

**U.S. NUCLEAR REGULATORY COMMISSION
NOTICE OF GRANT/ASSISTANCE AWARD**

1. GRANT/AGREEMENT NO. NRC-04-08-138	2. MODIFICATION NO.	3. PERIOD OF PERFORMANCE FROM: 09/05/08 TO: 09/04/13	4. AUTHORITY Pursuant to Section 31b and 141b of the Atomic Energy Act of 1954, as amended
5. TYPE OF AWARD <input type="checkbox"/> GRANT <input checked="" type="checkbox"/> COOPERATIVE AGREEMENT	6. ORGANIZATION TYPE Non-Profit/Education DUNS No. 053599908	7. RECIPIENT NAME AND ADDRESS OREGON STATE UNIVERSITY OREGON STATE UNIVERSITY CORVALLIS OR 973318507	

8. PROJECT TITLE:
"Basic Research on High Temperature Gas Reactor Thermal Hydraulics and Reactor Physics"

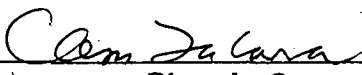
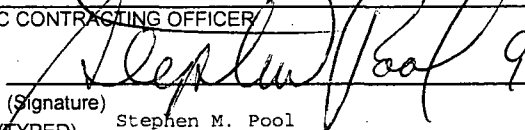
9. PROJECT WILL BE CONDUCTED PER GOVERNMENT'S/RECIPIENT'S PROPOSAL(S) DATED 04/01/08	10. TECHNICAL REPORTS ARE REQUIRED <input checked="" type="checkbox"/> PROGRESS AND FINAL <input type="checkbox"/> FINAL ONLY <input type="checkbox"/> OTHER (Conference Proceedings)	11. PRINCIPAL INVESTIGATOR(S) NAME AND ADDRESS Oregon State University Attn: Dr. Brian G. Woods 116 Radiation Center Corvallis, Oregon 97331-5902
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12. NRC PROGRAM OFFICE (NAME & ADDRESS) U.S. Nuclear Regulatory Commission Attn: Ms. Lauren Gibson Mail Stop T-K10K8 11545 Rockville Pike Rockville MD 20852	13. ACCOUNTING & APPROPRIATION DATA APPN. NO: 31X0200 B&R NO: 86015171277 JOB CODE: K6677 BOC NO: 252A OFFICE ID NO: RES-C08-161	14. METHOD OF PAYMENT <input type="checkbox"/> ADVANCE BY TREASURY CHECK <input type="checkbox"/> REIMBURSEMENT BY TREASURY CHECK <input type="checkbox"/> LETTER OF CREDIT <input checked="" type="checkbox"/> OTHER (SPECIFY) Dept of Treasury (See NRC Standard Terms and Conditions)
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15. NRC OBLIGATION FUNDS	16. TOTAL FUNDING AGREEMENT
THIS ACTION \$750,000.00	NRC \$6,615,886.00 This action provides funds for Fiscal Year in the amount of \$750,000.00
PREVIOUS OBLIGATION	RECIPIENT
TOTAL \$750,000.00	TOTAL \$6,615,886.00

17. NRC ISSUING OFFICE (NAME AND ADDRESS)

U.S. Nuclear Regulatory Commission
Div. of Contracts
Attn: Mr. Michael Mills
Mail Stop: TWB-01-B10M
Washington, DC 20555

18. RECIPIENT  (Signature) Clem LaCava NAME (TYPED) Assistant Contract Officer TITLE Office of Sponsored Programs TELEPHONE NO. 541-737-2373	19. NRC CONTRACTING OFFICER  (Signature) Stephen M. Pool NAME (TYPED) Contracting Officer TITLE Contracting Officer TELEPHONE NO. 301-492-3618
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20. PAYMENT INFORMATION

Payment will be made by: Automated Standard application for Payments (ASAP)

1. Attached is a copy of the "NRC Standard Terms and Conditions for U.S. nongovernmental Recipients.
Acceptance of these terms and conditions is acknowledged when Federal funds are used on this project.

2. ORDER OF PRECEDENCE

In the event of a conflict between the recipient's proposal and this award, the terms of the Award shall prevail.

3. By this award, the Recipient certifies that payment of any audit-related debt will not reduce the level of performance of any Federal Program

TEMPLATE - ADM001

SUNSI REVIEW COMPLETE

SEP 17 2008

ADM002

Because the proposed effort is for the award of a cooperative agreement, substantial involvement on the part of the Nuclear Regulatory Commission is contemplated during performance of the agreement. Government activity that may constitute "substantial involvement," can be found in the Office of Management and Budget (OMB), Implementation of the Federal Grant and Cooperative Agreement Act of 1977 (OMB Final Guidance) 43 Fed. Reg. 36,860, 36,863 (1978) and may include the following:

It is anticipated that RES will be involved in the following areas:

- I) Review and approval of key personnel;
- II) Review and approval of one stage of work before another can begin;
 - a. Applies to tasks 1, 3, and 4
 - b. NRC to review and approve
 - i. test section design
 - ii. instrumentation
 - iii. test matrix
 - iv. data format
- III) Agency and recipient collaboration or joint participation & Substantial, direct agency operational involvement or participation during the assisted activity.
 - a. Applies to all tasks
 - b. NRC activities in task 1
 - i. Participate in literature review
 - ii. Participate in developing and examining phenomena to determine which ones to investigate further
 - c. NRC activities in task 2
 - i. Participate in developing an instrumentation plan
 - ii. Participate in developing a test plan
 - d. NRC activities in task 3
 - i. Perform pre-test and post-test calculations with our codes to make sure the tests meet their objects and to find deficiencies in our codes
 - e. NRC activities in task 4
 - i. Perform pre-test and post-test calculations with our codes to make sure the tests meet their objects and to find deficiencies in our codes

The Nuclear Regulatory Commission's Standard Terms and Conditions for U.S. Nongovernmental Recipients

Preface

The Recipient and any sub-recipients must, in addition to the assurances made as part of the application, comply and require each of its sub-awardees employed in the completion of the project to comply with all applicable statutes, regulations, Executive Orders (EOs), Office of Management and Budget (OMB) circulars, terms and conditions, and approved applications.

This award is subject to the laws and regulations of the United States. Any inconsistency or conflict in terms and conditions specified in the award will be resolved according to the following order of precedence: public laws, regulations, applicable notices published in the Federal Register, EOs, OMB Circulars, the Nuclear Regulatory Commission's (NRC) Mandatory Standard Provisions, special award conditions, and standard award conditions.

Some of the NRC terms and conditions contain a summary of pertinent statutes, regulations, Code of Federal Regulations (CFR), EOs, OMB Circulars or assurances by reference or in full text. Although it is a summary, it does not diminish the full force and effect of such statute, regulation, EOs, or OMB Circulars.

I. Mandatory General Requirements

The order of these requirements does not make one requirement more important than any other requirement.

1. APPLICABILITY OF 2 CFR PART 215

a. All provisions of 2 CFR Part 215 and all Standard Provisions attached to this grant/cooperative agreement are applicable to the Recipient and to sub-recipients which meet the definition of "Recipient" in Part 215, unless a section specifically excludes a sub-recipient from coverage. The Recipient shall assure that sub-recipients have copies of all the attached standard provisions.

b. Recipients are required to ensure compliance with monitoring procedures in accordance with OMB Circular A-133.

[END OF PROVISION]

2. AWARD PACKAGE

a. This award is composed of an award face page (which may incorporate the Recipient's proposal by reference) and the NRC Standard Provisions for U.S. Nongovernmental Recipients.

- b. This award constitutes acceptance by the NRC of the Recipient's proposal and budget unless otherwise indicated on the face page, Block 9.
- c. The Recipient is obligated to conduct such project oversight as may be appropriate, to manage the funds with prudence, and to comply with the provisions outlined herein. Within this framework, the Principal Investigator (PI) named on the award face page, Block 11, is responsible for the scientific or technical direction of the project and for preparation of the project performance reports.
- d. This award is funded on a cost reimbursement basis not to exceed the amount awarded as indicated on the face page, Block 16, and is subject to a refund of unexpended funds to NRC.

[END OF PROVISION]

3. NONDISCRIMINATION

(This provision is applicable when work under the grant/cooperative agreement is performed in the U.S. or when employees are recruited in the U.S.)

No U.S. citizen or legal resident shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity funded by this award on the basis of race, color, national origin, age, religion, handicap, or sex. The Recipient agrees to comply with the non-discrimination requirements below:

- a. Title VI of the Civil Rights Act of 1964 (42 USC §§ 2000d et seq)
- b. Title IX of the Education Amendments of 1972 (20 USC §§ 1681 et seq)
- c. Section 504 of the Rehabilitation Act of 1973, as amended (29 USC § 794)
- d. The Age Discrimination Act of 1975, as amended (42 USC §§ 6101 et seq)
- e. The Americans with Disabilities Act of 1990 (42 USC §§ 12101 et seq)
- f. Parts II and III of EO 11246 as amended by EO 11375 and 12086.
- g. EO 13166, "Improving Access to Services for Persons with Limited English Proficiency."
- h. Any other applicable non-discrimination law(s).

Generally, Title VII of the Civil Rights Act of 1964, 42 USC § 2000e et seq, provides that it shall be an unlawful employment practice for an employer to discharge any individual or otherwise to discriminate against an individual with respect to compensation, terms, conditions, or privileges of employment because of such individual's race, color, religion, sex, or national origin. However, Title VII, 42 USC § 2000e-1(a), expressly exempts from the prohibition against discrimination on the basis of religion, a religious corporation, association, educational institution, or society with respect to the employment of individuals of a particular religion to perform work connected with the carrying on by such corporation, association, educational institution, or society of its activities.

[END OF PROVISION]

4. NONLIABILITY

NRC does not assume liability with respect to any personal or property damage or loss for any third party claims for damages arising out of this award.

[END OF PROVISION]

5. MODIFICATIONS

Changes to the grant/cooperative agreement can only be made by issuance of a modification by the NRC Grants Officer.

[END OF PROVISION]

6. NOTICES

Any notice given by NRC or the Recipient shall in writing and delivered in person, mailed, or sent electronically as follows:

To the NRC Grants Officer, at the address specified in the award document.

To the Recipient, at the address shown in the award document.

Notices shall be effective as stated in the notice.

[END OF PROVISION]

7. SUBGRANT

Sub-recipients, sub-awardees, and contractors have no relationship with NRC under the terms of this grant/cooperative agreement. All required NRC approvals must be directed through the Recipient to NRC.

[END OF PROVISION]

8. LOBBYING RESTRICTIONS

- a. The Recipient shall comply with provisions of 31 USC § 1352. This provision generally prohibits the use of Federal funds for lobbying in the Executive or Legislative Branches of the Federal Government in connection with the award, and requires disclosure of the use of non-Federal funds for lobbying.
- b. The Recipient receiving in excess of \$100,000 in Federal funding shall submit a completed Standard Form (SF) LLL, "Disclosure of Lobbying Activities," regarding the use of non-Federal funds for lobbying. The SF-LLL shall be submitted within 30 days following the end of the calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed. The Recipient must submit the SF-LLL, including those received from sub-recipients, contractors, and subcontractors, to the Grants Officer.

[END OF PROVISION]

9. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

a. The Recipient agrees to notify the Grants Officer immediately upon learning that it or any of its principals:

- (1) Are presently excluded or disqualified from covered transactions by any Federal department or agency;
- (2) Have been convicted within the preceding three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, receiving stolen property, making false claims, or obstruction of justice; commission of any other offense indicating a lack of business integrity or business honesty that seriously and directly affects your present responsibility;
- (3) Are presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b); and
- (4) Have had one or more public transactions (Federal, State, or local) terminated for cause or default within the preceding three years.

b. The Recipient agrees that, unless authorized by the Grants Officer, it will not knowingly enter into any subGrant or contracts under this grant/cooperative agreement with a person or entity that is included on the Excluded Parties List System (<http://epls.amet.gov>).

The Recipient further agrees to include the following provision in any subGrant or contracts entered into under this award:

DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSION

The Recipient certifies that neither it nor its principals is presently excluded or disqualified from participation in this transaction by any Federal department or agency.

- c. The policies and procedures applicable to debarment, suspension, and ineligibility under NRC-financed transactions are set forth in 2 CFR Part 180.

[END OF PROVISION]

10. DRUG-FREE WORKPLACE

The Recipient must be in compliance with The Federal Drug Free Workplace Act of 1988. The policies and procedures applicable to violations of these requirements are set forth in 41 USC 702.

[END OF PROVISION]

11. EQUAL PROTECTION OF THE LAWS FOR FAITH-BASED AND COMMUNITY ORGANIZATIONS

a. The Recipient may not discriminate against any beneficiary or potential beneficiary under this award on the basis of religion or religious belief. Accordingly, in providing services supported in whole or in part by this grant/cooperative agreement or in its outreach activities related to such services, the Recipient may not discriminate against current or prospective program beneficiaries on the basis of religion, a religious belief, a refusal to hold a religious belief, or a refusal to actively participate in a religious practice;

b. The Federal Government must implement Federal programs in accordance with the Establishment Clause and the Free Exercise Clause of the First Amendment to the Constitution. Therefore, if the Recipient engages in inherently religious activities, such as worship, religious instruction, and proselytization, it must offer those services at a different time or location from any programs or services directly funded by this award, and participation by beneficiaries in any such inherently religious activities must be voluntary.

c. If the Recipient makes sub-awards under this grant/cooperative agreement, faith-based organizations should be eligible to participate on the same basis as other organizations, and should not be discriminated against on the basis of their religious character or affiliation.

[END OF PROVISION]

12. IMPLEMENTATION OF E.O. 13224 -- EXECUTIVE ORDER ON TERRORIST FINANCING

The Recipient is reminded that U.S. Executive Orders and U.S. law prohibits transactions with, and the provision of resources and support to, individuals and organizations associated with terrorism. It is the legal responsibility of the Recipient to ensure compliance with these Executive Orders and laws. This provision must be included in all contracts/sub-awards issued under this grant/cooperative agreement.

[END OF PROVISION]

13. DOMESTIC TRAVEL

Domestic travel is an appropriate charge to this award and prior authorization for specific trips are not required, as long as the trip is identified in the original program description and original budget. All other domestic travel must not increase the total estimated award amount. Trips that have not been identified in the approved budget require the approval of the Grants.

All common carrier travel reimbursable hereunder shall be via the least expensive class rates consistent with achieving the objective of the travel and in accordance with the Recipient's policies and practices. Travel by first-class travel is not authorized unless prior approval is obtained from the Grants Officer.

[END OF PROVISION]

14. INTERNATIONAL AIR TRAVEL AND TRANSPORTATION

(This provision is applicable when costs for international travel or transportation will be paid for with NRC funds. This provision is not applicable if the Recipient is providing for travel with private funds as part of a cost-sharing requirement, or with Program Income generated under the award.)

a. PRIOR BUDGET APPROVAL

In accordance with OMB Cost Principles, direct charges for foreign travel costs are allowable only when each foreign trip has received prior budget approval. Such approval will be deemed to have been met when:

- (1) the trip is identified. Identification is accomplished by providing the following information: the number of trips, the number of individuals per trip, and the destination country(s).
- (2) the information noted at (a)(1) above is incorporated in: the proposal, the program description or schedule of the award, the implementation plan (initial or revisions), or amendments to the award; and
- (3) the costs related to the travel are incorporated in the approved budget of the award.

The Grants Officer may approve travel which has not been incorporated in writing as required by paragraph (a)(2). In such case, a copy of the Grants Officer's approval must be included in the grant/cooperative agreement file.

b. NOTIFICATION

- (1) As long as prior budget approval has been met in accordance with paragraph (a) above, a separate Notification will not be necessary.

c. SECURITY ISSUES

Recipients are encouraged to obtain the latest Department of State Travel Advisory Notices before travelling. These Notices are available to the general public and may be obtained directly from the State Department, or via Internet.

Where security is a concern in a specific region, Recipients may choose to notify the US Embassy of their presence when they have entered the country. This may be especially important for long-term posting.

d. THE FLY AMERICA ACT

The Fly America Act (49 U.S.C. 40118) requires that all air travel and shipments under this award must be made on U.S. flag air carriers to the extent service by such carriers is available. The Administrator of General Services Administration (GSA) is authorized to issue regulations for purposes of implementation. Those regulations may be found at 41 CFR Part 301, and are hereby incorporated by reference into this award.

e. COST PRINCIPLES

The Recipient will be reimbursed for travel and the reasonable cost of subsistence, post differentials and other allowances paid to employees in international travel status in accordance with the Recipient's applicable cost principles and established policies and practices which are uniformly applied to federally financed and other activities of the grantee.

If the Recipient does not have established written policies regarding travel costs, the standard for determining the reasonableness of reimbursement for overseas allowance will be the Standardized Regulations (Government Civilians, Foreign Areas), published by the U.S. Department of State, as from time to time amended. The most current subsistence, post differentials, and other allowances may be obtained from the Grants Officer.

This provision must be included in all sub-awards and contracts which require international air travel and transportation under this award.

[END OF PROVISION]

15. TERMINATION

Termination of this award by default or by convenience shall follow provisions as established in 2 CFR 215.60, Termination and Enforcement.

[END OF PROVISION]

16. PROPERTY MANAGEMENT STANDARDS

Property standards of this award shall follow provisions as established in 2 CFR 215.30.

[END OF PROVISION]

17. PROCUREMENT STANDARDS

Procurement standards of this award shall follow provisions as established in 2 CFR 215.40.

[END OF PROVISION]

18. INTANGIBLE AND INTELLECTUAL PROPERTY

Intangible property of this award shall generally follow provisions established in 2 CFR 215.36.

Intellectual property rights shall follow provisions listed below:

a. Inventions

The rights to any invention made by a Recipient under an NRC financial assistance award are determined by the Bayh-Dole Act, Pub. Law 96-517, as amended and codified in 35 USC § 200 et seq, except as otherwise required by law. The specific rights and responsibilities are described in more detail in 37 CFR Part 401 and in particular, in the standard patent rights clause in 37 CFR § 401.14.

1. Ownership

- (a) Recipient. The Recipient has the right to own any invention it makes (conceived or first actually reduced to practice) or made by its employees. The Recipient may not assign its rights to a third party without the permission of NRC unless it is to a patent management organization (i.e., a university's Research Foundation). The Recipient's ownership rights are subject to the Government's nonexclusive paid-up license and other rights.
- (b) NRC. If the Recipient elects not to own or does not elect rights or file a patent application within the time limits set forth in the standard patent rights clause, NRC may request an assignment of all rights, which is normally subject to a limited royalty free nonexclusive revocable license from the Recipient. NRC owns any invention made solely by its employees but may license the Recipient in accordance with the procedures in 37 CFR Part 404.
- (c) Inventor/Employee. If neither the Recipient nor the NRC is interested in owning an invention by a Recipient employee, the Recipient, with the written concurrence of NRC, may allow the inventor/employee to own the invention subject to certain restrictions as described in 37 CFR § 401.9.
- (d) Joint inventions. Inventions made jointly by a Recipient and an NRC employee will be owned jointly by the Recipient and NRC. However, NRC may transfer its rights to the Recipient as authorized by 35 USC § 202(e) and 37 CFR § 401.10 if the Recipient is willing to patent and license the invention usually in

exchange for a share of "net" royalties based on the number of inventors (e.g., 50-50 if there is one Recipient and NRC employee). The grant/cooperative agreement will be prepared by the NRC and may include other provisions, such as royalty free license to the Government and certain other entities. 35 USC § 202(e) also authorizes the Recipient to transfer its rights to the Government which can agree to share royalties similarly as described above.

2. Responsibilities – iEdison

The Recipient has responsibilities and duties set forth in the standard patent rights clause. The Recipient is expected to comply with all the requirements of the standard patent rights clause and 37 CFR Part 401. Recipients of NRC financial assistance awards are required to submit their disclosures and elections electronically using the Interagency Edison extramural invention reporting system (iEdison) at www.iedison.gov. Recipients may obtain a waiver of this electronic submission requirement by providing to NRC compelling reasons for allowing the submission of paper copies of reports related to inventions.

b. Patent Notification Procedures

Pursuant to EO 12889, NRC is required to notify the owner of any valid patent covering technology whenever the NRC or its financial assistance Recipients, without making a patent search, knows (or has demonstrable reasonable grounds to know) that technology covered by a valid United States patent has been or will be used without a license from the owner. To ensure proper notification, if the Recipient uses or has used patented technology under this award without license or permission from the owner, the Recipient must notify the Grants Officer. This notice does not necessarily mean that the Government authorizes and consents to any copyright or patent infringement occurring under the financial assistance.

c. Data, Databases, and Software

The rights to any work produced or purchased under a NRC federal financial assistance award are determined by 2 CFR 215.36. Such works may include data, databases or software. The Recipient owns any work produced or purchased under a NRC federal financial assistance award subject to NRC's right to obtain, reproduce, publish or otherwise use the work or authorize others to receive, reproduce, publish or otherwise use the data for Government purposes.

d. Copyright

The Recipient may copyright any work produced under a NRC federal financial assistance award subject to NRC's royalty-free nonexclusive and irrevocable right to reproduce, publish or otherwise use the work or authorize others to do so for Government purposes. Works jointly authored by NRC and Recipient employees may be copyrighted but only the part authored by the Recipient is

protected because, under 17 USC § 105, works produced by Government employees are not copyrightable in the United States. On occasion, NRC may ask the Recipient to transfer to NRC its copyright in a particular work when NRC is undertaking the primary dissemination of the work. Ownership of copyright by the Government through assignment is permitted under 17 USC § 105.

[END OF PROVISION]

19. EQUIPMENT

Equipment procedures shall follow provision established in 2 CFR 215.34.

[END OF PROVISION]

20. RETENTION AND ACCESS REQUIREMENTS FOR RECORDS

Retention and access requirements for records of the Recipient shall follow established provisions in 2 CFR 215.53.

[END OF PROVISION]

21. ORGANIZATIONAL PRIOR APPROVAL SYSTEM

- a. In order to carry out its responsibilities for monitoring project performance and for adhering to award terms and conditions, each performing organization shall have a system to ensure that appropriate authorized officials provide necessary organizational reviews and approvals in advance of any action that would result in either the performance or modification of an NRC supported activity where such approvals are required by the award instrument, including the obligation or expenditure of funds where the governing cost principles either prescribe conditions or require approvals.
- b. The organization shall designate an appropriate official or officials to review and approve the types of actions described in Section "a" above. Preferably, the official(s) should be the same official(s) who sign(s) or countersign(s) those types of requests that require submission to and approval by NRC. The designated official(s) shall not be the principal investigator or any official having direct responsibility for the actual conduct of the project, or a subordinate of such individual.

[END OF PROVISION]

22. CONFLICT OF INTEREST

Conflict of interest standards of this award shall follow provisions as established in 2 CFR 215.42 Codes of Conduct.

[END OF PROVISION]

23. DISPUTE REVIEW PROCEDURES

- a. Any request for review of a notice of termination or other adverse decision should be addressed to the Grants Officer. It must be postmarked or if sent by electronic means dated no later than 30 days after the postmarked date of such termination or adverse decision from the Grants Officer.
- b. The request for review must contain a full statement of the recipient's position and the pertinent facts and reasons in support of such position.
- c. The Grants Officer will promptly acknowledge receipt of the request for review and shall forward it to the Director, Office of Administration, who shall appoint a review committee consisting of a minimum of three persons.
- d. Pending resolution of the request for review, the NRC may withhold or defer payments under the award during the review proceedings.
- e. The review committee will request the Grants Officer who issued the notice of termination or adverse action to provide copies of all relevant background materials and documents. The committee may, at its discretion, invite representatives of the recipient and the NRC program office to discuss pertinent issues and to submit such additional information as it deems appropriate. The chairman of the review committee will insure that all review activities or proceedings are adequately documented.
- f. Based on its review, the committee will prepare its recommendation to the Director, Office of Administration, who will advise the parties concerned of his/her decision.

[END OF PROVISION]

[END OF MANDATORY PROVISIONS]

II. Financial Requirements

1. FINANCIAL MANAGEMENT ACTIVITIES

Financial Management procedures shall follow the established provisions in 2 CFR 215.20.

2. SPECIFIC FINANCIAL MANAGEMENT PROVISIONS

The following financial management procedures shall follow the established provisions in 2 CFR 215 as follows:

- a. Payment – 2 CFR 215.22

- b. Cost Share – 2 CFR 215.23
- c. Program Income – 2 CFR 215.24
 - i. Earned program income, if any, shall be added to funds committed to the project by the NRC and Recipient and used to further eligible project or program objectives.
- d. Budget Revision – 2 CFR 215.25
 - i. In accordance with 2 CFR 215.25(e), the NRC waives the prior approval requirement for items identified in sub-part (e)(1-4).
 - ii. In accordance with 2 CFR 215.25(f), the NRC shall restrict the transfer of funds among direct cost items as provided in this sub-part.
 - iii. The Recipient is not authorized at any time to transfer amounts budgeted for direct costs to the indirect costs line item or vice versa, without written approval of the Grants Officer.
- e. Allowable Costs – 2 CFR 215.27

3. FINANCIAL REPORTS

- a. The Recipient shall submit a “Financial Status Report” (SF-269) on a semi-annual basis for the periods ending March 31 and September 30, or any portion thereof, unless otherwise specified in a special award condition. Reports are due no later than 30 days following the end of each reporting period. A final SF-269 shall be submitted within 90 days after expiration of the award.
- b. The Recipient shall submit a “Federal Cash Transaction Report” (SF-272) on a semi-annual basis for the periods ending March 31 and September 30, or any portion thereof, unless otherwise specified in a special award condition. Reports are due no later than 30 days following the end of each reporting period. A final SF-272 shall be submitted within 90 days after expiration of the award.
- c. The reports must be submitted to the Grants Officer in hard copy (no more than the original and two copies), or electronically when specified in the special award conditions.

4. INDIRECT COSTS

- a. Indirect costs will not be allowable charges against the award unless specifically included as a line item in the approved budget incorporated into the award. (The term “indirect cost” has been replaced with the term “facilities and administrative costs” under 2 CFR 220, “Cost Principles for Educational Institutions.”)
- b. Excess indirect costs may not be used to offset unallowable direct costs.
- c. If the Recipient has not previously established an indirect cost rate with a Federal agency, the negotiation and approval of a rate is subject to the procedures in the applicable cost principles and the following subparagraphs:
 - 1a. State, Local and Indian Tribal Governments; Educational Institutions; and Non-Profit Organizations (non-commercial organizations).

For the above listed organizations, cognizant federal agency is generally defined as the agency that provides the largest dollar amount of direct federal funding. For those organizations for which the NRC is cognizant or has oversight, NRC or its designee will either negotiate a fixed rate with a forward pricing rate agreement, or in some instances, will limit its review to evaluating the procedures described in the Recipient's cost allocation methodology plan. Indirect cost rates and cost allocation methodology reviews are subject to future audits to determine actual indirect costs.

1b. Commercial Organizations

For commercial organizations, cognizant federal agency is defined as the agency that provides the largest dollar amount of negotiated contracts, including options. If the only federal funds received by a commercial organization are NRC award funds, then NRC becomes the cognizant federal agency for the purpose of indirect cost negotiations. For those organizations for which NRC is cognizant, NRC or its designee will negotiate a fixed rate forward pricing rate agreement with the Recipient. Fixed rate means an indirect cost rate which has the same characteristics as a pre-determined rate, except that the difference between the estimated costs and the actual costs of the period covered by the rate is carried forward as an adjustment to the rate computation of the subsequent period.

NRC or its designee will negotiate cost rates using the cost principles found in 48 CFR Part 31, "Contract Cost Principles and Procedures." For guidance on how to put an indirect cost plan together go to:

<http://www.dol.gov/oasam/programs/boc/costdeterminationguide/main.htm>

2. Within 90 days of the award start date, the Recipient shall submit documentation (indirect cost proposal, cost allocation plan, etc.) necessary to perform the review to the address listed below. The Recipient shall provide the Grants Officer with a copy of the transmittal letter.

U.S. Nuclear Regulatory Commission
Division of Contracts
MailStop: T-7-I-2
Washington, DC 20555

3. The Recipient can use the fixed rate proposed in the indirect cost plan until such time as the NRC provides a response to the submitted plan. Actual indirect costs must be calculated annually and adjustments made through the forward pricing rate agreement used in calculating next year's rate. This calculation of actual indirect costs and the forward pricing rate agreement is subject to audit. Indirect cost rate proposals must be submitted annually. Organizations that have previously established indirect cost rates must submit a new indirect cost proposal to the cognizant agency within six months after the end of the Recipient's fiscal year.

- d. When NRC is not the oversight or cognizant Federal agency, the Recipient shall provide the Grants Officer with a copy of a negotiated rate agreement or a copy of the transmittal letter submitted to the cognizant or oversight Federal agency requesting a negotiated rate agreement.
- e. If the Recipient fails to submit the required documentation to NRC within 90 days of the award start date, the Grants Officer may modify the award to preclude the recovery of any indirect cost under the award. If the NRC, oversight, or cognizant Federal agency determines there is a finding of good and sufficient cause to excuse the Recipient's delay in submitting the documentation, an extension of the 90 day due date may be approved by the Grants Officer.
- f. Regardless of any approved indirect cost rate applicable to the award, the maximum dollar amount of allocable indirect costs for which the NRC will reimburse shall be the lesser of:
 - 1. The line item amount for the Federal share of indirect costs contained in the approved budget of the award; or
 - 2. The Federal share of the total allocable indirect costs of the award based on the indirect cost rate approved by a cognizant or oversight Federal agency and current at the time the cost was incurred, provided the rate is approved on or before the award end date.

5. INCURRING COSTS OR OBLIGATING FEDERAL FUNDS BEYOND THE EXPIRATION DATE

- a. The Recipient shall not incur costs or obligate funds for any purpose pertaining to the operation of the project, program, or activities beyond the expiration date stipulated in the award. The only costs which are authorized for a period of up to 90 days following the award expiration date are those strictly associated with closeout activities. Closeout activities are normally limited to the preparation of final progress reports, financial, and required project audit reports unless otherwise approved in writing by the Grants Officer.
- b. Unless otherwise authorized in 2 CFR 215.25(e)(2) or a special award condition, any extension of the award period can only be authorized by the Grants Officer in writing. Verbal or written assurances of funding from other than the Grants Officer shall not constitute authority to obligate funds for programmatic activities beyond the expiration date.
- c. The NRC has no obligation to provide any additional prospective or incremental funding. Any modification of the award to increase funding and to extend the period of performance is at the sole discretion of the NRC.
- d. Requests for extensions to the period of performance shall be sent to the Grants Officer at least 30 days prior to the grant/cooperative agreement expiration date. Any request for extension after the expiration date shall not be honored.

6. TAX REFUNDS

Refunds of FICA/FUTA taxes received by the Recipient during or after the award period must be refunded or credited to NRC where the benefits were financed with Federal funds under the award. The Recipient agrees to contact the Grants Officer immediately upon receipt of these funds. The Recipient further agrees to refund portions of FICA/FUTA taxes determined to belong to the Federal Government, including refunds received after the award end date.

7. AUTOMATED STANDARD APPLICATION FOR PAYMENTS PROCEDURES

Unless otherwise provided for in the award document, payments under this award will be made using the Department of Treasury's Automated Standard Application for Payment (ASAP) system. Under the ASAP system, payments are made through preauthorized electronic funds transfers, in accordance with the requirements of the Debt Collection Improvement Act of 1996. In order to receive payments under ASAP, Recipients are required to enroll with the Department of Treasury, Financial Management Service, Regional Financial Centers, which allows them to use the on-line and Voice Response System (VRS) method of withdrawing funds from their ASAP established accounts. The following information will be required to make withdrawals under ASAP: (1) ASAP account number – the award number found on the cover sheet of the award; (2) Agency Location Code (ALC) – 31000001; and Region Code. Recipients enrolled in the ASAP system do not need to submit a "Request for Advance or Reimbursement" (SF-270), for payments relating to their award. Awards paid under the ASAP system require the following information for enrollment:

Grantees must enroll in the ASAP system by emailing the following information to Vicki.Gladhill@nrc.gov:

1. EIN#
2. DUNS#
3. Name of Organization
4. Type of Organization (i.e. Non-profit, For Profit, State etc.)
5. Address
6. Point of Contact
7. Title
8. Point of Contact's Email Address
9. Phone Number

Please put the award number on the subject line of the email for reference.

8. AUDIT

Under the Inspector General Act of 1978, as amended, 5 USC App. 3§ 1 et seq, an audit of the award may be conducted at any time. The Inspector General of the NRC, or any of his/her duly authorized representatives, shall have access to any pertinent books,

documents papers and records of the Recipient, whether written, printed, recorded, produced or reproduced by any electronic, mechanical, magnetic or other process or medium, in order to make audits, inspections, excerpts, transcripts or other examinations as authorized by law. When the Office of the Inspector General (OIG) requires a program audit on an NRC award, the OIG will usually make the arrangements to audit the award, whether the audit is performed by OIG personnel, an independent accountant under contract with the NRC, or any other Federal, state or local audit entity.

Organization-wide or program-specific audits shall be performed in accordance with the Single Audit Act Amendments of 1996, as implemented by OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations." Recipients that are subject to the provisions of OMB Circular A-133 and that expend \$500,000 or more in a year in Federal awards shall have an audit conducted for that year in accordance with the requirements contained in OMB Circular A-133. A copy of the audit shall be submitted to the Bureau of the Census, which has been designated by OMB as a central clearinghouse. The address is:

Federal Audit Clearinghouse
Bureau of the Census
1201 E. 10th Street
Jeffersonville, IN 47132

In accordance with 2 CFR 215.26 (c) and (d), for-profit hospitals, commercial, and other organizations not covered by the audit provisions in OMB Circular A-133 that expend \$500,000 or more in a year in Federal awards, are required to have a program-specific audit performed at the conclusion of the project, but no less than once every five years. Some NRC programs have specific audit guidelines that will be incorporated into the award. If NRC does not have a program-specific audit guide available for the program, the auditor should follow Generally Accepted Government Auditing Standards and the requirements for a program-specific audit as described in OMB Circular A-133 § .235. A copy of the program-specific audit shall be submitted to the OIG at the following address with a copy of the transmittal letter to the Grants Officer:

US Nuclear Regulatory Commission
Office of the Inspector General
(Program Specific Audit)
Washington, DC 20555

III. Programmatic Requirements

1. PERFORMANCE (TECHNCIAL) REPORTS

a. The Recipient shall submit performance (technical) reports in triplicate (one original and two copies) or electronically to the NRC Project Officer as specified in the special award conditions in the same frequency as the Financial Status Report (SF-269) unless otherwise authorized by the Grants Officer.

b. Unless otherwise specified in the award provisions, performance (technical) reports shall contain brief information as prescribed in the applicable uniform administrative requirements incorporated in the award.

2. UNSATISFACTORY PERFORMANCE

Failure to perform the work in accordance with the terms of the award and maintain at least a satisfactory performance rating or equivalent evaluation may result in designation of the Recipient as high risk and assignment of special award conditions or other further action as specified in the standard term and condition entitled "Termination".

Failure to comply with any or all of the provisions of the award may have a negative impact on future funding by NRC and may be considered grounds for any or all of the following actions: establishment of an accounts receivable, withholding of payments under any NRC award, changing the method of payment from advance to reimbursement only, or the imposition of other special award conditions, suspension of any NRC active awards, and termination of any NRC award.

3. PROGRAMMATIC CHANGES

The Recipient shall report programmatic changes to the Grants Officer, and shall request prior approvals in accordance with 2 CFR 215.25(c)(1-3).

4. OTHER FEDERAL AWARDS WITH SIMILAR PROGRAMMATIC ACTIVITIES

The Recipient shall immediately provide written notification to the NRC Project Officer and the Grants Officer in the event that, subsequent to receipt of the NRC award, other financial assistance is received to support or fund any portion of the program description incorporated into the NRC award. NRC will not pay for costs that are funded by other sources.

5. PROHIBITION AGAINST ASSIGNMENT BY THE RECIPIENT

The Recipient shall not transfer, pledge, mortgage, or otherwise assign the award, or any interest therein, or any claim arising thereunder, to any party or parties, banks, trust companies, or other financing or financial institutions without the express written approval of the Grants Officer.

6. SITE VISITS

The NRC, through authorized representatives, has the right, at all reasonable times, to make site visits to review project accomplishments and management control systems and to provide such technical assistance as may be required. If any site visit is made by the NRC on the premises of the Recipient or contractor under an award, the Recipient shall provide and shall require his/her contractors to provide all reasonable facilities and assistance for the safety and convenience of the Government representative in the performance of their duties. All site visits and evaluations shall be performed in such a manner as will not unduly delay the work.

IV. Environmental Requirements

Environmental impacts must be considered by Federal decision makers in their decisions whether or not to (1) approve a proposal for Federal assistance; (2) approve the proposal with mitigation; or (3) approve a different proposal having less adverse environmental impacts. Federal environmental laws require that the funding agency initiate a planning process with an early consideration of potential environmental impacts that projects funded with Federal assistance may have on the environment. The Recipient and sub-recipients must comply with all environmental standards, to include those prescribed under the following statutes and Executive Orders, and shall identify to the awarding agency any impact the award may have on the environment. In some cases, award funds can be withheld by the Grants Officer under a special award condition requiring the Recipient to submit additional environmental compliance information sufficient to enable the NRC to make an assessment on any impacts that a project may have on the environment.

The Recipient must adhere to the following environmental laws:

1. The National Environmental Policy Act of 1969 (42 USC §§ 4321-4327)
2. Floodplain Management, EO 11988 and, Protection of Wetlands, EO 11990, May 24, 1977
3. Clean Air Act, Clean Water Act, and EO 11738
4. The Flood disaster Protection Act of 1973 (42 USC § 4002 et seq)
5. The Endangered Species Act of 1973, as amended, (16 USC § 1531 et seq).
6. The Coastal Zone Management Act, as amended, (16 USC § 1451 et seq)
7. The Coastal Barriers Resources Act, (16 USC §3501 et seq)
8. The Wild and Scenic Rivers Act, as amended, (16 USC §§ 1271 et seq)
9. The Safe Drinking Water Act of 1974, as amended, (42 USC §§ 300f-j)
10. The Resource Conservation and Recovery Act of 1976, as amended, (42 USC §§ 6901 et seq).
11. The Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, and the Superfund Amendments and Reauthorization Act of 1986, and the Community Environmental Response Facilitation Act of 1992, as amended, (42 USC §§ 9601 et seq)
12. Environmental Justice in Minority Populations and Low Income Populations, EO 12898, February 11, 1994.

V. Miscellaneous Requirements

1. CRIMINAL AND PROHIBITED ACTIVITIES

- a. The Program Fraud Civil Remedies Act (31 USC §§ 3801-3812), provides for the imposition of civil penalties against persons who make false, fictitious, or fraudulent claims to the Federal government for money (including money representing grant/cooperative agreements, loans, or other benefits.)
- b. False statements (18 USC §§ 287 and 1101), provides that whoever makes or presents any false, fictitious, or fraudulent statements, representations, or claims against the United States shall be subject to imprisonment of not more than five years and shall be subject to a fine in the amount provided by 18 USC § 287.
- c. False Claims Act (31 USC 3729 et seq), provides that suits under this Act can be brought by the government, or a person on behalf of the government, for false claims under federal assistance programs.
- d. Copeland "Anti-Kickback" Act (18 USC § 874 and 40 USC § 276c), prohibits a person or organization engaged in a federally supported project from enticing an employee working on the project from giving up a part of his compensation under an employment contract.

[END OF PROVISION]

2. AMERICAN-MADE EQUIPMENT AND PRODUCTS

Recipients are hereby notified that they are encouraged, to the greatest extent practicable, to purchase American-made equipment and products with funding provided under this award.

[END OF PROVISION]

3. INCREASING SEAT BELT USE IN THE UNITED STATES

Pursuant to EO 13043, Recipients should encourage employees and contractors to enforce on-the-job seat belt policies and programs when operating company-owned, rented or personally-owned vehicle.

[END OF PROVISION]

4. FEDERAL EMPLOYEE EXPENSES

Federal agencies are generally barred from accepting funds from a Recipient to pay transportation, travel, or other expenses for any Federal employee unless specifically approved in the terms of the award. Use of award funds (Federal or non-Federal) or the Recipient's provision of in-kind goods or services, for the purposes of transportation, travel, or any other expenses for any Federal employee may raise appropriation augmentation issues. In addition, NRC policy prohibits the acceptance of gifts, including travel payments for Federal employees, from Recipients or applicants regardless of the source.

[END OF PROVISION]

5. Minority Serving Institutions (MSIs) Initiative

Pursuant to EOs 13256, 13230, and 13270, NRC is strongly committed to broadening the participation of MSIs in its financial assistance program. NRC's goals include achieving full participation of MSIs in order to advance the development of human potential, strengthen the Nation's capacity to provide high-quality education, and increase opportunities for MSIs to participate in and benefit from Federal financial assistance programs. NRC encourages all applicants and Recipients to include meaningful participations of MSIs. Institutions eligible to be considered MSIs are listed on the Department of Education website.

[END OF PROVISION]

6. RESEARCH MISCONDUCT

Scientific or research misconduct refers to the fabrication, falsification, or plagiarism in proposing, performing, or reviewing research; or in reporting research results. It does not include honest errors or differences of opinions. The Recipient organization has the primary responsibility to investigate allegations and provide reports to the Federal Government. Funds expended on an activity that is determined to be invalid or unreliable because of scientific misconduct may result in a disallowance of costs for which the institution may be liable for repayment to the awarding agency. The Office of Science and Technology Policy at the White House published in the Federal Register on December 6, 2000, a final policy that addressed research misconduct. The policy was developed by the National Science and Technology Council (65 FR 76260). The NRC requires that any allegation be submitted to the Grants Officer, who will also notify the OIG of such allegation. Generally, the Recipient organization shall investigate the allegation and submit its findings to the Grants Officer. The NRC may accept the Recipient's findings or proceed with its own investigation. The Grants Officer shall inform the Recipient of the NRC's final determination.

[END OF PROVISION]

7. PUBLICATIONS, VIDEOS, AND ACKNOWLEDGMENT OF SPONSORSHIP

Publication of the results or findings of a research project in appropriate professional journals and production of video or other media is encouraged as an important method of recording and reporting scientific information. It is also a constructive means to expand access to federally funded research. The Recipient is required to submit a copy to the funding agency and when releasing information related to a funded project include a statement that the project or effort undertaken was or is sponsored by the NRC. The Recipient is also responsible for assuring that every publication of material (including Internet sites and videos) based on or developed under an award, except scientific articles or papers appearing in scientific, technical or professional journals, contains the following disclaimer: "This [report/video] was prepared by [Recipient name] under award [number] from [name of operating unit], Nuclear Regulatory Commission. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the view

of the [name of operating unit] or the US Nuclear Regulatory Commission." This also applies to videos produced under NRC financial assistance awards.

[END OF PROVISION]

8. HOMELAND SECURITY PRESIDENTIAL DIRECTIVE – 12

If the performance of this grant/cooperative agreement award requires Recipients to have physical access to Federal premises for more than 180 days or access to a Federal information system, personal identity verification procedures must be implemented. Any items or services delivered under this financial assistance award shall comply with the Nuclear Regulatory Commission's personal identity verification procedures that implement Homeland Security Presidential Directive -12, FIPS Pub 201, and OMB Memorandum M-05-24. The Recipient shall insert this clause in all sub-awards or contracts when the sub-award recipient or contractor is required to have physical access to a Federally controlled facility or access to a Federal information system.

[END OF PROVISION]

[END OF MISCELLANEOUS PROVISIONS]