computer Software will NOT be utilized in the performance of this award.

27. SUBSTANTIVE INVOLVEMENT

DOE will have substantial involvement in the project through its program director and contracting officer, in order to obtain the highest practical probability of success. Specific performance milestones will be incorporated in the award documents, in order to assure continued progress on the project. The ARPA-E Program Director will also participate in go/no-go milestone assessments for program continuation as listed in the milestones provided by Foro Energy. These decision points occur at 12 months and 24 months post-award. The term of the total agreement is 30 months. Beyond these major decision points, Foro Energy will provide the Contract Officer's Representative (COR) with quarterly progress reports. By careful analysis of these reports and regular contact with Foro Energy staff, the COR will remain aware on a regular basis of project progress. Such involvement is appropriate to protect the Government's interest in ensuring success of the project.

28. GOVERNMENT INSIGHT

ARPA-E and the Recipient are bound to each other by a duty of good faith and best effort to achieve the goals of the Project.

The Recipient is responsible for the overall Project, including execution, technical and project management, reporting, financial and administrative matters. In recognition of the significance of this Project to the nation's energy agenda and energy future the Recipient agrees to provide additional access to project related information. The ARPA-E Project Officer or their designee will be provided access, on a non-interference basis, to technical and project status meetings or tests via telephone or in person to better understand the progress and challenges of the Project. ARPA-E may participate in meetings, reviews, and tests and may provide input and comment but has no right of approval. The Recipient shall notify the ARPA-E Project Officer of meetings, reviews, or tests and provide related documents reasonably in advance to the ARPA-E Project Officer to permit insight. The Recipient is not expected to delay any aspect of performance to accommodate ARPA-E insight.

ARPA-E federal employees are subject to the provisions of the Trade Secrets Act. If ARPA-E contractor support personnel participate they shall be subject to appropriate obligations of confidentiality to DOE.

29. NO COST EXTENSION – REQUIREMENT FOR TIMELY DELIVERABLES

Any one-time, no cost extension of this agreement will not change requirements for deliverables unless agreed to in writing by ARPA-E.

30. QUARTERLY REVIEWS AND FUNDING: MEETING MILESTONES, SCHEDULE AND BUDGET

This goal of this agreement is transformational energy technology development: to help mature the technology that is the subject of this agreement to the point that it can be transitioned into industrial development and deployment. The technical challenges of this

effort, combined with the need to ensure proper expenditure of government funds, require close monitoring of negotiated milestones, schedule, and budget commitments - essential terms and conditions of this agreement - to ensure these are achieved. ARPA-E and the recipient will conduct quarterly reviews of the status of this project. If, after a quarterly review, ARPA-E determines that the recipient has failed to meet milestones, schedule, or cost commitments, ARPA-E may at its discretion 1) renegotiate these terms/conditions and continue funding, or 2) discontinue funding under this agreement.

31. DEFINITIONS

The terms defined in 10 CFR 600.3 and 10 CFR 603.1205 through 603.1340 apply to this agreement. In addition, the following terms apply:

Party(ies): The executing entities to this Agreement, consisting of the Department of Energy and the Recipient.

32. FINANCIAL SYSTEM AND RECORDS

Prior to the submission of invoices to DOE, the Recipient shall have and maintain an established accounting system which complies with Generally Accepted Accounting Principles, and with the requirements of this Agreement, and shall ensure that appropriate arrangements have been made for receiving, distributing and accounting for Federal funds and Recipient cost sharing, including any in-kind costs. Consistent with this, an acceptable accounting system will be one in which all funds, cash receipts, and disbursements are controlled and documented properly. Such records are subject to audit.

33. ALLOWABLE COSTS

Allowable costs are determined in accordance with the cost principles applicable to the type of entity incurring the costs. See 10 CFR 600.317 for a list of entities and the applicable cost principles.

34. AUDITS

a. The Recipient's and any subrecipient's financial records are subject to examination or audit on behalf of the Government as long as the records are maintained (see Clause 39 Record Retention and Access to Records).

b. If the Recipient or subrecipient is a for-profit organization that expends \$500,000 or more a year in Federal awards, it must have an audit made after the first year of the award and every two years thereafter by an independent auditor in accordance with the requirements in 10 CFR 600.316. If the Recipient or subrecipient is currently performing under a Federal award that requires an audit by a Federal cognizant agency that auditor must perform the independent audit. A document entitled, "Coverage of Independent Audits of For-Profit Firms," at <http://grants.pr.doe.gov> provides guidance to for-profit participants and their independent public accountants (IPA) on the desired coverage of

periodic audits.

- c. If the Recipient or subrecipient is a Nonprofit organization or a State or local government, it is subject to the Single Audit Act requirements at 10 CFR 600.126 or 10 CFR 600.226.
- d. If a subrecipient is a FFRDC or GOGO, the Federal cognizant agency shall perform the independent audit in accordance with the established audit schedule.

Provisional Indirect Rates

- e. The indirect cost rates proposed by the Recipient, FORO Energy have not been audited by an independent third party. These unaudited rates have been provisionally accepted for the purposes of establishing the total project cost and the Recipient's cost share. The indirect cost rates proposed/accepted shall be used as provisional billing rates for the purpose of making payments to the Recipient and computing cost share until a third party audit is conducted and the findings finalized.
- f. A formal request for audit will be made to the cognizant federal audit agency. Upon completion of FORO's assessment the DOE Contracting Officer shall notify the Recipient and, if necessary, propose adjustments to this award retroactive to the effective date of the award to reflect the audited indirect cost rates. Both parties agree to implement these changes as soon as practicable after the audit findings are available.
- g. The total funding provided by DOE shall remain unchanged under the award as long as the Recipient is maintaining the minimum cost share required by the Funding Opportunity Announcement, DE-FOA-0000065.

35. TITLE AND DISPOSITION OF PROPERTY

- a. *Definitions.* In this article "property" means tangible personal property acquired or fabricated under this award, other than property actually consumed during the execution of work under this agreement.
- b. Title to Property. The Recipient will acquire property with an acquisition value greater than \$5,000 under this Agreement as set forth in Attachment * to this Agreement that is necessary to further the RD&D goals of this Program and is not for the direct benefit of the Government. Title to this property shall vest in the Recipient upon acquisition. Title to any other items of property acquired under this Agreement with an current per unit fair market value of less than \$5,000 shall vest in the Recipient upon acquisition with no further obligation of the Parties. Should any other item of property with an acquisition value of \$5,000 or more be required, the Recipient shall obtain prior written approval of the Contracting Officer. Title to this property shall also vest in the Recipient upon acquisition subject to conditions of 10 CFR 600.321. The Recipient shall be responsible for the maintenance, repair, protection, and preservation of all property.

c. Disposition of Property. At the completion of the term of this Agreement, or until the property is no longer needed for the purposes of the project; items of property set forth in Attachment * or any other items of property with a per unit fair market value greater than \$5,000 shall be disposed of in accordance with the disposition requirements in 10 CFR 600.321(f).

36. RESERVED

37. PURCHASING STANDARDS

For purchases made under this agreement that are funded in whole or in part with Federal funds or Recipient's cost sharing, the Recipient must comply with the requirements in 10 CFR 600.331 for a for-profit recipient.

38. FLOW DOWN REQUIREMENTS TO SUBRECIPIENTS

In accordance with the policy in 10 CFR 603.605, the Recipient shall provide the same financial management, property management, and purchasing systems requirements to a subrecipient that would apply if the subrecipient were the recipient. For example, a for-profit Recipient would require a university subrecipient to comply with the requirements that apply to a university. If the subrecipient is a FFRDC or GOCO, the financial management, property management, and purchasing requirements in the subaward should conform as much as practicable with the requirements in the FFRDC/GOCO contract. Note these flow down requirements apply to subawards for substantive performance of portions of the effort and not to purchases of goods or services needed to carry out the RD&D.

39. RECORD RETENTION AND ACCESS TO RECORDS

a. The Recipient and any subrecipient must keep records related to this agreement for a period of three years after submission of the final financial status report, with the following exceptions:

1. Records related to an audit, claim, or dispute that begins but does not reach its conclusion within the 3-year period must be kept until the matter is resolved and final action taken.
2. Records for any real property or equipment acquired with project funds must be kept for three years after final disposition.

b. The DOE Contracting Officer, the DOE Inspector General, and the Comptroller General of the United States, or any of their duly authorized representatives, shall have unrestricted access to any books, documents, papers or other records of the Recipient and subrecipients that are pertinent to the agreement in order to make audits. Such audit, examination, or access shall be performed during business hours on business days upon prior written notice and shall be subject to the security requirements of the audited party.

40. CLAIMS, DISPUTES AND APPEALS

- a. The Recipient must submit claims arising out of or relating to this agreement in writing to the Contracting Officer and must specify the nature and basis for the relief requested and include all data that supports the claim. DOE will attempt to resolve such claims informally at the Contracting Officer level. All disputes and appeals will be resolved in accordance with the procedures set forth in 10 CFR Part 600.22.
- b. Claims for damages of any nature whatsoever pursued under this Agreement shall be limited to direct damages only up to the aggregate amount of Government funding disbursed as of the time the dispute arises. In no event shall the Government be liable for claims for consequential, punitive, special and incidental damages, claims for lost profits, or other indirect damages.

41. FOREIGN ACCESS TO TECHNOLOGY

The parties understand that technology developments resulting from the performance of the agreement may be subject to U.S. laws and regulations limiting access. Any transfer of technology developed under this agreement must be consistent with U.S. laws and regulations, including the Department of Commerce Export Regulation at Chapter VII, Subchapter C, Title 15 of the CFR, as applicable. Each Recipient and subrecipient shall comply with these laws and regulations.

42. TERMINATION AND ENFORCEMENT

- a. This award may be terminated in whole or in part by the Contracting Officer, if the Recipient materially fails to comply with the terms and conditions of the award. DOE enforcement remedies are contained in 10 CFR 600.352.
- b. Subject to a reasonable determination by either party that the project will not produce beneficial results commensurate with the expenditure of resources, that party may terminate in whole or in part the agreement by providing at least 30 days advance written notice to the other party, provided such notice is preceded by consultation between the parties. The two parties will negotiate the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated. If either party determines in the case of partial termination that the reduced or modified portion of the award will not accomplish the purpose for which the award was made, the award may be terminated in its entirety.
- c. Unless otherwise negotiated, DOE's maximum liability is the lesser of:
 1. DOE's share of allowable costs incurred up to the date of termination, or
 2. The amount of DOE funds obligated to the TIA.

d. Notwithstanding paragraphs c. of this section, if the award includes milestone payments, the Government has no obligation to pay the Recipient beyond the last completed and paid milestone if the Recipient decides to terminate.

43. SPECIAL PROVISIONS RELATING TO WORK FUNDED UNDER AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (Mar 2009)

Preamble

The American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, (Recovery Act) was enacted to preserve and create jobs and promote economic recovery, assist those most impacted by the recession, provide investments needed to increase economic efficiency by spurring technological advances in science and health, invest in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits, stabilize State and local government budgets, in order to minimize and avoid reductions in essential services and counterproductive State and local tax increases. Recipients shall use grant funds in a manner that maximizes job creation and economic benefit.

The Recipient shall comply with all terms and conditions in the Recovery Act relating generally to governance, accountability, transparency, data collection and resources as specified in Act itself and as discussed below.

Recipients should begin planning activities for their first tier subrecipients, including obtaining a DUNS number (or updating the existing DUNS record), and registering with the Central Contractor Registration (CCR).

Be advised that Recovery Act funds can be used in conjunction with other funding as necessary to complete projects, but tracking and reporting must be separate to meet the reporting requirements of the Recovery Act and related guidance. For projects funded by sources other than the Recovery Act, Contractors must keep separate records for Recovery Act funds and to ensure those records comply with the requirements of the Act.

The Government has not fully developed the implementing instructions of the Recovery Act, particularly concerning specific procedural requirements for the new reporting requirements. The Recipient will be provided these details as they become available. The Recipient must comply with all requirements of the Act. If the recipient believes there is any inconsistency between ARRA requirements and current award terms and conditions, the issues will be referred to the Contracting Officer for reconciliation.

Definitions

For purposes of this clause, Covered Funds means funds expended or obligated from appropriations under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5. Covered Funds will have special accounting codes and will be identified as

Recovery Act funds in the grant, cooperative agreement or TIA and/or modification using Recovery Act funds. Covered Funds must be reimbursed by September 30, 2015.

Non-Federal employer means any employer with respect to covered funds -- the contractor, subcontractor, grantee, or recipient, as the case may be, if the contractor, subcontractor, grantee, or recipient is an employer; and any professional membership organization, certification of other professional body, any agent or licensee of the Federal government, or any person acting directly or indirectly in the interest of an employer receiving covered funds; or with respect to covered funds received by a State or local government, the State or local government receiving the funds and any contractor or subcontractor receiving the funds and any contractor or subcontractor of the State or local government; and does not mean any department, agency, or other entity of the federal government.

Recipient means any entity that receives Recovery Act funds directly from the Federal government (including Recovery Act funds received through grant, loan, or contract) other than an individual and includes a State that receives Recovery Act Funds.

Special Provisions

A. Flow Down Requirement

Recipients must include these special terms and conditions in any subaward.

B. Segregation of Costs

Recipients must segregate the obligations and expenditures related to funding under the Recovery Act. Financial and accounting systems should be revised as necessary to segregate, track and maintain these funds apart and separate from other revenue streams. No part of the funds from the Recovery Act shall be commingled with any other funds or used for a purpose other than that of making payments for costs allowable for Recovery Act projects.

C. Prohibition on Use of Funds

None of the funds provided under this agreement derived from the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, may be used by any State or local government, or any private entity, for any casino or other gambling establishment, aquarium, zoo, golf course, or swimming pool.

D. Access to Records

With respect to each financial assistance agreement awarded utilizing at least some of the funds appropriated or otherwise made available by the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, any representative of an appropriate inspector general appointed under section 3 or 8G of the Inspector General Act of 1988 (5 U.S.C.

App.) or of the Comptroller General is authorized --

(1) to examine any records of the contractor or grantee, any of its subcontractors or subgrantees, or any State or local agency administering such contract that pertain to, and involve transactions that relate to, the subcontract, subcontract, grant, or subgrant; and

(2) to interview any officer or employee of the contractor, grantee, subgrantee, or agency regarding such transactions.

E. Publication

An application may contain technical data and other data, including trade secrets and/or privileged or confidential information, which the applicant does not want disclosed to the public or used by the Government for any purpose other than the application. To protect such data, the applicant should specifically identify each page including each line or paragraph thereof containing the data to be protected and mark the cover sheet of the application with the following Notice as well as referring to the Notice on each page to which the Notice applies:

Notice of Restriction on Disclosure and Use of Data

The data contained in all (with the exception of the technical abstract) the pages of this application have been submitted in confidence and contain trade secrets or proprietary information, and such data shall be used or disclosed only for evaluation purposes, provided that if this applicant receives an award as a result of or in connection with the submission of this application, DOE shall have the right to use or disclose the data here to the extent provided in the award. This restriction does not limit the Government's right to use or disclose data obtained without restriction from any source, including the applicant.

Information about this agreement will be published on the Internet and linked to the website www.recovery.gov, maintained by the Accountability and Transparency Board. The Board may exclude posting contractual or other information on the website on a case-by-case basis when necessary to protect national security or to protect information that is not subject to disclosure under sections 552 and 552a of title 5, United States Code.

F. Protecting State and Local Government and Contractor Whistleblowers.

The requirements of Section 1553 of the Act are summarized below. They include, but are not limited to:

Prohibition on Reprisals: An employee of any non-Federal employer receiving covered funds under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, may not be discharged, demoted, or otherwise discriminated against as a reprisal for disclosing, including a disclosure made in the ordinary course of an employee's duties, to the Accountability and Transparency Board, an inspector general, the Comptroller General, a member of Congress, a State or Federal regulatory or law enforcement agency,

a person with supervisory authority over the employee (or other person working for the employer who has the authority to investigate, discover or terminate misconduct), a court or grant jury, the head of a Federal agency, or their representatives information that the employee believes is evidence of:

- gross mismanagement of an agency contract or grant relating to covered funds;
- a gross waste of covered funds;
- a substantial and specific danger to public health or safety related to the implementation or use of covered funds;
- an abuse of authority related to the implementation or use of covered funds; or
- as violation of law, rule, or regulation related to an agency contract (including the competition for or negotiation of a contract) or grant, awarded or issued relating to covered funds.

Agency Action: Not later than 30 days after receiving an inspector general report of an alleged reprisal, the head of the agency shall determine whether there is sufficient basis to conclude that the non-Federal employer has subjected the employee to a prohibited reprisal. The agency shall either issue an order denying relief in whole or in part or shall take one or more of the following actions:

- Order the employer to take affirmative action to abate the reprisal.
- Order the employer to reinstate the person to the position that the person held before the reprisal, together with compensation including back pay, compensatory damages, employment benefits, and other terms and conditions of employment that would apply to the person in that position if the reprisal had not been taken.
- Order the employer to pay the employee an amount equal to the aggregate amount of all costs and expenses (including attorneys' fees and expert witnesses' fees) that were reasonably incurred by the employee for or in connection with, bringing the complaint regarding the reprisal, as determined by the head of a court of competent jurisdiction.

Nonenforceability of Certain Provisions Waiving Rights and Remedies or Requiring Arbitration: Except as provided in a collective bargaining agreement, the rights and remedies provided to aggrieved employees by this section may not be waived by any agreement, policy, form, or condition of employment, including any predispute arbitration agreement. No predispute arbitration agreement shall be valid or enforceable if it requires arbitration of a dispute arising out of this section.

Requirement to Post Notice of Rights and Remedies: Any employer receiving covered funds under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, shall post notice of the rights and remedies as required therein. (Refer to section 1553 of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, www.Recovery.gov, for specific requirements of this section and prescribed language for the notices.)

G. RESERVED

H. False Claims Act

Recipient and sub-recipients shall promptly refer to the DOE or other appropriate Inspector General any credible evidence that a principal, employee, agent, contractor, sub-grantee, subcontractor or other person has submitted a false claim under the False Claims Act or has committed a criminal or civil violation of laws pertaining to fraud, conflict of interest, bribery, gratuity or similar misconduct involving those funds.

I. Information in Support of Recovery Act Reporting

Recipient may be required to submit backup documentation for expenditures of funds under the Recovery Act including such items as timecards and invoices. Recipient shall provide copies of backup documentation at the request of the Contracting Officer or designee.

J. Availability of Funds

Funds appropriated under the Recovery Act and obligated to this award are available for reimbursement of costs until September 30, 2015.

44. REPORTING AND REGISTRATION REQUIREMENTS UNDER SECTION 1512 OF THE RECOVERY ACT

(a) This award requires the recipient to complete projects or activities which are funded under the American Recovery and Reinvestment Act of 2009 (Recovery Act) and to report on use of Recovery Act funds provided through this award. Information from these reports will be made available to the public.

(b) The reports are due no later than ten calendar days after each calendar quarter in which the recipient receives the assistance award funded in whole or in part by the Recovery Act.

(c) Recipients and their first-tier recipients must maintain current registrations in the Central Contractor Registration (<http://www.ccr.gov>) at all times during which they have active federal awards funded with Recovery Act funds. A Dun and Bradstreet Data Universal Numbering System (DUNS) Number (<http://www.dnb.com>) is one of the requirements for registration in the Central Contractor Registration.

(d) The recipient shall report the information described in section 1512(c) of the Recovery Act using the reporting instructions and data elements that will be provided online at <http://www.FederalReporting.gov> and ensure that any information that is pre-filled is corrected or updated as needed.

45. REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS -- SECTION 1605 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

(a) Definitions. As used in this award term and condition--

(1) Manufactured good means a good brought to the construction site for incorporation into the building or work that has been--

(i) Processed into a specific form and shape; or

(ii) Combined with other raw material to create a material that has different properties than the properties of the individual raw materials.

(2) Public building and public work means a public building of, and a public work of, a governmental entity (the United States; the District of Columbia; commonwealths, territories, and minor outlying islands of the United States; State and local governments; and multi-State, regional, or interstate entities which have governmental functions). These buildings and works may include, without limitation, bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals, and the construction, alteration, maintenance, or repair of such buildings and works.

(3) Steel means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements.

(b) Domestic preference. (1) This award term and condition implements Section 1605 of the American Recovery and Reinvestment Act of 2009 (Recovery Act) (Pub. L. 111--5), by requiring that all iron, steel, and manufactured goods used in the project are produced in the United States except as provided in paragraph (b)(3) and (b)(4) of this section and condition.

(2) This requirement does not apply to the material listed by the Federal Government as follows: **None.**

(3) The award official may add other iron, steel, and/or manufactured goods to the list in paragraph (b)(2) of this section and condition if the Federal Government determines that--

(i) The cost of the domestic iron, steel, and/or manufactured goods would be unreasonable. The cost of domestic iron, steel, or manufactured goods used in the project is unreasonable when the cumulative cost of such material will increase the cost of the overall project by more than 25 percent;

(ii) The iron, steel, and/or manufactured good is not produced, or manufactured in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or

(iii) The application of the restriction of section 1605 of the Recovery Act would be inconsistent with the public interest.

- (c) Request for determination of inapplicability of Section 1605 of the Recovery Act .
- (1)(i) Any recipient request to use foreign iron, steel, and/or manufactured goods in accordance with paragraph (b)(3) of this section shall include adequate information for Federal Government evaluation of the request, including--
- (A) A description of the foreign and domestic iron, steel, and/or manufactured goods;
 - (B) Unit of measure;
 - (C) Quantity;
 - (D) Cost;
 - (E) Time of delivery or availability;
 - (F) Location of the project;
 - (G) Name and address of the proposed supplier; and
 - (H) A detailed justification of the reason for use of foreign iron, steel, and/or manufactured goods cited in accordance with paragraph (b)(3) of this section.
- (ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed cost comparison table in the format in paragraph (d) of this section.
- (iii) The cost of iron, steel, and/or manufactured goods material shall include all delivery costs to the construction site and any applicable duty.
- (iv) Any recipient request for a determination submitted after Recovery Act funds have been obligated for a project for construction, alteration, maintenance, or repair shall explain why the recipient could not reasonably foresee the need for such determination and could not have requested the determination before the funds were obligated. If the recipient does not submit a satisfactory explanation, the award official need not make a determination.
- (2) If the Federal Government determines after funds have been obligated for a project for construction, alteration, maintenance, or repair that an exception to section 1605 of the Recovery Act applies, the award official will amend the award to allow use of the foreign iron, steel, and/or relevant manufactured goods. When the basis for the exception is nonavailability or public interest, the amended award shall reflect adjustment of the award amount, redistribution of budgeted funds, and/or other actions taken to cover costs associated with acquiring or using the foreign iron, steel, and/or relevant manufactured goods. When the basis for the exception is the unreasonable cost of the domestic iron, steel, or manufactured goods, the award official shall adjust the award amount or redistribute budgeted funds by at least the differential established in 2 CFR 176.110(a).

(3) Unless the Federal Government determines that an exception to section 1605 of the Recovery Act applies, use of foreign iron, steel, and/or manufactured goods is noncompliant with section 1605 of the American Recovery and Reinvestment Act.

(d) Data. To permit evaluation of requests under paragraph (b) of this section based on unreasonable cost, the Recipient shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Items Cost Comparison

Description	Unit of measure	Quantity	Cost
(dollars)*			
Item 1:			
Foreign steel, iron, or manufactured good		_____	_____
Domestic steel, iron, or manufactured good		_____	_____
Item 2:			
Foreign steel, iron, or manufactured good		_____	_____
Domestic steel, iron, or manufactured good		_____	_____

[List name, address, telephone number, email address, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information.]

[*Include all delivery costs to the construction site.]

46. REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS (COVERED UNDER INTERNATIONAL AGREEMENTS)--SECTION 1605 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

(a) Definitions. As used in this award term and condition--

Designated country --(1) A World Trade Organization Government Procurement Agreement country (Aruba, Austria, Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea (Republic of), Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and United Kingdom;

(2) A Free Trade Agreement (FTA) country (Australia, Bahrain, Canada, Chile, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Israel, Mexico, Morocco, Nicaragua, Oman, Peru, or Singapore); or

(3) A United States-European Communities Exchange of Letters (May 15, 1995) country: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta,

Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, and United Kingdom.

Designated country iron, steel, and/or manufactured goods --(1) Is wholly the growth, product, or manufacture of a designated country; or

(2) In the case of a manufactured good that consist in whole or in part of materials from another country, has been substantially transformed in a designated country into a new and different manufactured good distinct from the materials from which it was transformed.

Domestic iron, steel, and/or manufactured good --(1) Is wholly the growth, product, or manufacture of the United States; or

(2) In the case of a manufactured good that consists in whole or in part of materials from another country, has been substantially transformed in the United States into a new and different manufactured good distinct from the materials from which it was transformed. There is no requirement with regard to the origin of components or subcomponents in manufactured goods or products, as long as the manufacture of the goods occurs in the United States.

Foreign iron, steel, and/or manufactured good means iron, steel and/or manufactured good that is not domestic or designated country iron, steel, and/or manufactured good.

Manufactured good means a good brought to the construction site for incorporation into the building or work that has been--

(1) Processed into a specific form and shape; or

(2) Combined with other raw material to create a material that has different properties than the properties of the individual raw materials.

Public building and public work means a public building of, and a public work of, a governmental entity (the United States; the District of Columbia; commonwealths, territories, and minor outlying islands of the United States; State and local governments; and multi-State, regional, or interstate entities which have governmental functions). These buildings and works may include, without limitation, bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals, and the construction, alteration, maintenance, or repair of such buildings and works.

Steel means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements.

(b) Iron, steel, and manufactured goods. (1) The award term and condition described in this section implements--

(i) Section 1605(a) of the American Recovery and Reinvestment Act of 2009 (Pub. L. 111--5) (Recovery Act), by requiring that all iron, steel, and manufactured goods used in the project are produced in the United States; and

(ii) Section 1605(d), which requires application of the Buy American requirement in a manner consistent with U.S. obligations under international agreements. The restrictions of section 1605 of the Recovery Act do not apply to designated country iron, steel, and/or manufactured goods. The Buy American requirement in section 1605 shall not be applied where the iron, steel or manufactured goods used in the project are from a Party to an international agreement that obligates the recipient to treat the goods and services of that Party the same as domestic goods and services. This obligation shall only apply to projects with an estimated value of \$7,443,000 or more.

(2) The recipient shall use only domestic or designated country iron, steel, and manufactured goods in performing the work funded in whole or part with this award, except as provided in paragraphs (b)(3) and (b)(4) of this section.

(3) The requirement in paragraph (b)(2) of this section does not apply to the iron, steel, and manufactured goods listed by the Federal Government as follows: **None**.

(4) The award official may add other iron, steel, and manufactured goods to the list in paragraph (b)(3) of this section if the Federal Government determines that--

(i) The cost of domestic iron, steel, and/or manufactured goods would be unreasonable. The cost of domestic iron, steel, and/or manufactured goods used in the project is unreasonable when the cumulative cost of such material will increase the overall cost of the project by more than 25 percent;

(ii) The iron, steel, and/or manufactured good is not produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality; or

(iii) The application of the restriction of section 1605 of the Recovery Act would be inconsistent with the public interest.

(c) Request for determination of inapplicability of section 1605 of the Recovery Act or the Buy American Act. (1)(i) Any recipient request to use foreign iron, steel, and/or manufactured goods in accordance with paragraph (b)(4) of this section shall include adequate information for Federal Government evaluation of the request, including--

(A) A description of the foreign and domestic iron, steel, and/or manufactured goods;

(B) Unit of measure;

(C) Quantity;

(D) Cost;

(E) Time of delivery or availability;

(F) Location of the project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign iron, steel, and/or manufactured goods cited in accordance with paragraph (b)(4) of this section.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed cost comparison table in the format in paragraph (d) of this section.

(iii) The cost of iron, steel, or manufactured goods shall include all delivery costs to the construction site and any applicable duty.

(iv) Any recipient request for a determination submitted after Recovery Act funds have been obligated for a project for construction, alteration, maintenance, or repair shall explain why the recipient could not reasonably foresee the need for such determination and could not have requested the determination before the funds were obligated. If the recipient does not submit a satisfactory explanation, the award official need not make a determination.

(2) If the Federal Government determines after funds have been obligated for a project for construction, alteration, maintenance, or repair that an exception to section 1605 of the Recovery Act applies, the award official will amend the award to allow use of the foreign iron, steel, and/or relevant manufactured goods. When the basis for the exception is nonavailability or public interest, the amended award shall reflect adjustment of the award amount, redistribution of budgeted funds, and/or other appropriate actions taken to cover costs associated with acquiring or using the foreign iron, steel, and/or relevant manufactured goods. When the basis for the exception is the unreasonable cost of the domestic iron, steel, or manufactured goods, the award official shall adjust the award amount or redistribute budgeted funds, as appropriate, by at least the differential established in 2 CFR 176.110(a).

(3) Unless the Federal Government determines that an exception to section 1605 of the Recovery Act applies, use of foreign iron, steel, and/or manufactured goods other than designated country iron, steel, and/or manufactured goods is noncompliant with the applicable Act.

(d) Data. To permit evaluation of requests under paragraph (b) of this section based on unreasonable cost, the applicant shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Items Cost Comparison

Description	Unit of measure	Quantity	Cost
(dollars)*			
Item 1:			
Foreign steel, iron, or manufactured good		_____	_____
Domestic steel, iron, or manufactured good		_____	_____
Item 2:			
Foreign steel, iron, or manufactured good		_____	_____
Domestic steel, iron, or manufactured good		_____	_____

[List name, address, telephone number, email address, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information.]

[*Include all delivery costs to the construction site.]

47. WAGE RATE REQUIREMENTS UNDER SECTION 1606 OF THE RECOVERY ACT

(a) Section 1606 of the Recovery Act requires that all laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the Federal Government pursuant to the Recovery Act shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code.

Pursuant to Reorganization Plan No. 14 and the Copeland Act, 40 U.S.C. 3145, the Department of Labor has issued regulations at 29 CFR parts 1, 3, and 5 to implement the Davis-Bacon and related Acts. Regulations in 29 CFR 5.5 instruct agencies concerning application of the standard Davis-Bacon contract clauses set forth in that section. Federal agencies providing grants, cooperative agreements, and loans under the Recovery Act shall ensure that the standard Davis-Bacon contract clauses found in 29 CFR 5.5(a) are incorporated in any resultant covered contracts that are in excess of \$2,000 for construction, alteration or repair (including painting and decorating).

(b) For additional guidance on the wage rate requirements of section 1606, contact your awarding agency. Recipients of grants, cooperative agreements and loans should direct their initial inquiries concerning the application of Davis-Bacon requirements to a particular federally assisted project to the Federal agency funding the project. The Secretary of Labor retains final coverage authority under Reorganization Plan Number 14.

48. RECOVERY ACT TRANSACTIONS LISTED IN SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS AND RECIPIENT RESPONSIBILITIES FOR INFORMING SUBRECIPIENTS

- (a) To maximize the transparency and accountability of funds authorized under the American Recovery and Reinvestment Act of 2009 (Pub. L. 111--5) (Recovery Act) as required by Congress and in accordance with 2 CFR 215.21 "Uniform Administrative Requirements for Grants and Agreements" and OMB Circular A--102 Common Rules provisions, recipients agree to maintain records that identify adequately the source and application of Recovery Act funds. OMB Circular A--102 is available at <http://www.whitehouse.gov/omb/circulars/a102/a102.html>.
- (b) For recipients covered by the Single Audit Act Amendments of 1996 and OMB Circular A--133, "Audits of States, Local Governments, and Non-Profit Organizations," recipients agree to separately identify the expenditures for Federal awards under the Recovery Act on the Schedule of Expenditures of Federal Awards (SEFA) and the Data Collection Form (SF--SAC) required by OMB Circular A--133. OMB Circular A--133 is available at <http://www.whitehouse.gov/omb/circulars/a133/a133.html>. This shall be accomplished by identifying expenditures for Federal awards made under the Recovery Act separately on the SEFA, and as separate rows under Item 9 of Part III on the SF--SAC by CFDA number, and inclusion of the prefix "ARRA-" in identifying the name of the Federal program on the SEFA and as the first characters in Item 9d of Part III on the SF--SAC.
- (c) Recipients agree to separately identify to each subrecipient, and document at the time of subaward and at the time of disbursement of funds, the Federal award number, CFDA number, and amount of Recovery Act funds. When a recipient awards Recovery Act funds for an existing program, the information furnished to subrecipients shall distinguish the subawards of incremental Recovery Act funds from regular subawards under the existing program.
- (d) Recipients agree to require their subrecipients to include on their SEFA information to specifically identify Recovery Act funding similar to the requirements for the recipient SEFA described above. This information is needed to allow the recipient to properly monitor subrecipient expenditure of ARRA funds as well as oversight by the Federal awarding agencies, Offices of Inspector General and the Government Accountability Office.

ATTACHMENT 2:
ARPA-E INTELLECTUAL PROPERTY PROVISIONS

1. FAR 52.227-1 Authorization and Consent (JUL 1995)-Alternate I (APR 1984)
2. FAR 52.227-2 Notice and Assistance Regarding Patent and Copyright Infringement (AUG 1996)

The above clause is not applicable if the award is for less than \$100,000, in aggregate.

3. 10 CFR 600.325 Appendix A, Rights in Data - Programs Covered Under Special Data Statutes (OCT 2003)
4. FAR 52.227-23 Rights to Proposal Data (Technical) (JUN 1987)
5. 10 CFR 600.325 Appendix A, Patent Rights (Small Business Firms and Nonprofit Organizations) (OCT 2003)
6. U.S. Competitiveness Clause

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

1. 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)

2. 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)

3. 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 (c) 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 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 either the limited rights or restricted rights notice as authorized by paragraph (h) of this clause, the protected data notice as authorized in paragraph (g), or the copyright notice required by paragraph (c) of this clause, 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
- (iii) 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 of this award that would have been treated as a trade secret if developed at private

expense. Any such claimed "protected data" will be clearly marked with the following Protected Rights Notice, and will be treated in accordance with such Notice, subject to the provisions of paragraphs (e) and (f) of this clause.

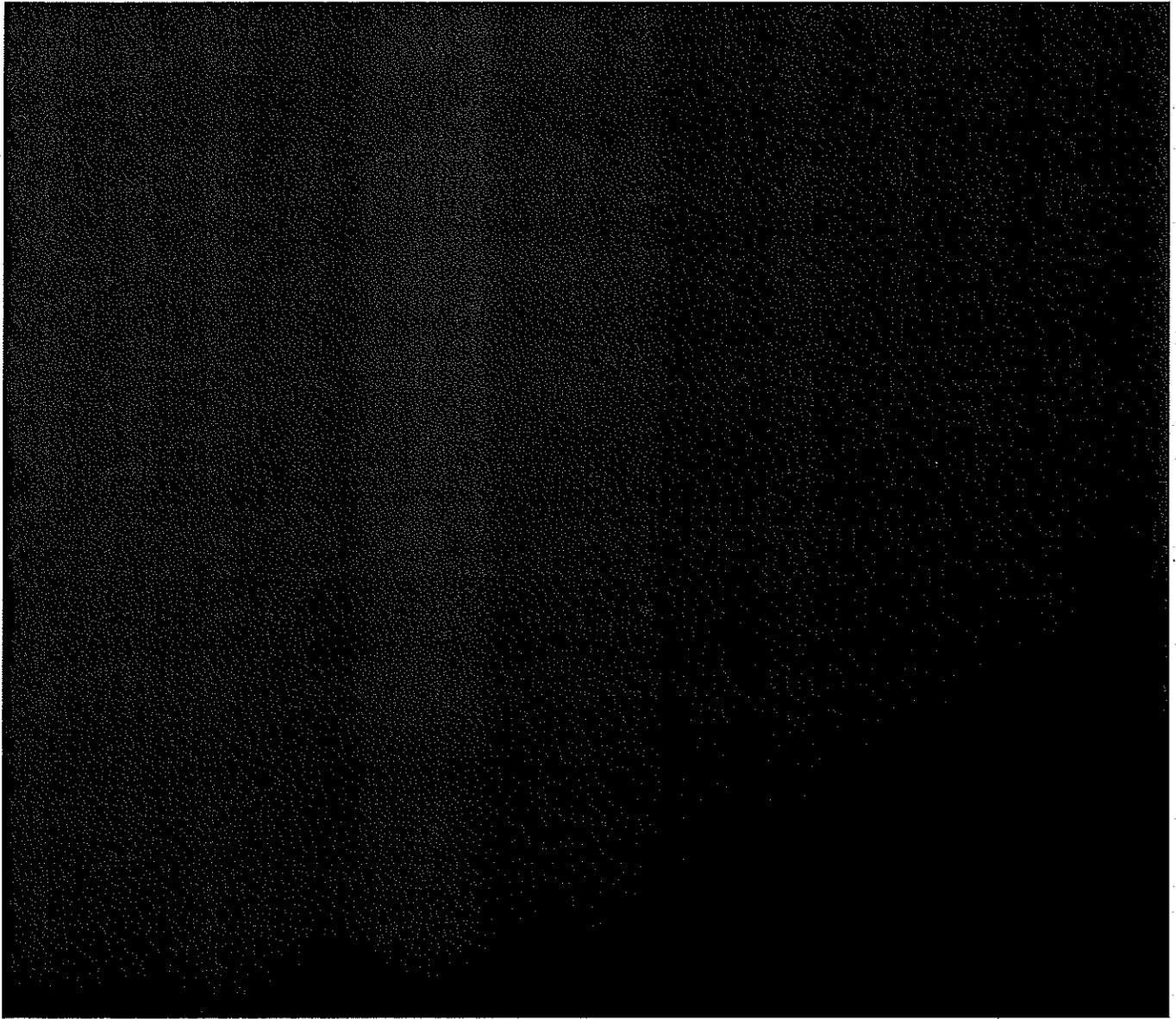
PROTECTED RIGHTS NOTICE

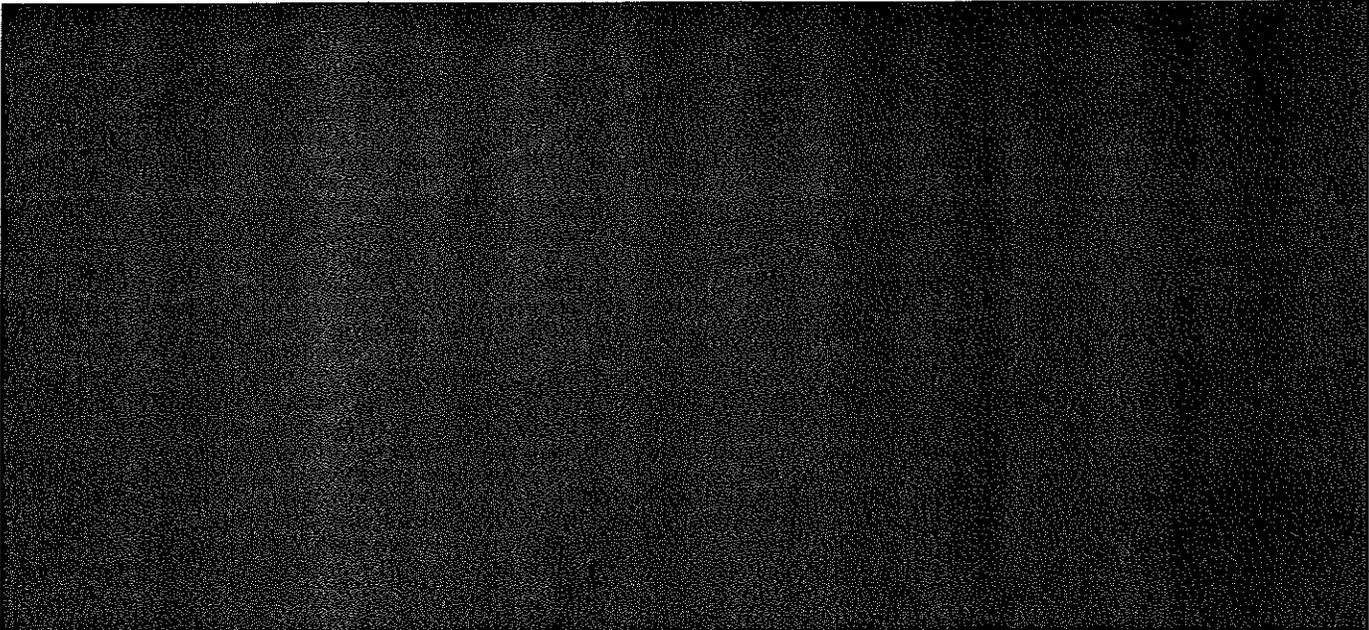
These protected data were produced under this agreement with the U.S. Department of Energy and may not be published, disseminated, or disclosed to others outside the Government until 5 years after development of information under this agreement, unless express written authorization is obtained from the recipient. Upon expiration of the period of protection set forth in this Notice, the Government shall have unlimited rights in 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 evaluation purposes under the restriction that the "Protected Data" be retained in confidence and not be further disclosed; or
 - (b) To subcontractors or other team members performing work under the Government's program of which this award is a part, for information or use in connection with the work performed under their activity, and 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 becomes 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 is independently developed by someone who did not have access to the Protected Data and such data is 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. The parties agree that notwithstanding the following lists of types of data, nothing precludes the Government from seeking delivery of additional data in accordance with this award, or from making publicly available additional non-protected data, nor does the following list constitute any admission by the Government that technical data not on the list is Protected Data.

Unlimited Rights Data for Foro Energy Award





(h) Protection of Limited Rights Data

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 to 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.

(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. In this regard, for subawards with for-profit organizations, awardees may include the appropriate Rights in Data provision set forth in 10 CFR 600.325, Subpart D, Appendix A, suitably modified to identify the parties. For subawards with nonprofit organizations, subawardees are generally subject to the data provisions of 10 CFR 600.136.

(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 three 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)

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

Except for data contained on pages (*to be completed by awardee*), 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 dated , upon which this contract is based.

5. 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) Notwithstanding the above, Recipient retains the option to repay the Government's share of this award that has been disbursed to Recipient, to DOE/ARPA-E in full, including interest, and to forego any further Government payments under this award. In the event of, and upon such repayment in full, DOE's March-in-Rights set forth herein will be relinquished in full. In addition, upon such repayment, the non-exclusive, paid-up license, set forth in paragraph (b) of this clause, to practice or have practiced a subject invention for or on behalf of the U.S. throughout the world, will also be relinquished in full. However, the option set forth herein for Recipient to repay in full with interest, must be exercised by Recipient no later than the period set forth in 37 C.F.R. 401.6(d), i.e., within 30 days after receipt of a written notice of march-in.

(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

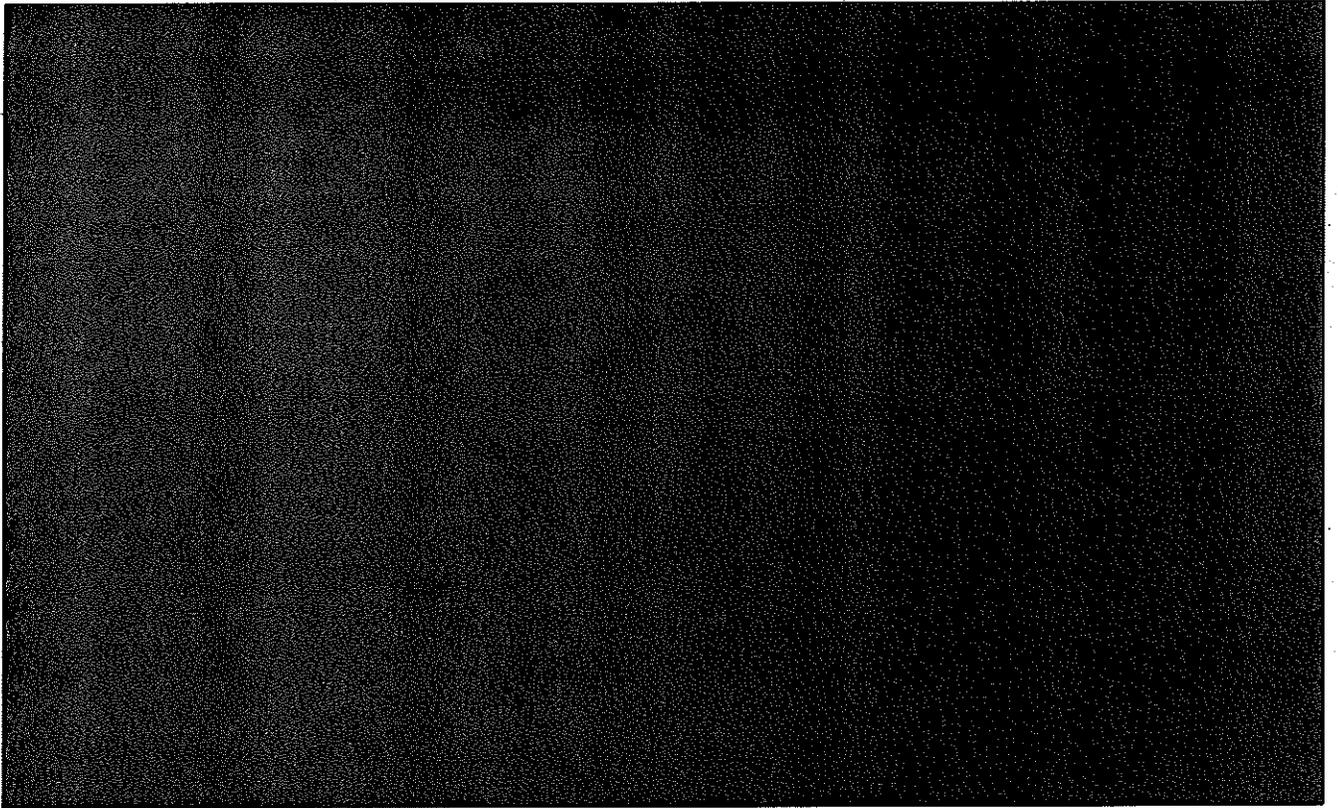
Unless otherwise Specified in the award, the information identified in paragraphs (f)(2) and (f)(3) may be electronically filed.

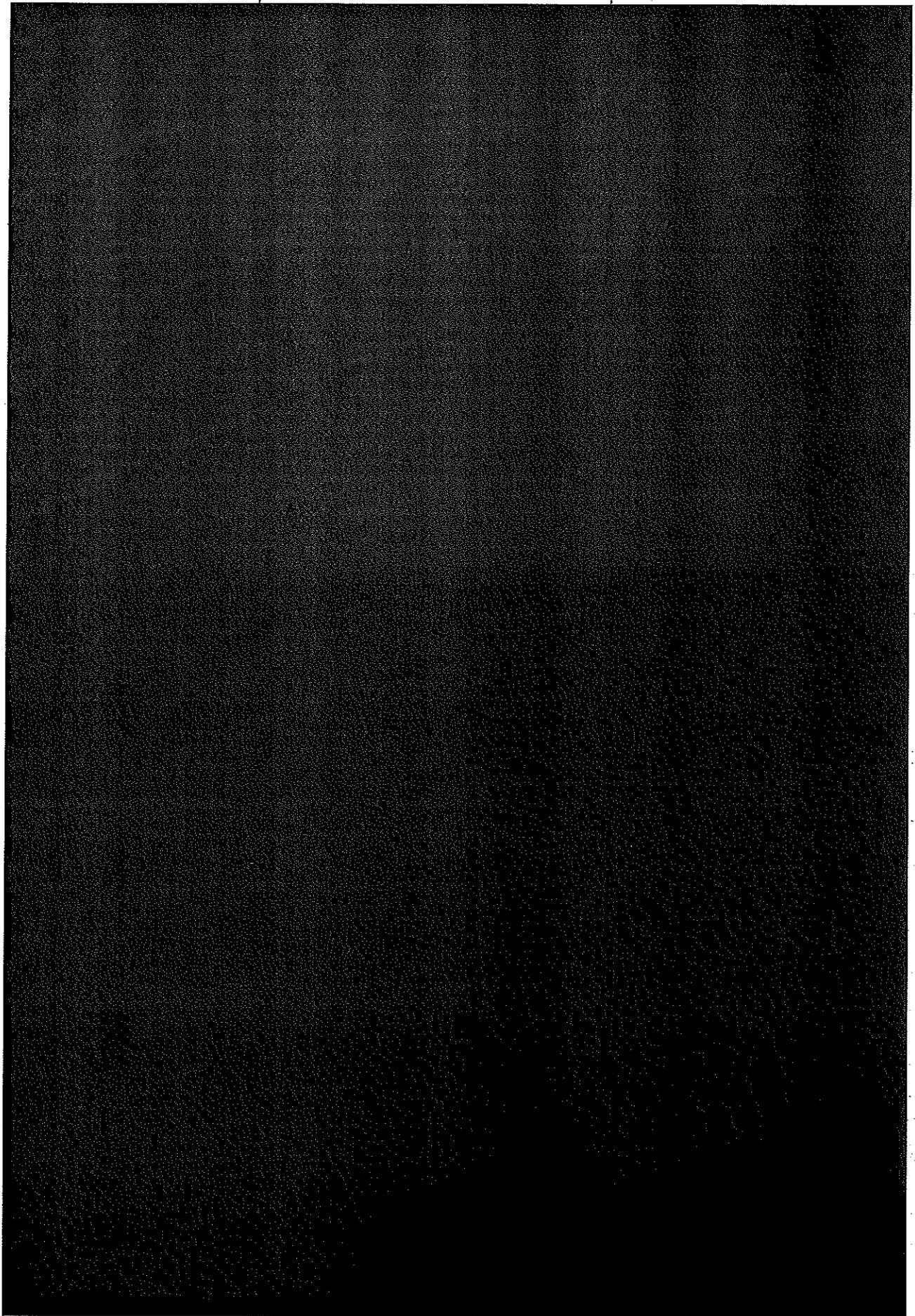
[End of clause]

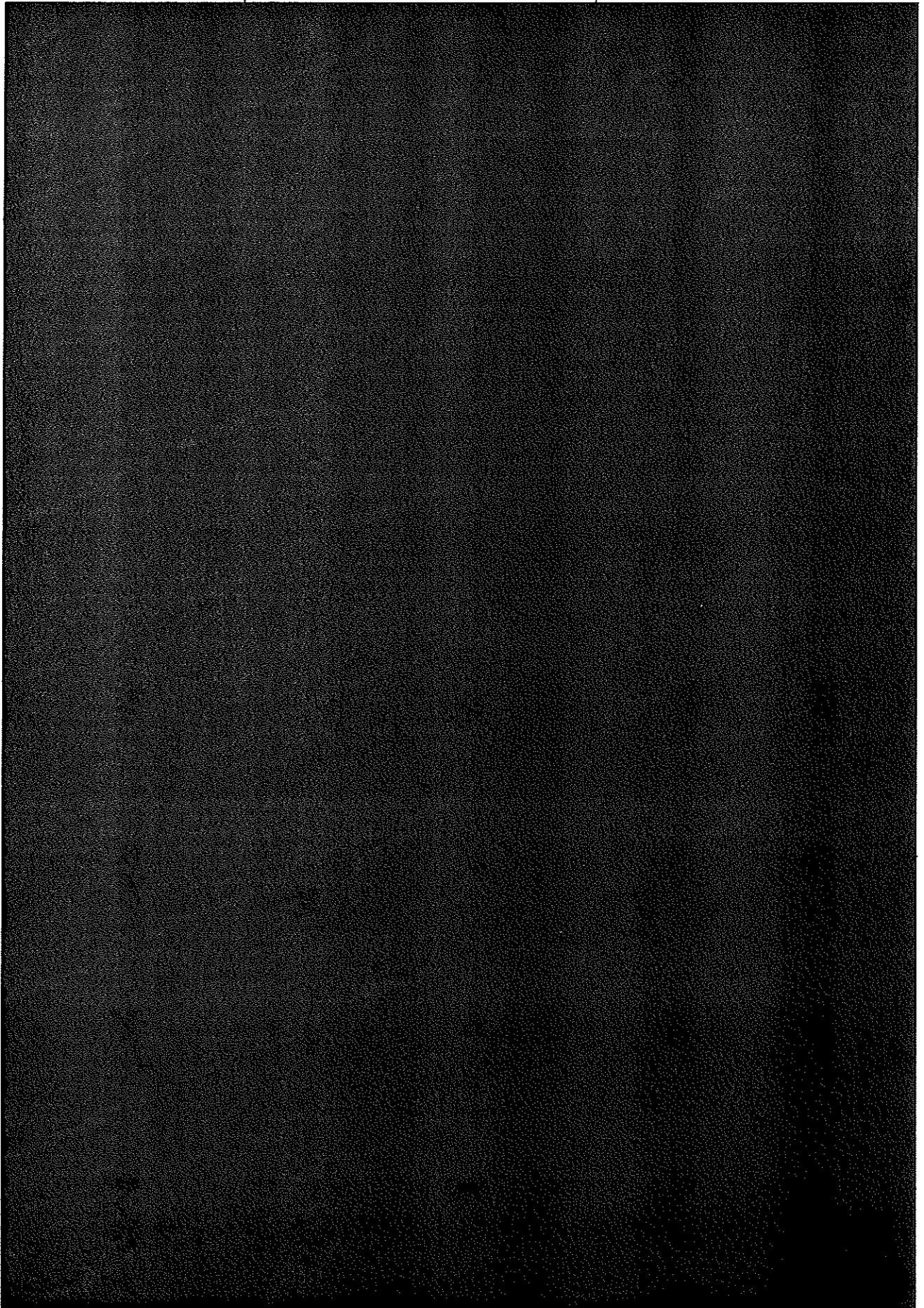
6. U.S. Competitiveness

The Contractor agrees that any products embodying any elected subject invention or produced through the use of any elected subject invention will be manufactured

substantially in the United States for any use or sale in the United States, unless the Contractor can show to the satisfaction of DOE that it is not commercially feasible to do so. In the event DOE agrees to foreign manufacture for U.S. use or sales, 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 further agrees to make the above condition binding on any assignee or licensee of, or any entity acquiring rights to, any elected subject invention, including subsequent owners of Contractor acquiring a controlling interest, and including subsequent assignees and licensees.







ATTACHMENT 4:
FEDERAL FINANCIAL ASSISTANCE
REPORTING CHECKLIST AND INSTRUCTIONS

1. Identification Number: DE-AR0000044		2. Program/Project Title: LOW CONTACT DRILLING TECHNOLOGY TO ENABLE ECONOMICAL EGS WELLS		
3. Recipient: FORO ENERGY, INCORPORATED				
4. Reporting Requirements:		Frequency	No. of Copies	Addressees
A. MANAGEMENT REPORTING				
<input checked="" type="checkbox"/> Progress Report		Q	1	ARPA-E-reporting@hq.doe.gov
<input checked="" type="checkbox"/> Special Status Report		A	1	ARPA-E-reporting@hq.doe.gov
B. SCIENTIFIC/TECHNICAL REPORTING (Reports/Products must be submitted with appropriate DOE F 241. The 241 forms are available at www.osti.gov/eflink .)				
<input checked="" type="checkbox"/> Final Scientific/Technical Report	Form DOE F 241.3			
<input checked="" type="checkbox"/> Conference papers/proceedings*	DOE F 241.3	F		http://www.osti.gov/eflink-2413
<input checked="" type="checkbox"/> Software/Manual	DOE F 241.4	Y		http://www.osti.gov/eflink-2413
<input type="checkbox"/> Other (see Special Instructions)	DOE F 241.3	Y		http://www.osti.gov/eflink-2413
* Scientific and technical conferences only				4pre.jsp
C. FINANCIAL REPORTING				
<input checked="" type="checkbox"/> SF-425 Federal Financial Report		Q	1	ARPA-E-reporting@hq.doe.gov
D. CLOSEOUT REPORTING				
<input checked="" type="checkbox"/> Patent Certification		F	1	ARPA-E-reporting@hq.doe.gov
<input checked="" type="checkbox"/> Property Certification		F	1	ARPA-E-reporting@hq.doe.gov
<input type="checkbox"/> Other				
E. OTHER REPORTING				
<input checked="" type="checkbox"/> Annual Indirect Cost Proposal		Y	1	ARPA-E-reporting@hq.doe.gov
<input checked="" type="checkbox"/> Annual Inventory of Federally Owned Property, if any		Y	1	ARPA-E-reporting@hq.doe.gov
<input type="checkbox"/> Other				
F. AMERICAN RECOVERY AND REINVESTMENT ACT REPORTING				
<input checked="" type="checkbox"/> Reporting and Registration Requirements		D		http://www.federalreporting.gov
<p>FREQUENCY CODES AND DUE DATES:</p> <ul style="list-style-type: none"> A - Within 5 calendar days after events or as specified. F - Final; 90 calendar days after expiration or termination of the award. Y - Yearly; 90 days after the end of the reporting period. S - Semiannually; within 30 days after end of reporting period. Q - Quarterly; within 30 days after end of the reporting period. D - Quarterly; within 10 days after end of the reporting period plus by day 22 reviewed subrecipient entries. See OMB guidance at Department of Energy - OMB Reporting Help. 				

5. ARPA-E Special Instructions:

Within 30 days of award you must:

- A. Register on FederalReporting.gov
- B. Provide a Resource Loaded Schedule to Level 3, which includes milestones, activities descriptions, start and finish dates, duration of activities, and costs.

Federal Assistance Reporting Instructions (9/09)**A. MANAGEMENT REPORTING****Progress Report**

The Progress Report must provide a concise narrative assessment of the status of work and include the following information and any other information identified under Special Instructions on the Federal Assistance Reporting Checklist:

1. The DOE award number and name of the recipient.
2. The project title and name of the project director/principal investigator.
3. Date of report and period covered by the report.
4. A comparison of the actual accomplishments with the goals and objectives established for the period and reasons why the established goals were not met, if they were not.
5. A discussion of what was accomplished under these goals during this reporting period, including major activities, significant results, major findings or conclusions, key outcomes or other achievements. This section should contain sufficient information to document progress and completion of the milestones, and may be marked as protected data.
6. Cost Status. Show approved budget by budget period, actual costs incurred, and cumulative cost to date. If cost sharing is required break out by DOE share, recipient share, and total costs.
7. Schedule Status. List milestones, anticipated start and completion dates and actual start and completion dates. If you submitted a project management plan with your application, you must use this plan to report schedule and budget variance. You may use your own project management system to provide this information. You must provide percent complete for each milestone provided.
8. Any changes in approach or aims and reasons for change. Remember significant changes to the objectives and scope require prior approval by the contracting officer.
9. Actual or anticipated problems or delays and actions taken or planned to resolve them.
10. Any absence or changes of key personnel or changes in consortium/teaming

arrangement.

11. A description of any product produced or technology transfer activities accomplished during this reporting period, such as:
 - A. Publications (list journal name, volume, issue); conference papers; or other public releases of results. Attach or send copies of public releases to the DOE Program Manager identified in Block 15 of the Assistance Agreement Cover Page.
 - B. Web site or other Internet sites that reflect the results of this project.
 - C. Networks or collaborations fostered.
 - D. Technologies/Techniques.
 - E. Inventions/Patent Applications
 - F. Other products, such as data or databases, physical collections, audio or video, software or netware, models, educational aid or curricula, instruments or equipment.
12. You positively affirm you are in compliance with the "Performance of Work in the United States" provision found in the Special Terms and Conditions of this agreement (Attachment 1, provision no. 22).

Special Status Report

The recipient must report the following events by e-mail as soon as possible after they occur:

1. Developments that have a significant favorable impact on the project.
2. Problems, delays, or adverse conditions which materially impair the recipient's ability to meet the objectives of the award or which may require DOE to respond to questions relating to such events from the public. The recipient must report any of the following incidents and include the anticipated impact and remedial action to be taken to correct or resolve the problem/condition:
 - a. Any single fatality or injuries requiring hospitalization of two or more individuals.
 - b. Any significant environmental permit violation.
 - c. Any verbal or written Notice of Violation of any Environmental, Safety,

and Health statutes.

- d. Any incident which causes a significant process or hazard control system failure.
- e. Any event which is anticipated to cause a significant schedule slippage or cost increase.
- f. Any damage to Government-owned equipment in excess of \$50,000.
- g. Any other incident that has the potential for high visibility in the media.

B. SCIENTIFIC/TECHNICAL REPORTS

Final Scientific/Technical Report

Content. The final scientific/technical report must include the following information and any other information identified under Special Instructions on the Federal Assistance Reporting Checklist:

1. Identify the DOE award number; name of recipient; project title; name of project director/principal investigator; and consortium/teaming members.
2. Display prominently on the cover of the report any authorized distribution limitation notices, such as patentable material or protected data. Reports delivered without such notices may be deemed to have been furnished with unlimited rights, and the Government assumes no liability for the disclosure, use or reproduction of such reports.
3. Provide an executive summary, which includes a discussion of 1) how the research adds to the understanding of the area investigated; 2) the technical effectiveness and economic feasibility of the methods or techniques investigated or demonstrated; or 3) how the project is otherwise of benefit to the public. The discussion should be a minimum of one paragraph and written in terms understandable by an educated layman.
4. Provide a comparison of the actual accomplishments with the goals and objectives of the project.
5. Summarize project activities for the entire period of funding, including original hypotheses, approaches used, problems encountered and departure from planned methodology, and an assessment of their impact on the project results. Include, if applicable, facts, figures, analyses, and assumptions used during the life of the project to support the conclusions.

6. Identify products developed under the award and technology transfer activities, such as:
 - a. Publications (list journal name, volume, issue), conference papers, or other public releases of results. If not provided previously, attach or send copies of any public releases to the DOE Program Manager identified in Block 15 of the Assistance Agreement Cover Page;
 - b. Web site or other Internet sites that reflect the results of this project;
 - c. Networks or collaborations fostered;
 - d. Technologies/Techniques;
 - e. Inventions/Patent Applications, licensing agreements; and
 - f. Other products, such as data or databases, physical collections, audio or video, software or netware, models, educational aid or curricula, instruments or equipment.
7. For projects involving computer modeling, provide the following information with the final report:
 - a. Model description, key assumptions, version, source and intended use;
 - b. Performance criteria for the model related to the intended use;
 - c. Test results to demonstrate the model performance criteria were met (e.g., code verification/validation, sensitivity analyses, history matching with lab or field data, as appropriate);
 - d. Theory behind the model, expressed in non-mathematical terms;
 - e. Mathematics to be used, including formulas and calculation methods;
 - f. Whether or not the theory and mathematical algorithms were peer reviewed, and, if so, include a summary of theoretical strengths and weaknesses;
 - g. Hardware requirements; and
 - h. Documentation (e.g., users guide, model code).

Electronic Submission. The final scientific/technical report must be submitted electronically-via the DOE Energy Link System (E-Link) accessed at <http://www.osti.gov/mlink-2413>.

Electronic Format. Reports must be submitted in the ADOBE PORTABLE DOCUMENT FORMAT (PDF) and be one integrated PDF file that contains all text, tables, diagrams, photographs, schematic, graphs, and charts. Materials, such as prints, videos, and books, that are essential to the report but cannot be submitted electronically, should be sent to the Contracting Officer at the address listed in Block 16 of the Assistance Agreement Cover Page.

Submittal Form. The report must be accompanied by a completed electronic version of DOE Form 241.3, "U.S. Department of Energy (DOE), Announcement of Scientific and Technical Information (STI)." You can complete, upload, and submit the DOE F.241.3 online via E-Link. You are encouraged not to submit patentable material or protected data in these reports, but if there is such material or data in the report, you must: (1) clearly identify patentable or protected data on each page of the report; (2) identify such material on the cover of the report; and (3) mark the appropriate block in Section K of the DOE F 241.3. Reports must not contain any limited rights data (proprietary data), classified information, information subject to export control classification, or other information not subject to release. Protected data is specific technical data, first produced in the performance of the award that is protected from public release for a period of time by the terms of the award agreement.

Conference Papers/Proceedings

Content: The recipient must submit a copy of any conference papers/proceedings, with the following information: (1) Name of conference; (2) Location of conference; (3) Date of conference; and (4) Conference sponsor.

Electronic Submission. Scientific/technical conference paper/proceedings must be submitted electronically via the DOE Energy Link System (E-Link) at <http://www.osti.gov/mlink-2413>. Non-scientific/technical conference papers/proceedings must be sent to the URL listed on the Reporting Checklist.

Electronic Format. Conference papers/proceedings must be submitted in the ADOBE PORTABLE DOCUMENT FORMAT (PDF) and be one integrated PDF file that contains all text, tables, diagrams, photographs, schematic, graphs, and charts. If the proceedings cannot be submitted electronically, they should be sent to the DOE Administrator at the address listed in Block 16 of the Assistance Agreement Cover Page.

Submittal Form. Scientific/technical conference papers/proceedings must be accompanied by a completed DOE Form 241.3. The form and instructions are available on E-Link at <http://www.osti.gov/mlink-2413>. This form is not required for non-scientific or non-technical conference papers or proceedings.

Software/Manual

Content. Unless otherwise specified in the award, the following must be delivered: source code, the executable object code and the minimum support documentation needed by a competent user to understand and use the software and to be able to modify the software in subsequent development efforts.

Electronic Submission. Submissions may be submitted electronically-via the DOE Energy Link System (E-Link) at <http://www.osti.gov/estsc/241-4pre.jsp>. They may also be submitted via regular mail to:

Energy Science and Technology Software Center
P.O. Box 1020
Oak Ridge, TN 37831

Submittal Form. Each software deliverable and its manual must be accompanied by a completed DOE Form 241.4 "Announcement of U.S. Department of Energy Computer Software." The form and instructions are available on E-Link at <http://www.osti.gov/estsc/241-4pre.jsp>.

Protected Personally Identifiable Information (PII). Management Reports or Scientific/Technical Reports must not contain any *Protected* PII. PII is any information about an individual which can be used to distinguish or trace an individual's identity. Some information that is considered to be PII is available in public sources such as telephone books, public websites, university listings, etc. This type of information is considered to be Public PII and includes, for example, first and last name, address, work telephone number, e-mail address, home telephone number, and general educational credentials. In contrast, *Protected* PII is defined as an individual's first name or first initial and last name in combination with any one or more of types of information, including, but not limited to, social security number, passport number, credit card numbers, clearances, bank numbers, biometrics, date and place of birth, mother's maiden name, criminal, medical and financial records, educational transcripts, etc.

C. FINANCIAL REPORTING

Recipients must complete the SF-425 as identified on the Reporting Checklist in accordance with the report instructions. A fillable version of the form is available at http://www.whitehouse.gov/omb/grants/grants_forms.aspx.

D. CLOSEOUT REPORTS

Final Invention and Patent Report

The recipient must provide a DOE Form 2050.11, "PATENT CERTIFICATION." This form is available at <http://www.directives.doe.gov/pdfs/forms/2050-11.pdf> and <http://grants.pr.doe.gov>.

Property Certification

The recipient must provide the Property Certification, including the required inventories of non-exempt property, located at <http://grants.pr.doe.gov>.

E. OTHER REPORTING

Annual Indirect Cost Proposal and Reconciliation

Requirement. In accordance with the applicable cost principles, the recipient must submit an annual indirect cost proposal, reconciled to its financial statements, within six months after the close of the fiscal year, unless the award is based on a predetermined or fixed indirect rate(s), or a fixed amount for indirect or facilities and administration (F&A) costs. (aren't we using fixed rates, and costs are indexed for inflation?)

Cognizant Agency. The recipient must submit its annual indirect cost proposal directly to the cognizant agency for negotiating and approving indirect costs. If the DOE awarding office is the cognizant agency, submit the annual indirect cost proposal to the DOE Administrator at the address listed in Block 16 of the Assistance Agreement Cover Page.

Annual Inventory of Federally Owned Property

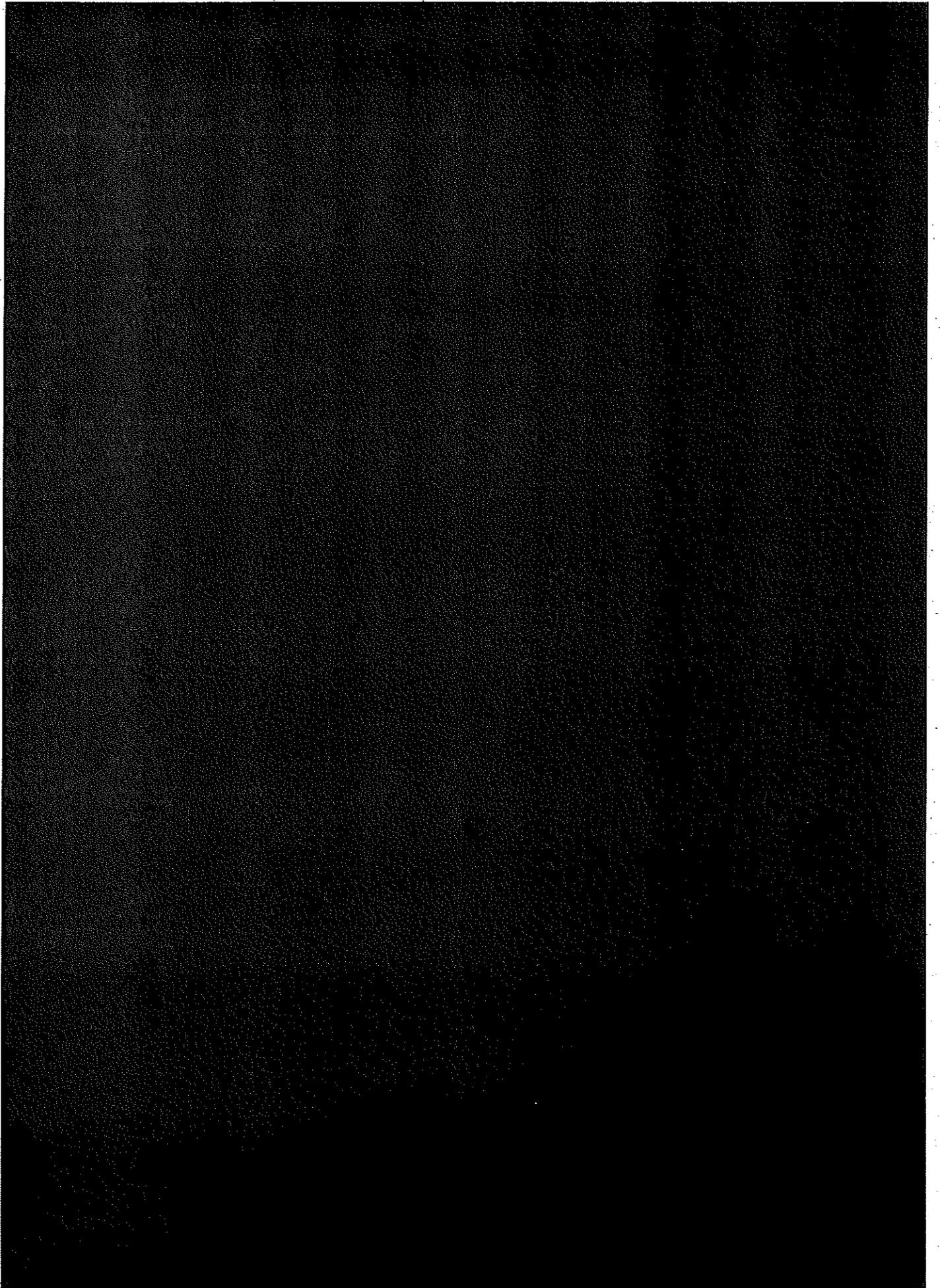
Requirement. If at any time during the award the recipient is provided Government-furnished property or acquires property with project funds and the award specifies that the property vests in the Federal Government (i.e. federally owned property), the recipient must submit an annual inventory of this property to the DOE Administrator at the address listed in Block 16 of the Assistance Agreement Cover Page no later than October 30th of each calendar year, to cover an annual reporting period ending on the preceding September 30th. (is the expectation that we will retain title to equipment purchased with ARPA-E funds, and if so, what is the threshold e.g. - \$10k and above?)

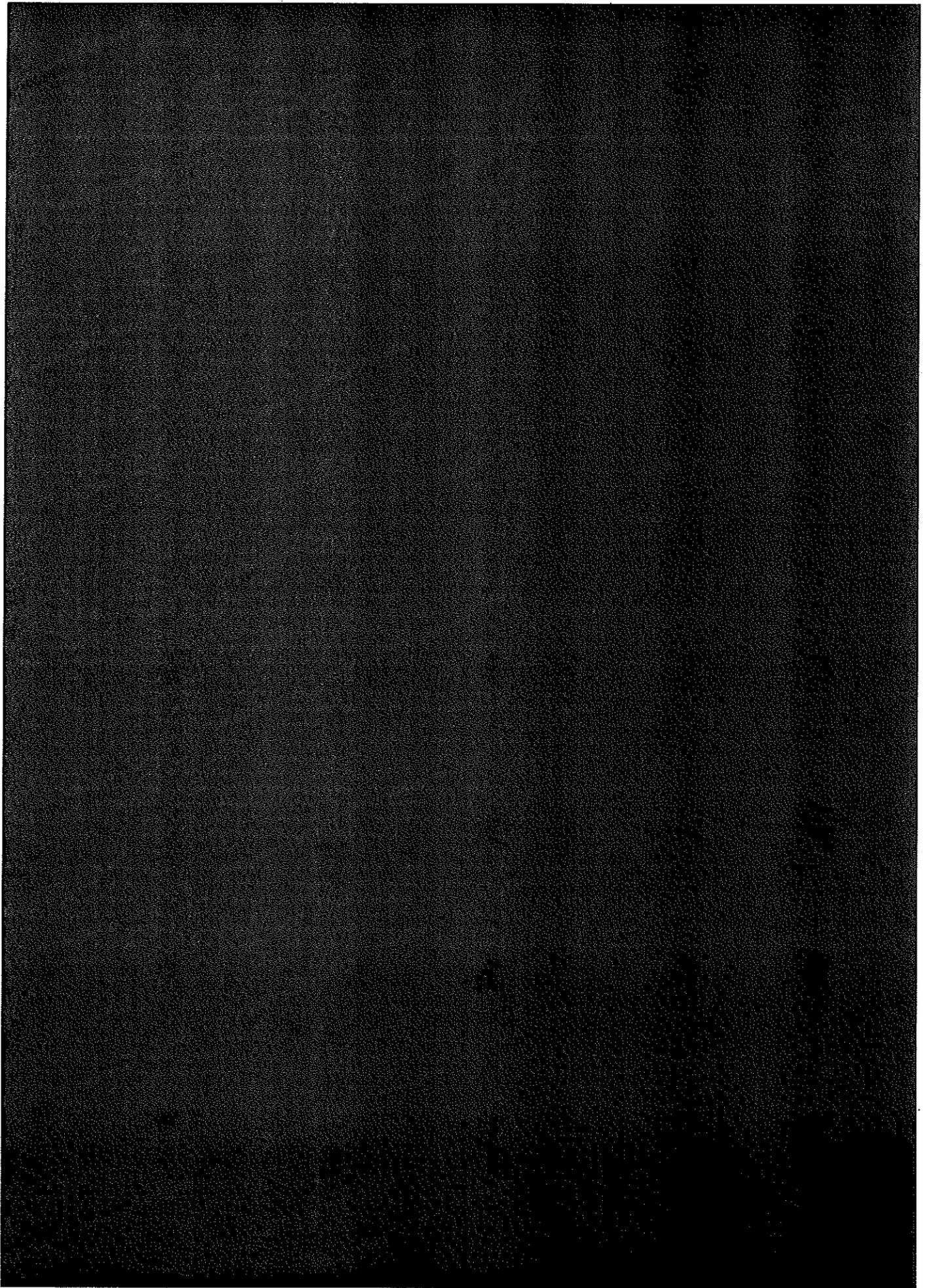
Content of Inventory. The inventory must include a description of the property, tag number, acquisition date, location of property, and acquisition cost, if purchased with project funds. The report must list all federally owned property, including property located at subcontractor's facilities or other locations.

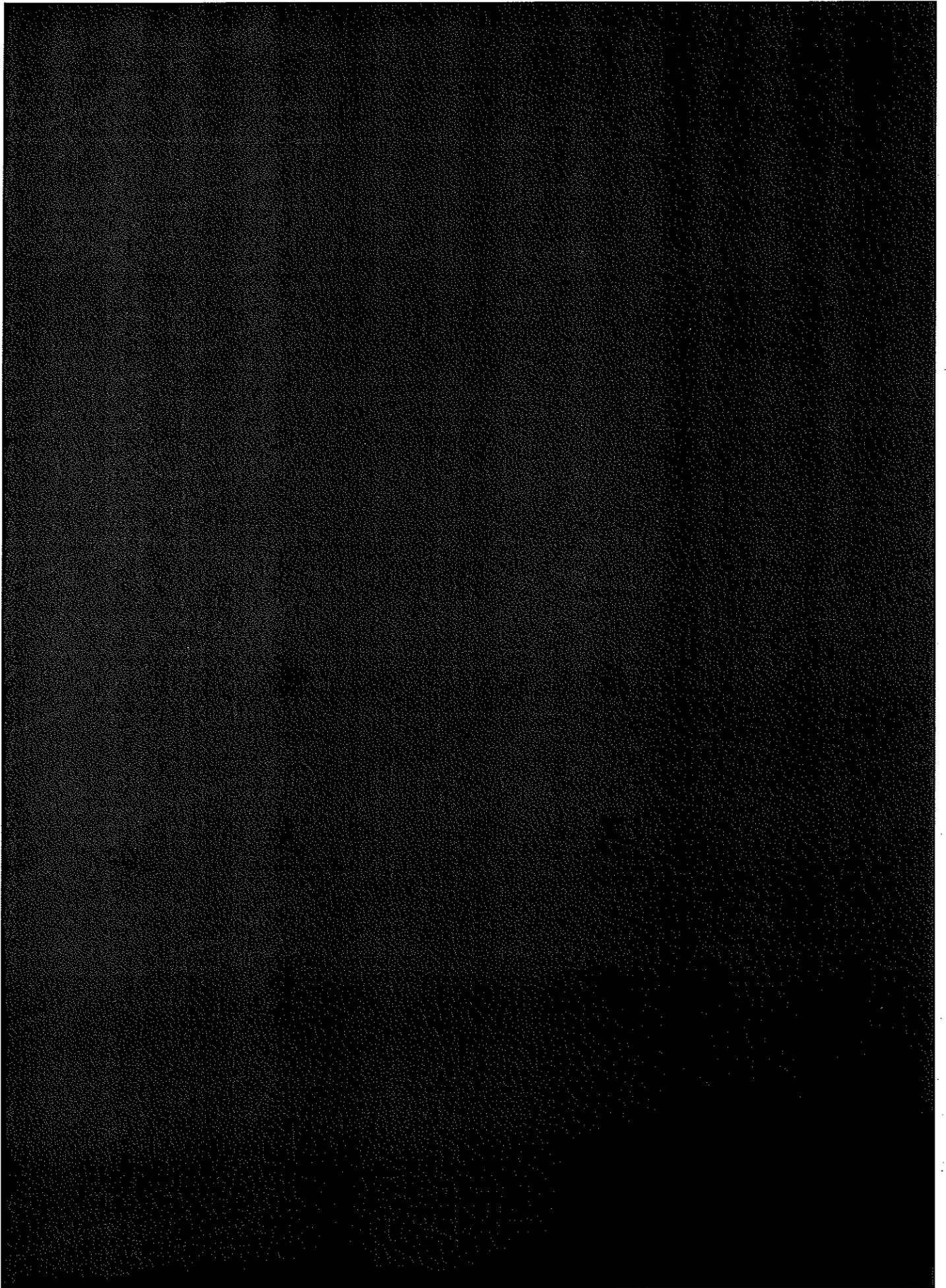
F. AMERICAN RECOVERY AND REINVESTMENT ACT REPORTING

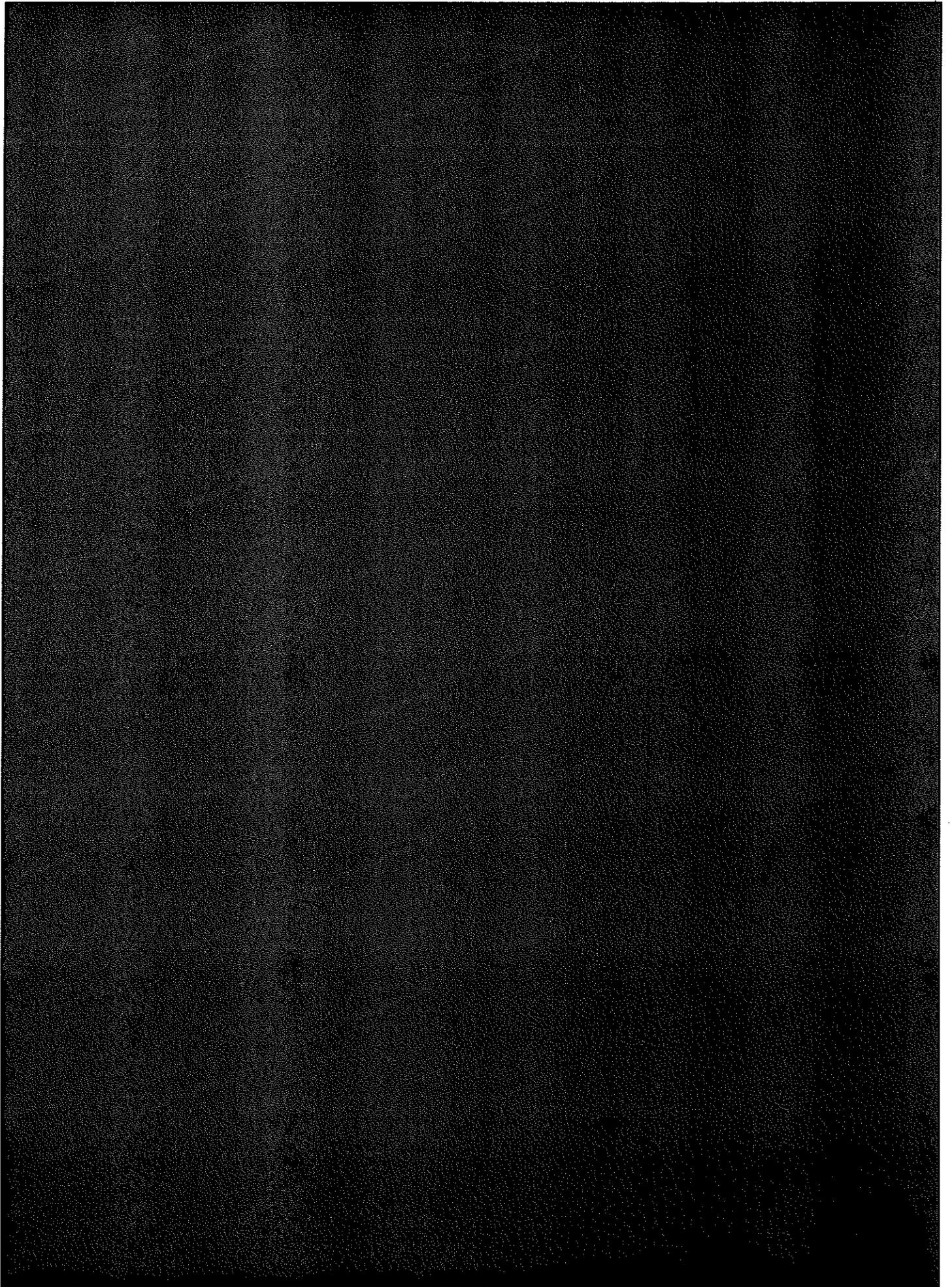
See Special Award Term entitled Reporting and Registration Requirement under Section 1512 of the Recovery Act. The reports are due no later than ten calendar days after each calendar quarter in which the recipient receives the assistance award funded in whole or in part by the Recovery Act. Jobs not reported in FederalReporting.gov must be reported to ARPA-E, including: prime and sub-contractor actual jobs numbers for all Recovery-funded projects, including those financed from Power Marketing Administration (PMA) borrowing authority. Current FAR guidance states that prime contractors are not to report sub-contractor created jobs.

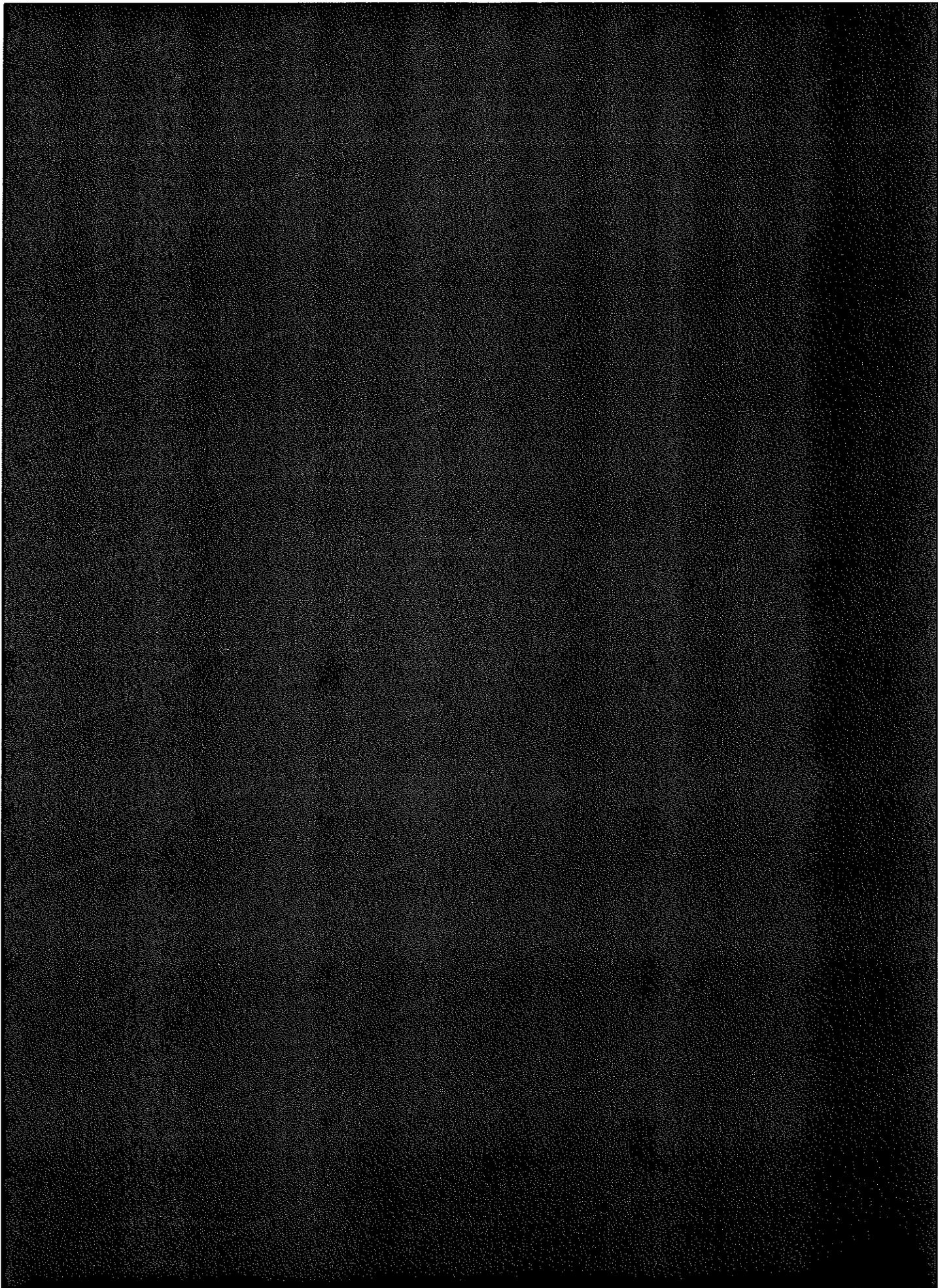
Any jobs created from leveraging the private sector, including all loans subsidies issued by the Loan Guarantee Program Office. Such data should include the impact of the entire project including on projects where Federal funds leverage private investment through cost-share, loan guarantees, or other matching equities. Additional information on complying with this requirement can be found at [Department of Energy - OMB Reporting Help](#).

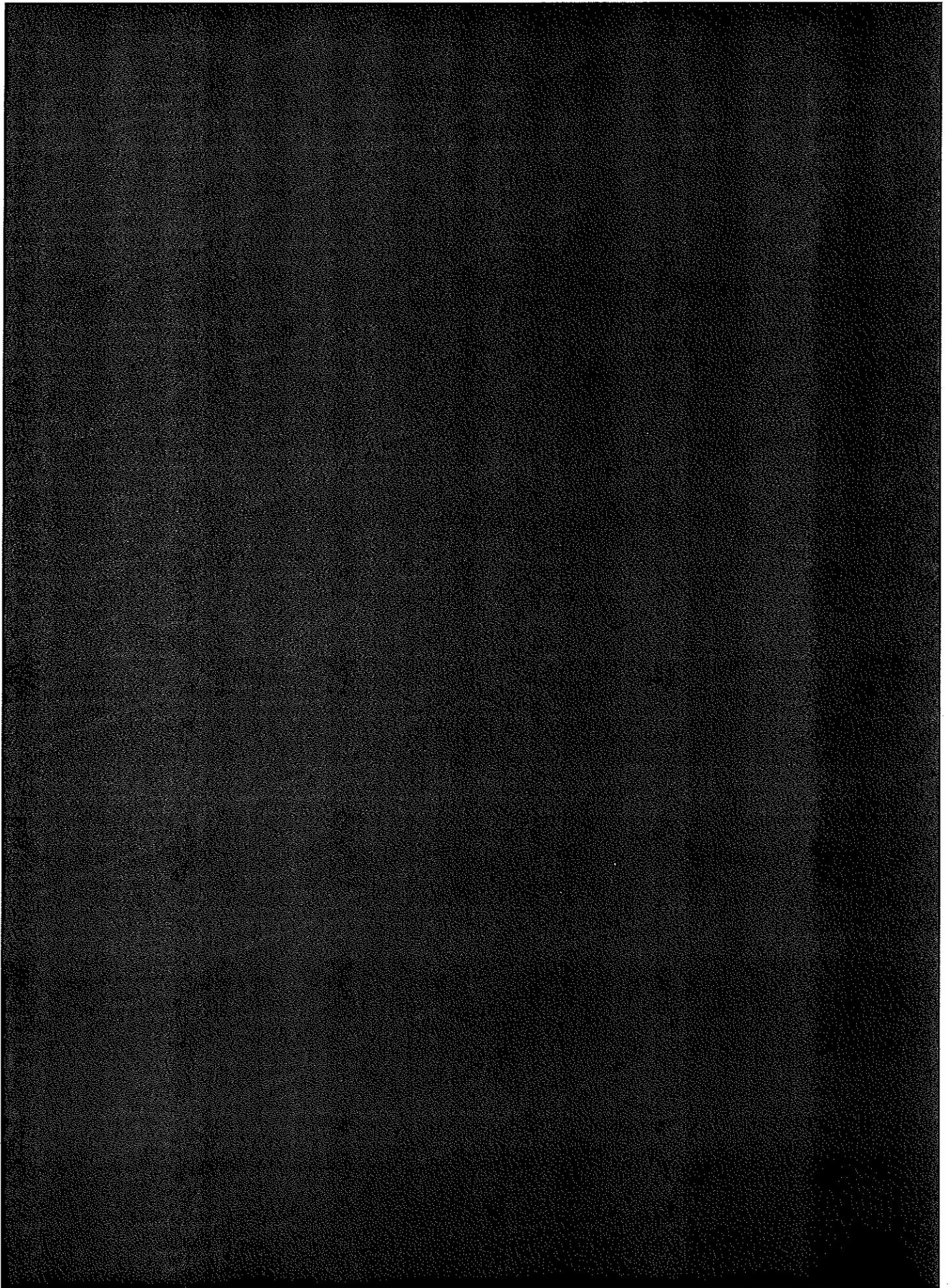


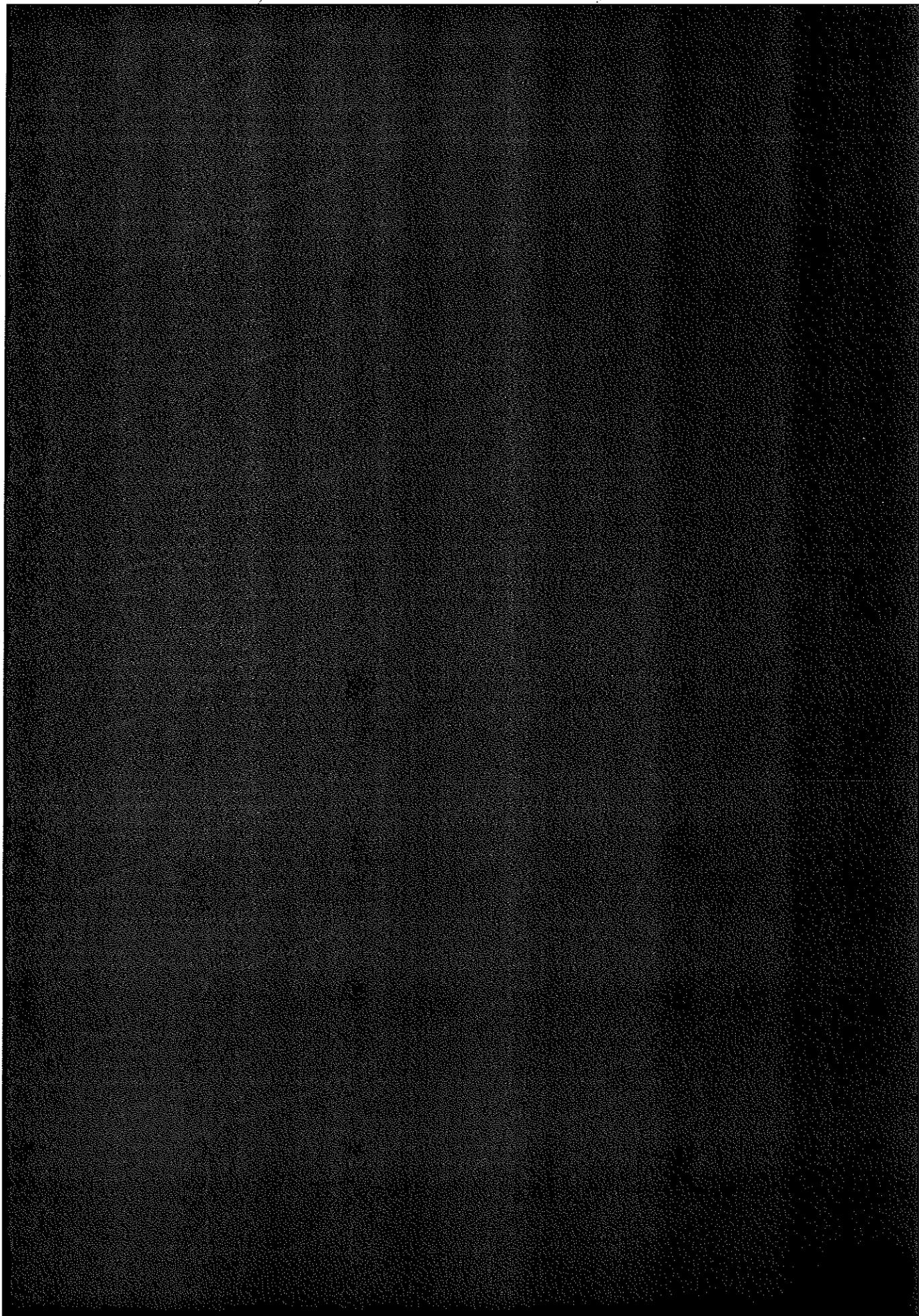


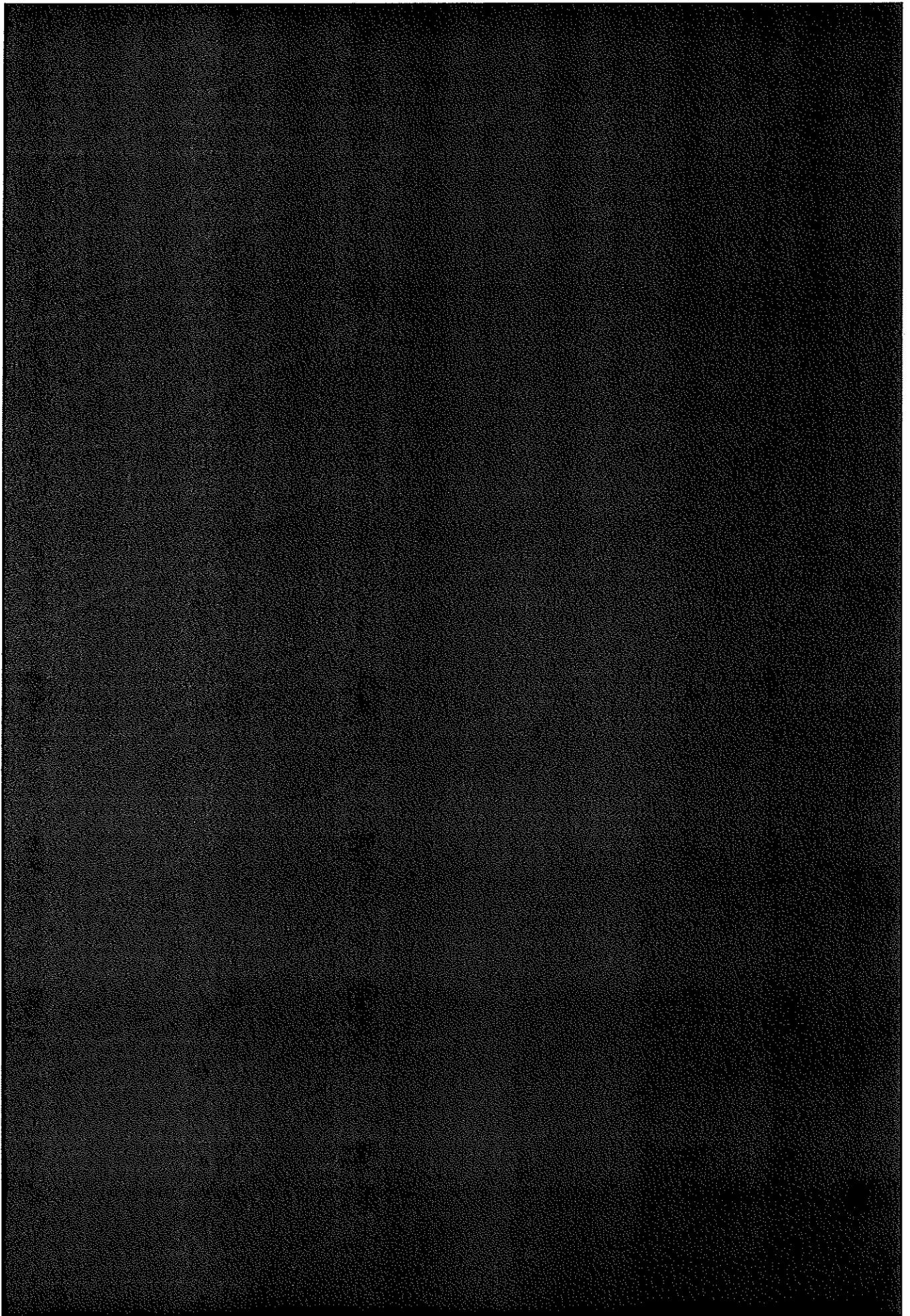












APPENDIX A:
NATIONAL POLICY ASSURANCES TO BE INCORPORATED AS AWARD
TERMS FOR FUNDING OPPORTUNITY ANNOUNCEMENT DE-FOA-0000065
(as of 10/29)¹

To the extent that a term does not apply to a particular type of activity or award, it is self-deleting.

I. Nondiscrimination Policies

You must comply with applicable provisions of the following national policies prohibiting discrimination:

- 1 On the basis of race, color, or national origin, in Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.), as implemented by DOE regulations at 10 CFR part 1040;
- 2 On the basis of sex or blindness, in Title IX of the Education Amendments of 1972 (20 U.S.C. 1681 et seq.), as implemented by DOE regulations at 10 CFR parts 1041 and 1042;
- 3 On the basis of age, in the Age Discrimination Act of 1975 (42 U.S.C. 6101 et seq.), as implemented by Department of Health and Human Services regulations at 45 CFR part 90 and DOE regulations at 10 CFR part 1040;
- 4 On the basis of disability, in Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), as implemented by Department of Justice regulations at 28 CFR part 41 and DOE regulations at 10 CFR part 1041;
- 5 On the basis of race, color, national origin, religion, disability, familial status, and sex under Title VIII of the Civil Rights Act (42 U.S.C. 3601 et seq.) as implemented by the Department of Housing and Urban Development at 24 CFR part 100; and
- 6 On the basis of disability in the Architectural Barriers Act of 1968(42 U.S.C. 4151 et seq.) for the design, construction, and alteration of buildings and facilities financed with Federal funds.

II. Environmental Policies

You must:

- 1 Comply with applicable provisions of the Clean Air Act (42 U.S.C. 7401, et. seq.) and Clean Water Act (33 U.S.C. 1251, et. seq.), as implemented by Executive Order 11738 [3 CFR, 1971-1975 Comp., p. 799] and Environmental Protection Agency rules at 40 CFR part 32, Subpart J.
- 2 Immediately identify to us, as the awarding agency, any potential impact that you find this award may have on:

¹ see http://management.energy.gov/business_doe/1374.htm for the most recent version

- a. The quality of the human environment, including wetlands, and provide any help we may need to comply with the National Environmental Policy Act (NEPA, at 42 U.S.C. 4321 et. seq.) and assist us to prepare Environmental Impact Statements or other environmental documentation. In such cases, you may take no action that will have an adverse environmental impact (e.g., physical disturbance of a site such as breaking of ground) or limit the choice of reasonable alternatives until we provide written notification of Federal compliance with NEPA, as implemented by DOE at 10 CFR part 1021.
- b. Flood-prone areas, and provide any help we may need to comply with the National Flood Insurance Act of 1968 and Flood Disaster Protection Act of 1973 (42 U.S.C. 4001 et. seq.), which require flood insurance, when available, for Federally assisted construction or acquisition in flood-prone areas, as implemented by DOE at 10 CFR part 1022.
- c. Use of land and water resources of coastal zones, and provide any help we may need to comply with the Coastal Zone Management Act of 1972(16 U.S.C. 1451, et. seq.).
- d. Coastal barriers along the Atlantic and Gulf coasts and Great Lakes' shores, and provide help we may need to comply with the Coastal Barriers Resource Act (16 U.S.C. 3501 et. seq.), concerning preservation of barrier resources.
- e. Any existing or proposed component of the National Wild and Scenic Rivers system, and provide any help we may need to comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271 et seq.).
- f. Underground sources of drinking water in areas that have an aquifer that is the sole or principal drinking water source, and provide any help we may need to comply with the Safe Drinking Water Act(42 U.S.C. 300h-3).

3 Comply with applicable provisions of the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4821-4846), as implemented by the Department of Housing and Urban Development at 24 CFR part 35. The requirements concern lead-based paint in housing owned by the Federal Government or receiving Federal assistance.

4 Comply with section 6002 of the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6962), and implementing regulations of the Environmental Protection Agency, 40 CFR Part 247, which require the purchase of recycled products by States or political subdivision of States.

III. Live Organisms

1 **Human research subjects.** You must protect the rights and welfare of individuals that participate as human subjects in research under this award in accordance with the Common Federal Policy for the Protection of Human Subjects (45 CFR part 46), as implemented by DOE at 10 CFR part 745.

2 **Animals and plants.**

a. You must comply with applicable provisions of Department of Agriculture rules at 9 CFR parts 1-4 that implement the Laboratory Animal Welfare Act of 1966 (7 U.S.C. 2131-2156)

and provide for humane transportation, handling, care, and treatment of animals used in research, experimentation, or testing under this award.

b. You must follow the guidelines in the National Academy of Sciences(NAS) Publication "Guide for the Care and Use of Laboratory Animals"(1996, which may be found currently at <http://www.nap.edu/readingroom/books/labrats/>) and comply with the Public Health Service Policy and Government principles Regarding the Care and use of animals (included as Appendix D to the NAS Guide).

c. You must immediately identify to us, as the awarding agency, any potential impact that you find this award may have on endangered species, as defined by the Endangered Species Act of 1973, as amended ("the Act," 16 U.S.C. 1531-1543), and implementing regulations of the Departments of the Interior (50 CFR parts 10-24) and Commerce (50 CFR parts 217-227). You also must provide any help we may need to comply with 16 U.S.C. 1536(a)(2). This is not in lieu of responsibilities you have to comply with provisions of the Act that apply directly to you as a U.S. entity, independent of receiving this award.

IV. Other National Policies

1 **Debarment and suspension.** You must comply with requirements regarding debarment and suspension in Subpart C of 2 CFR parts 180 and 901.

2 **Drug-free workplace.** You must comply with drug-free workplace requirements in Subpart B of 10 CFR part 607, which implements sec. 5151-5160 of the Drug-Free Workplace Act of 1988 (Pub. L. 100-690, Title V, Subtitle D; 41 U.S.C. 701, et seq.).

3 **Lobbying.**

a. You must comply with the restrictions on lobbying in 31 U.S.C.1352, as implemented by DOE at 10 CFR part 601, and submit all disclosures required by that statute and regulation.

b. If you are a nonprofit organization described in section 501(c)(4)of title 26, United States Code (the Internal Revenue Code of 1968),you may not engage in lobbying activities as defined in the Lobbying Disclosure Act of 1995 (2 U.S.C., Chapter 26). If we determine that you have engaged in lobbying activities, we will cease all payments to you under this and other awards and terminate the awards unilaterally for material failure to comply with the award terms and conditions. By submitting an application and accepting funds under this agreement, you assure that you are not an organization described in section 501(c)(4) that has engaged in any lobbying activities described in the Lobbying Disclosure Act of 1995 (2 U.S.C. 1611).

c. You must comply with the prohibition in 18 U.S.C. 1913 on the use of Federal funds, absent express Congressional authorization, to pay directly or indirectly for any service, advertisement or other written matter, telephone communication, or other device intended to influence at any time a Member of Congress or official of any government concerning any legislation, law, policy, appropriation, or ratification.

4 Officials not to benefit. You must comply with the requirement that no member of Congress shall be admitted to any share or part of this agreement, or to any benefit arising from it, in accordance with 41U.S.C. 22.

5 Hatch Act. If applicable, you must comply with the provisions of the Hatch Act (5 U.S.C. 1501-1508 and 7324-7326), as implemented by the Office of Personnel Management at 5 CFR part 151, which limits political activity of employees or officers of State or local governments whose employment is connected to an activity financed in whole or part with Federal funds.

6 Native American graves protection and repatriation. If you control or possess Native American remains and associated funerary objects, you must comply with the requirements of 43 CFR part 10, the Department of the Interior implementation of the Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C., chapter 32).

7 Fly America Act. You must comply with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 40118), commonly referred to as the "Fly America Act," and implementing regulations at 41 CFR 301-10.131 through 301-10.143. The law and regulations require air transport of people or property to, from, between or within a country other than the United States, the cost of which is supported under this award, to be performed by or under a cost-sharing arrangement with a U.S. flag carrier, if service is available.

8 Use of United States-flag vessels.

a. Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)), at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds under this award, and which may be transported by ocean vessel, must be transported on privately owned United States-flag commercial vessels, if available.

b. Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph 9.a of this section shall be furnished to both our award administrator (through you in the case of your contractor's bill-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

9 Research misconduct. You must comply with the government-wide policy on research misconduct issued by the Office of Science and Technology Policy (available in the Federal Register at 65 FR 76260, December 6, 2000, or on the Internet at www.ostp.gov), as implemented by DOE at 10 CFR part 733 and 10 CFR 600.31.

10 Requirements for an Institution of Higher Education Concerning Military recruiters and Reserve Officers Training Corps (ROTC).

a. As a condition for receiving funds under an award by the National Nuclear Security Administration of the Department of Energy, you agree that you are not an institution of

higher education that has a policy or practice placing any of the restrictions specified in 10 U.S.C. 983, as implemented by 32 CFR part 216, on:

- i. Maintenance, establishment, or operation of Senior ROTC units, or student participation in those units; or
- ii. Military recruiters' access to campuses, students on campuses, or information about students.

b. If you are determined, using the procedures in 32 CFR part 216, to be such an institution of higher education during the period of performance of this award, we:

- i. Will cease all payments to you of funds under this award and all other awards subject to the requirements in 32 CFR part 216; and
- ii. May suspend or terminate those awards unilaterally for material failure to comply with the award terms and conditions.

11. Historic preservation. You must identify to us any:

a. Any property listed or eligible for listing on the National Register of Historic Places that will be affected by this award, and provide any help we may need, with respect to this award, to comply with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as implemented by the Advisory Council on Historic Preservation regulations at 36 CFR part 800 and Executive Order 11593, "Identification and Protection of Historic Properties," [3 CFR, 1971-1975 Comp., p. 559].

b. Potential under this award for irreparable loss or destruction of significant scientific, prehistorical, historical, or archeological data, and provide any help we may need, with respect to this award, to comply with the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1, et seq.).

12 Relocation and real property acquisition. You must comply with applicable provisions of 49 CFR part 24, which implements the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. 4601, et seq.) and provides for fair and equitable treatment of persons displaced by federally assisted programs or persons whose property is acquired as a result of such programs.

13 Confidentiality of patient records. You must keep confidential any records that you maintain of the identity, diagnosis, prognosis, or treatment of any patient in connection with any program or activity relating to substance abuse education, prevention, training, treatment, or rehabilitation that is assisted directly or indirectly under this award, in accordance with 42 U.S.C. 290dd-2.

14 Constitution Day. You must comply with Public Law 108-447, Div. J; Title I, Sec. 111 (36 U.S.C. 106 note), which requires each educational institution receiving Federal funds in a Federal fiscal year to hold an educational program on the United States Constitution on September 17th during that year for the students served by the educational institution.

15 Trafficking in Persons

- a. Provisions applicable to a recipient that is a private entity.

1. You as the recipient, your employees, subrecipients under this award, and subrecipients' employees may not—
 - i. Engage in severe forms of trafficking in persons during the period of time that the award is in effect;
 - ii. Procure a commercial sex act during the period of time that the award is in effect;
or
 - iii. Use forced labor in the performance of the award or subawards under the award.
2. We as the Federal awarding agency may unilaterally terminate this award, without penalty, if you or a subrecipient that is a private entity—
 - i. Is determined to have violated a prohibition in paragraph a.1 of this award term;
or
 - ii. Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph a.1 of this award term through conduct that is either—
 - A. Associated with performance under this award; or
 - B. Imputed to you or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 CFR part 901.
- b. Provision applicable to a recipient other than a private entity. We as the Federal awarding agency may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity—
 1. Is determined to have violated an applicable prohibition in paragraph a.1 of this award term; or
 2. Has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in paragraph a.1 of this award term through conduct that is either—
 - i. Associated with performance under this award; or
 - ii. Imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 CFR part 901.
- c. Provisions applicable to any recipient.

1. You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in paragraph a.1 of this award term.
 2. Our right to terminate unilaterally that is described in paragraph a.2 or b. of this section:
 - i. Implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and
 - ii. Is in addition to all other remedies for noncompliance that are available to us under this award.
 3. You must include the requirements of paragraph a.1 of this award term in any subaward you make to a private entity.
- d. Definitions. For purposes of this award term:
1. "Employee" means either:
 - i. An individual employed by you or a subrecipient who is engaged in the performance of the project or program under this award; or
 - ii. Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.
 2. "Forced labor" means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.
 3. "Private entity":
 - i. Means any entity other than a State, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25.
 - ii. Includes:
 - A. A nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR 175.25(b).
 - B. A for-profit organization.
 4. "Severe forms of trafficking in persons," "commercial sex act," and "coercion" have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. 7102).

V. National Policy Requirements for Subawards.

Recipient responsibility. You must include in any subaward you make under this award the requirements of the national policy requirements in Sections I through IV of this document that apply, based on the type of subawardee organization and situation.