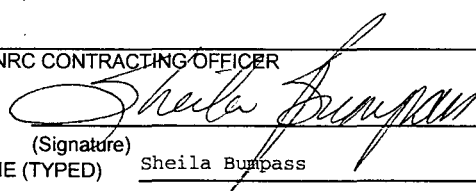


**U.S. NUCLEAR REGULATORY COMMISSION  
NOTICE OF GRANT/ASSISTANCE AWARD**

1. GRANT/AGREEMENT NO. NRC-27-10-1125		2. MODIFICATION NO.		3. PERIOD OF PERFORMANCE FROM: 09/30/2010 TO: 09/30/2011		4. AUTHORITY Pursuant to Section 31b and 141b of the Atomic Energy Act of 1954, as amended	
5. TYPE OF AWARD  <input checked="" type="checkbox"/> GRANT <input type="checkbox"/> COOPERATIVE AGREEMENT		6. ORGANIZATION TYPE State Controlled Higher Education Institution  DUNS#: 030052815		7. RECIPIENT NAME, ADDRESS, and EMAIL ADDRESS ALBANY STATE UNIVERSITY  504 COLLEGE DR  ALBANY GA 317052717 atin.sinha@asurams.edu			
8. PROJECT TITLE: Nuclear Power Plant Workforce Development Courses in Construction, Startup, and Quality Assurance							
9. PROJECT WILL BE CONDUCTED PER GOVERNMENT'S/RECIPIENT'S PROPOSAL(S) DATED 09/10/2010 AND APPENDIX A-PROJECT GRANT PROVISIONS		10. TECHNICAL REPORTS ARE REQUIRED <input type="checkbox"/> PROGRESS AND FINAL <input type="checkbox"/> FINAL ONLY <input checked="" type="checkbox"/> OTHER (Conference Proceedings)		11. PRINCIPAL INVESTIGATOR(S) NAME, ADDRESS and EMAIL ADDRESS Dr. Atin Sinha, 229-430-4820 Professor and Coordinator of Engineering Albany State University 504 College Drive Albany GA 31705 atin.sinha@asurams.edu			
12. NRC PROGRAM OFFICE (NAME and ADDRESS) US Nuclear Regulatory Commission Attn: Tuwanda Smith, 301-415-7394 Mailstop: EBB/O3 H8 6003 Executive Blvd. Bldg. (EBB) Bethesda MD		13. ACCOUNTING and APPROPRIATION DATA APPN. NO: 31X0200 B&R NO: 07P-15-5C1-161 JOB CODE: L2284 BOC NO: 4110 OFFICE ID NO: SDB-27-10-1125		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) Electronic ASAP.gov (See Remarks in Item #20 "Payment Information")			
15. NRC OBLIGATION FUNDS  THIS ACTION \$50,000.00  PREVIOUS OBLIGATION  TOTAL \$50,000.00		16. TOTAL FUNDING AGREEMENT  NRC \$50,000.00  RECIPIENT 0  TOTAL \$50,000.00  This action provides funds for Fiscal Year 10 in the amount of See Page 2					
17. NRC ISSUING OFFICE (NAME, ADDRESS and EMAIL ADDRESS)  U.S. Nuclear Regulatory Commission Div. of Contracts Attn: Erika Eam, 301-492-3492 Mail Stop: TWB-01-B10M Washington, DC 20555 Erika.Eam@nrc.gov							
18.  SIGNATURE NOT REQUIRED				19. NRC CONTRACTING OFFICER   9/28/2010 (Signature) (Date) NAME (TYPED) Sheila Bumpass  TITLE Contracting Officer  TELEPHONE NO. 301-492-3484			
20. PAYMENT INFORMATION  Payment will be made through the Automated Standard Application for Payment (ASAP.gov) unless the recipient has failed to comply with the program objectives, award conditions, Federal reporting requirements or other conditions specified in 2 CFR 215 (OMB Circular A110).							
21. Attached is a copy of the "NRC General Provisions for Grants and Cooperative Agreements Awarded to Non-Government Recipients. Acceptance of these terms and conditions is acknowledged when Federal funds are used on this project.							
22. ORDER OF PRECEDENCE In the event of a conflict between the recipient's proposal and this award, the terms of the Award shall prevail.							
23. 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**

**OCT 04 2010**

**ADM002**

**ATTACHMENT A - SCHEDULE****A.1 PURPOSE OF GRANT**

The purpose of this Grant is to provide support to Albany State University's "Nuclear Power Plant Workforce Development Courses in Construction, Startup, and Quality Assurance" program as described in Attachment B entitled "Program Description."

**A.2 PERIOD OF GRANT**

1. The effective date of this Grant is September 30, 2010. The estimated completion date of this Grant is September 30, 2011.
2. Funds obligated hereunder are available for program expenditures for the estimated period: September 30, 2010 – September 30, 2011.

**A. GENERAL**

1. Total Estimated NRC Amount: \$50,000.00
2. Total Obligated Amount: \$50,000.00
3. Cost-Sharing Amount: \$0.00
4. Activity Title: To introduce the participants in Nuclear industry and nuclear plants, Basic NPP layout, legal requirements, licensing and safeguards, NPP construction requirements, NPP pre-operational startup and power ascension testing, Quality Assurance / Quality Control program requirements, Establishing nuclear courses and industry relations, Mentoring for participation in grant opportunities.
5. NRC Project Officer: Tuwanda Smith
6. DUNS No.: 030052815

**B. SPECIFIC**

- RFPA No.: SDB-27-10-1125  
 FFS: RQ-SBC-10-328  
 Job Code: L2284  
 BOC: 4110  
 B&R Number: 07P-15-5C1-161  
 Appropriation #: 31X0200  
 Amount Obligated: \$50,000

**A.3 BUDGET**

The following is a Grant Budget. Revisions to the budget shall be made in accordance with Revision of Grant Budget in accordance with 2 CFR 215.25.

<u>Cost Elements</u>	<u>USNRC</u>
Personnel	\$23,800.00
Fringe Benefits	\$1,584.80

<b>Travel</b>	\$3,000.00
<b>Supplies</b>	\$1,055.20
<b>Other</b>	\$16,560.00
<b>Indirect Charges</b>	\$4,000.00
<b>Total</b>	\$50,000.00

#### **A.4 AMOUNT OF AWARD AND PAYMENT PROCEDURES**

1. The total estimated amount of this Grant Award is \$50,000 for the one year period.
2. NRC hereby obligates the amount of \$50,000 for program expenditures during the period set forth above and in support of the Budget above. The Recipient will be given written notice by the Contracting Officer when additional funds will be added. NRC is not obligated to reimburse the Recipient for the expenditure of amounts in excess of the total obligated amount.
3. Payment shall be made to the Recipient in accordance with procedures set forth in the Automated Standard Application For Payments (ASAP) Procedures set forth below.
4. Additional funds up to the total amount of the Grant Award shown above may be obligated by NRC subject to the availability of funds and satisfactory progress of the project.

#### **A.5 PROGRAM INCOME**

Program income is defined as gross income earned by the recipient that is directly generated by a support activity or earned as a result of the award. Recipients earning program income are required to report that income to the Grants Officer. In accordance with 2 CFR 215.44, the recipient is required to either deduct proportionally from the NRC's share of the project or returned the proportionate amount to the NRC. This obligation affects program income earned after the end of the project period and to program income earned from license fees and royalties for copyrighted material, patents, and inventions produced under the award or as a result of the award.

Attachment B – Program Description

# **ALBANY STATE UNIVERSITY NUCLEAR POWER PLANT WORKFORCE DEVELOPMENT COURSES IN CONSTRUCTION, STARTUP AND QUALITY ASSURANCE**

## **1. INTRODUCTION AND PURPOSE**

The classic processes for energy generation established since the industrial revolution, are under critical review and in the starting phase of wholesale redevelopment. Several factors have contributed to this decision, paramount of which is the threatened habitability of our planet. Industrial processes have exceeded habitability limits in at least three areas: ozone depletion, carbon dioxide expense, and nitrogen usage. The accelerated biodiversity loss and climatic changes are the direct results of resource mismanagement.

The US Government has made power generation its primary target for the economic recovery as well as the solution to the extensive environmental ills we face. A lot of resources, such as this grant initiative, are being made available to develop programs to fill the present and near future workforce needs. There are many HBCs and minority schools in the southwest interested in supporting the energy industry and particularly the nuclear industry. However, they are faced with limitations, including lack of expertise in this area, and not available funding to acquire such expertise.

Albany State University is a historically black university in South Georgia that offers degrees in science disciplines and offers a program in pre-engineering. Its geographic location places it within driving distance from several operating Nuclear Power Plants (NPP's), six of the new generation units planned to be built in Georgia, Florida and Alabama. 10 more NPP's are planned for the Southeast. For this reason, Albany State has begun a program to support nuclear industry workforce development efforts in the Southeast. It is expected that more than 80,000 NPP trained and certified workers will be needed in the next 8 years to support the 16 NPP's design and construction.

We have established ties with the Southern Polytechnic State University (SPSU) Center for Nuclear Power Generation and we have been active in requesting funding from the NRC to establish nuclear workforce development courses in our campus.

The purpose of this proposal is to acquire funding which will support a-three-week training seminar for six different minority schools, to be held in our campus, with the objective of introducing the participants in:

- Nuclear industry and nuclear plants
- Basic NPP layout, legal requirements, licensing and safeguards
- NPP construction requirements
- NPP pre-operational startup and power ascension testing
- Quality Assurance / Quality Control program requirements
- Establishing nuclear courses and industry relations
- Mentoring for participation in grant opportunities.

The Albany PI will be Dr. Atin Sinha, Professor in the Department of Natural Sciences, atin.sinha @asurams.edu; 229-430-4811. The contracts contact will be Cassandra Smith, Ph.D. Associate Vice President Research and Sponsored Programs Albany State University. (cmsmith@asurams.edu, 229-430-3690). The SPSU-NPG PI will be Tony Sideris, PE, Director of SPSU-NPG Center (tsideris@spsu.edu, 770-361-8555).

## **2. ABOUT ALBANY STATE UNIVERSITY**

**Albany State University-(ASU)** a Historically Black Institution located in rural Southwest Georgia is a comprehensive, coeducational liberal arts institution which offers undergraduate and graduate curricula that build on a strong liberal arts foundation. ASU provides innovative instructional and professional programs through its four academic colleges and the Graduate School. Combined these schools offer nearly 50 graduate and undergraduate degrees. ASU is located within driving distance from several operating nuclear power plants (NPP's) and 6 of the new generation units planned to be built in Georgia and Florida. An additional 10 NPP's are planned for the Southeast. For this reason, ASU has begun a program to support nuclear industry workforce development.

ASU has a commitment to cultivating and "educating minds to lead in a changing world". The identification, engagement, development, and growth of undergraduates as researchers are a major step toward realizing the magnitude and quality of educated minds. There is a symbiosis between research and undergraduate education; and the engagement of undergraduates in exploratory, empirical and active research has become a major focal point of ASU undergraduate education. In Goal 2: Strategy 1) establish collaborative relationships with other educational institutions, public and private agencies, business and industry, to enhance and expand programs and services for the mutual benefit of the University and the region.

## **3. NEED FOR NUCLEAR WORKFORCE DEVELOPMENT**

For the first time in over twenty years, the US government has given the green light to utilities to proceed with combined license applications for the next generation of Nuclear Power Plants (NPP's). Most of the utilities responding to this opportunity are southern utilities, and one of the most serious concerns they will face is the availability of trained labor. The design, construction, startup and operation of multiple nuclear generation units will create an extraordinary demand for knowledgeable technical, engineering and administrative personnel. This demand for qualified personnel will be added to an already critically inadequate human resource market as all large domestic utilities are experiencing loss of qualified personnel due to retirement and general attrition.

The great majority of nuclear plant engineering personnel come from diverse professional backgrounds such as mechanical, electrical, civil and industrial engineering, physics, chemistry, business administration and information technologies. There are relatively few engineers with actual nuclear engineering degrees. Larger university nuclear engineering programs are tailored toward nuclear physics and reactor-fuel operations, not plant construction and power production. Thus, the real training of engineers and other professionals in NPP's has been on-the-job. In the nuclear industry it is experience that counts.

Albany State and other HBCs in the southeast can make serious contribution to the nuclear industry by offering basic certified courses that will familiarize participants with NPP work culture and nuclear safety mentality. These courses, defined, outlined and now offered by SPSU's Center for Nuclear Power Generation, are designed to meet the industry training objectives for workforce

development and post employment training. All the schools participating in this proposal are within driving distance from existing nuclear power plants and new generation construction sites.

#### **4. AVAILABLE SPSU-NPG CENTER COURSES**

The courses we plan to offer in the proposed workshops will cover the following curriculum:

##### **1. Become knowledgeable about nuclear industry practices and topics, including:**

- The history and applications of nuclear power; technical, environmental and economic comparisons between nuclear and other power generation sources
- The operating experience of NPPs compared to other industries
- Risks of power generation and public policy
- The uranium fuel cycle, spent fuel reprocessing and nuclear waste disposal
- The legal requirements of licensing NPP's and how they are related to safety requirements
- The major industry players, including owner utilities, nuclear steam supply system vendors, design and construction companies, regulators and other engineering and equipment supply companies
- The nuclear power plant site layout, including the power block and support facilities
- Engineered safeguards and barriers for mitigating accident consequences

##### **2. Understand the specific nuclear regulatory requirements which guide NPP design, construction, startup, operations and maintenance including:**

- The NPP Construction Organization
- US NRC Regulatory Guides (NUREGS)
- Engineering Codes and Standards such as ASME, IEEE, ISA, NFPA and others that guide NPP development and operation
- Quality Assurance & Quality Control requirements, program compliance, NQA-1 compliance, and NRC-ITAAC regulatory practices
- Good practices learned from past experience and established by industry concerns like the Institute of Nuclear Power Operations (INPO)
- Specific management systems related to health and safety such as Emergency Planning, OSHA Requirements, Fire Protection, and Radiation Protection
- Modularization approach and logistics of offsite fabrication
- Specific technical requirements related to new generation NPP construction practices, and installation of piping systems, mechanical components, electrical systems, instrumentation and control systems, and coats and paintings.
- Specialty engineering practices and standards related to welding and brazing, cranes and heavy lifts, and fire protection

##### **3. Learn about the programmatic and implementation aspects of preoperational-startup testing and NPP commissioning to operations, including:**

- The legal requirements guiding preop-startup
- Construction testing and transfer of systems and components to preop group
- Organization and timeline of the startup process
- Relation to and involvement of other plant organizations
- Preop procedure writing, verification, and document control
- Vendor warranties and participation on equipment startup
- Preoperational testing of mechanical electrical, control, and waste disposal systems
- Containment building integrated leak rate test

- Systems turnover to operations
- Fuel loading and power ascension testing
- Classroom project presentations
- Demobilization of the preop program and class.

**4. Become familiar with the nuclear QA/QC program and how it guides all nuclear related components and activities toward excellence and safety**

- Introduction to 10CFR50 Appendix B requirements
- QA/QC program importance to nuclear safety
- Organization and responsibilities
- The 18 criteria of the QA program
- ITAAC (Inspection, Testing, Analysis, Acceptance and Compliance)
- Other federal and state regulatory agencies

**5. Guidance and mentoring in establishing nuclear workforce development programs in colleges**

- Certification of students and instructors
- Needed facilities and classroom material
- Subjects, ideas and objectives for grants solicitation
- Nuclear industry involvement
- Career services programs and opportunities

The above curriculum (except for item number 5) has been given successfully by SPSU on three occasions and with excellent student evaluation results. An added activity will be a field trip to a nuclear plant.

**5. APPROACH TO HBUs PARTICIPATION & TRAINING**

The approach to make these courses available to other HBCs is to establish a three week training seminar to be held on the Albany State campus, where about 10 participants, including faculty and students, can come from each participating school. The participants can also stay for free at the ALBANY State dormitories, and will be given meal cards to eat for free at the student center cafeteria.

The classes will start each Monday at 10:00am, a time which allow participants to commute to the Albany campus, and will end each week at 2:00pm. Daily classes will start at 8:30am and end at 5:00pm. There will be activities after five o'clock mainly related to career services and class project work.

A class project will be developed by the participants in working groups. It will probably be related to a grant type proposal, so that the participants acquire some experience in this area. All the participants must attend at least 90% of the classes, pass by 80% all the quiz questions

addressing all the course modules, and actively participate in the class project, before they are given their certifications.

## **6. PARTICIPATING MINORITY SCHOOLS**

Following is the list of schools that wish and agreed to participate in this program. All the listed schools are very interested in establishing nuclear workforce development courses in their campuses and to participate in future grant proposals. All the schools are within driving distance from Albany State, and within driving distance from existing nuclear plants or expected new construction sites.

A pre-project meeting will be planned with the participating schools representatives to discuss the project announcement and the process of identifying and accepting workshop participants (please see project timeline below).

### **Normal, Alabama, Alabama Agricultural Mechanical University (Alabama A & M U)**

School of Engineering, Technology and Computer Science offers Bachelor of Science degree programs in Civil, Electrical and Mechanical Engineering, Electrical and Mechanical Engineering Technology, Computer Science, Industrial Technology and Construction Management. The School offers Masters Degree programs in Engineering, Computer Science and Industrial Technology. Pre-college technical teachers can obtain undergraduate and graduate degrees in Industrial Technology Education through our Industrial Technology Department in collaboration with AAMU's School of Education. Contact is: **Dr. Trent Montgomery, Dean; email [trent.montgomery@aamu.edu](mailto:trent.montgomery@aamu.edu) Telephone # 256.372.5560**

### **Florida Agricultural Mechanical Engineering (FAMU) and Florida State University (FSU)**

Offers a Bachelor of Science (ABET-accredited) degree in Chemical Engineering.

Undergraduates may choose one of three major options within the BS degree in Chemical Engineering, including Chemical, Materials, and Biomedical Engineering. Graduate degrees (MS and PhD) are granted in both Chemical Engineering and in Biomedical Engineering. Dr. Bruce R. Locke, Professor and Department Chair, [locke@eng.fsu.edu](mailto:locke@eng.fsu.edu) ; telephone : 850-410-6149

### **Tugaloo, Mississippi, Tugaloo College:**

Offers dual Physics & Engineering degrees in agreements with partner institutes whereby students will transfer where he/she takes engineering specific courses (expected to finish in 2-years). For example: Brown University and Jackson State University, our contacts are: Jay Tang telephone: 202-231-8228 in the Department of Physics - Email: [Jay\\_Tang@Brown.edu](mailto:Jay_Tang@Brown.edu) and at Jackson is Dr. Himangshu Das in the department of civil engineering - Email: [himangshu.s.das@jsums.edu](mailto:himangshu.s.das@jsums.edu)



**South Carolina "Voorhees College:**

Will be offering two new Bachelor of Science degree programs in environmental science and emergency management with major emphasis in hazardous materials management and safety,"

Also offers Engineering Technician, Construction Engineering Technology and Technology/Electromechanical Engineering Tech. Contact: **Dean Dr. Stanley**

**lhekweazu:emailihekweazu@scsu.edu; telephone 803-536-7117.**

**Tuskegee Alabama: Tuskegee University:**

Offers a bachelors degree in Aerospace Science Engineering, Agribusiness Education, Agribusiness Science, Agronomy and Soils, Chemical Engineering, Electrical Engineering, Engineering Extension and Technical Education, Mechanical Engineering, contact: **Dean Dr. L. Burge**: email lburge@tuskegee.edu; **telephone:334-727-8355**

**7. PROJECT TIME LINE AND DELIVERABLES**

The nuclear training workshops seminar is planned for July 2011, when faculty and students can attend. Project preparations will start much earlier.

The time line activities will be as follows:

- January 1, 2011 Begin project
- January 30, 2011 Complete detailed project plan
- February 28, 2011 Day meeting with participants schools
- March 30, 2011 Program announcement
- April 30, 2011 End date for participants
- May 15, 2011 , Final list of participants
- July 11, 2011 Begin workshop seminar
- July 29, 2011 Complete workshop seminar
- August 30, 2011 End project, report results to NRC

The deliverables of this project will be:

- a) The project plan
- b) Announcements and other communications
- c) Class project and access to class material to be used
- d) Participant interim course evaluation reports and comments
- e) Final evaluations and project evaluation.

**8. PROJECT TEAM**

The lead project members for Albany State will be:

- Dr. Atin Sinha, Director of the Albany State University Pre-engineering program. Dr. Sinha has over 12 years experience working in the aeronautics industry and has writing

successful grants for student summer programs and Department of Defense Research instrumentation.

The lead instructors for the workshops will be:

- **Tony Sideris, PE**, Director of SPSU-NPG Center, will be the SPSU PI. Over forty years of experience in NPP I&C design, startup testing and safety analysis. Experience includes ANI, INPO, Wyle Laboratories and senior consultant to DOE uranium enrichment.
- **Mr. C. Wesley Rowley, PE**, Senior Consultant, Nuclear Engineering will be the curriculum development Project Manager. He is a member of and a previous chairman of ASME-BNC&S
- **Leo Modenos, PE**, Senior Nuclear Engineering Consultant. Over forty years of experience in NPP construction and regulatory compliance. SPSU project manager on the QA/QC curriculum development. Previously with US NRC and INPO (NQA-1 compliance).
- **David Garlington**: Licensed senior reactor operator and shift supervisor. MS in nuclear engineering, Rensselaer Polytechnic. Author of the original Fire Incident Data Base.
- **Harry Vardis**, is an expert in innovation and creative thinking, he has worked with executives in FORTUNE 500 companies to develop innovation management techniques and processes. He is presently the Director of The Center for Business Innovation at The Coles College of Business at Kennesaw State University.
- **Mr. Garry Harris**, will be the ASU PI. He has over thirty years of experience in the nuclear industry. He was a plant nuclear maintenance evaluator at the Institute for Nuclear Power Operations (INPO), and spent nine years at the US Nuclear Regulatory Commission (NRC) in various positions that included Operator License Examiner (BWR/PWR), Resident Inspector (BWR/PWR) and Senior Resident Inspector.

In addition to these instructors, there will be additional lecturers on specific subject matters from the industry, as well as participating presenters from utilities, the NRC Region II, INPO, TVA and others. NRC educational grant representatives will also be requested to attend and support the workshops. Final plans will be made in time. (As an example to industry participation to these workshops, please visit [spsu.edu/nuclear](http://spsu.edu/nuclear) and open the class schedules. Presenters and company affiliation are listed).

**RELATIONSHIP WITH OTHER GRANTS** Albany State University had recently submitted one proposal to the NRC for a research grant on fire protection.

**Attachment C – Standard Terms and Conditions**

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

**Preface**

This award is based on the application submitted to, and as approved by, the Nuclear Regulatory Commission (NRC) under the authorization 42 USC 2051(b) pursuant to section 31b and 141b of the Atomic Energy Act of 1954, as amended, and is subject to the terms and conditions incorporated either directly or by reference in the following:

- Grant program legislation and program regulation cited in this Notice of Grant Award.
- Restrictions on the expenditure of Federal funds in appropriation acts, to the extent those restrictions are pertinent to the award.
- Code of Federal Regulations/Regulatory Requirements - 2 CFR 215 Uniform Administrative Requirements For Grants And Cooperative Agreements With Institutions Of Higher Education, Hospitals, And Other Non-Profit Organizations (OMB Circulars), as applicable.

To assist with finding additional guidance for selected items of cost as required in 2 CFR 220, 2 CFR 225, and 2 CFR 230 these URLs to the Office of Management and Budget Cost Circulars are included for reference:

A-21 (now 2CFR 220):	<a href="http://www.whitehouse.gov/omb/circulars/a021/print/a021.html">http://www.whitehouse.gov/omb/circulars/a021/print/a021.html</a>
A-87 (now 2CFR 225):	<a href="http://www.whitehouse.gov/omb/circulars/a087/print/a087-all.html">http://www.whitehouse.gov/omb/circulars/a087/print/a087-all.html</a>
A-122 (now 2 CFR 230)	<a href="http://www.whitehouse.gov/omb/circulars/a122/print/a122.html">http://www.whitehouse.gov/omb/circulars/a122/print/a122.html</a>
A-102, SF 424:	<a href="http://www.whitehouse.gov/omb/circulars/a102/print/a102.html">http://www.whitehouse.gov/omb/circulars/a102/print/a102.html</a>
Form 990:	<a href="http://www.irs.gov/pub/irs-pdf/i990-ez.pdf">http://www.irs.gov/pub/irs-pdf/i990-ez.pdf</a>

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, Executive Orders (EOs), Office of Management and Budget (OMB) Circulars, the Nuclear Regulatory Commission's (NRC) Mandatory Standard Provisions, special award conditions, and standard award conditions.

By drawing funds from the Automated Standard Application for Payment system (ASAP), the recipient agrees to the terms and conditions of an award.

Certifications and representations. These terms incorporate the certifications and representations required by statute, executive order, or regulation that were submitted with the SF424B application through Grants.gov.

**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 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 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 Subpart C of 2 CFR 215 Part 180 and include this term in lower-tier (subaward) covered transactions.

b. Recipients must comply with monitoring procedures and audit requirements in accordance with OMB Circular A-133. <

[http://www.whitehouse.gov/omb/circulars/a133\\_compliance/08/08toc.aspx](http://www.whitehouse.gov/omb/circulars/a133_compliance/08/08toc.aspx) >

## **2. Award Package**

This award is composed of an award face page, Program Description, and the NRC Standard Provisions for U.S. Nongovernmental Recipients. This award constitutes acceptance by the NRC of the Recipient's program description and budget as incorporated into this award document.

The NRC Grants Officer (GO) is responsible for all business management aspects of negotiation, award, financial and administrative aspects of the grant. The GO utilizes information from site visits, reviews of expenditure and audit reports and other appropriate means to assure that the project is operated in compliance with all applicable Federal laws, regulations, guidelines and the terms and conditions of award. Questions concerning the applicability of regulations and policies to this grant and all requests for required prior approvals such as requests for permission to expend funds for certain items should be directed to the GO. Required approvals must be provided in writing and the GO is the only person who may grant such required approvals. Written approvals granted by other officials are not binding on the government. All changes in the terms of the grant award must be issued in writing by the GO.

### **§ 215.41 Recipient responsibilities.**

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 in 2 CFR 215.41. 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. 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.

The standards contained in this section do not relieve the recipient of the contractual responsibilities arising under its contract(s). The recipient is the responsible authority, without recourse to the NRC, regarding the settlement and satisfaction of all contractual and administrative issues arising out of procurements entered into in support of an award or other agreement. This includes disputes, claims, protests of award, source evaluation or other matters of a contractual nature. Matters concerning violation of statute are to be referred to such Federal, State or local authority as may have proper jurisdiction.

### **Subgrants**

#### **Appendix A to Part 215—Contract Provisions**

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. See 2 CFR 215.180 and 215.41.

**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:

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

**Modifications/Prior Approval**

NRC prior written approval may be required before a recipient makes certain budget modifications or undertakes particular activities. If NRC approval is required for changes in the grant, it must be requested of, and obtained from, the NRC Grants Officer in advance of the change or obligation of funds. All requests for NRC prior approval must be made, in writing (which includes submission by e-mail), to the designated Grants Specialist and Program Office no later than 30 days before the proposed change. The request must be signed by both the PI and the authorized organizational official. Failure to obtain prior approval, when required, from the NRC Grants Officer may result in the disallowance of costs, termination of the award, or other enforcement action within NRC's authority.

**Lobbying Restrictions**

The Recipient will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

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.

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 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.

**§ 215.13. Debarment And Suspension.**

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 sub-agreement or contracts under this grant with a person or entity that is included on the Excluded Parties List System (<http://epls.arnet.gov>).

The Recipient further agrees to include the following provision in any sub-agreement 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. The policies and procedures applicable to debarment, suspension, and ineligibility under NRC-financed transactions are set forth in 2 CFR Part 180.'

**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.

**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-agreements issued under this grant. Award Recipients must comply with Executive Order 13224, Blocking Property and Prohibiting Transactions with Persons who Commit, Threaten to Commit, or Support Terrorism. Information about this Executive Order can be found at: [www.fas.org/irp/offdocs/eo/eo-13224.htm](http://www.fas.org/irp/offdocs/eo/eo-13224.htm).

**Procurement Standards. § 215.40**

Sections 215.41 through 215.48 set forth standards for use by recipients in establishing procedures for the procurement of supplies and other expendable property, equipment, real property and other services with Federal funds. These standards are furnished to ensure that such materials and services are obtained in an effective manner and in compliance with the provisions of applicable Federal statutes and executive orders. No additional procurement standards or requirements shall be imposed by the Federal awarding agencies upon Recipients, unless specifically required by Federal statute or executive order or approved by OMB.

**Travel**

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 Recipient's original program description and original budget. All other travel, domestic or international, must not increase the total estimated award amount. Trips that have not been identified in the approved budget require the written prior approval of the Grants Officer.

Travel will be in accordance with the US Government Travel Regulations at: [www.gsa.gov/federaltravelregulation](http://www.gsa.gov/federaltravelregulation) and the per diem rates set forth at: [www.gsa.gov/perdiem](http://www.gsa.gov/perdiem).

Travel costs to the grant must be consistent with provisions as established in Appendix A to 2 CFR 220 (J.53)

**Property Management Standards**

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

**Equipment** procedures shall follow provision established in 2 CFR 215.34.

**Procurement Standards**

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

**Intangible and Intellectual Property**

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

**Inventions Report** - The Bayh-Dole Act (P.L. 96-517) affords recipients the right to elect title and retain ownership to inventions they develop with funding under an NRC grant award ("subject inventions"). In accepting an award, the recipient agrees to comply with applicable NRC policies, the Bayh-Dole Act, and its Government-wide implementing regulations found at Title 37, Code of Federal Regulations (CFR) Part 401. A significant part of the regulations require that the recipient report all subject inventions to the awarding agency (NRC) as well as

include an acknowledgement of federal support in any patents. NRC participates in the trans-government Interagency Edison system (<http://www.iedison.gov>) and expects NRC funding recipients to use this system to comply with Bayh-Dole and related intellectual property reporting requirements. The system allows for recipients to submit reports electronically via the Internet. In addition, the invention must be reported in continuation applications (competing or non-competing).

**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.

**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.

**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.

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

#### **Organizational Prior Approval System**

In order to carry out its responsibilities for monitoring project performance and for adhering to award terms and conditions, each recipient 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 prior approvals are required, including the obligation or expenditure of funds where the governing cost principles either prescribe conditions or require approvals.

The recipient shall designate an appropriate official or officials to review and approve the actions requiring NRC prior approval. Preferably, the authorized official(s) should be the same official(s) who sign(s) or countersign(s) those types of requests that require prior approval by NRC. The authorized organization 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.



**Conflict Of Interest Standards** of this award shall follow provisions as established in 2 CFR 215.42 Codes of Conduct.

**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 transmitted electronically 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.

**Termination and Enforcement.** Termination of this award by default or by mutual consent shall follow provisions as established in 2 CFR 215.60.

**Monitoring and Reporting § 215.51**

a. Recipient Financial Management systems must comply with the established provisions in 2 CFR 215.21

- Payment – 2 CFR 215.22
- Cost Share – 2 CFR 215.23
- Program Income – 2 CFR 215.24
  - 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, or returned to the NRC.
- Budget Revision – 2 CFR 215.25
  - In accordance with 2 CFR 215.25(e), the NRC waives the prior approval requirement for items identified in sub-part (e)(1-4).
  - The Recipient is not authorized to rebudget between direct costs and indirect costs without written approval of the Grants Officer.
  - Allowable Costs – 2 CFR 215.27

**b. Federal Financial Reports**

Effective October 1, 2008, NRC transitioned from the SF-269, SF-269A, SF-272, and SF-272A to the Federal Financial Report (SF-425) as required by OMB:

[http://www.whitehouse.gov/omb/fedreg/2008/081308\\_ffr.pdf](http://www.whitehouse.gov/omb/fedreg/2008/081308_ffr.pdf)

[http://www.whitehouse.gov/omb/grants/standard\\_forms/ffr.pdf](http://www.whitehouse.gov/omb/grants/standard_forms/ffr.pdf)

[http://www.whitehouse.gov/omb/grants/standard\\_forms/ffr\\_instructions.pdf](http://www.whitehouse.gov/omb/grants/standard_forms/ffr_instructions.pdf)

The Recipient shall submit a "Federal Financial Report" (SF-425) on a quarterly basis for the periods ending 3/31, 6/30, 9/30, and 12/31, 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-425 shall be submitted within 90 days after expiration of the award.

**Period of Availability of Funds 2 CFR § 215.28**

a. Where a funding period is specified, a recipient may charge to the grant only allowable costs resulting from obligations incurred during the funding period and any pre-award costs authorized by the NRC.

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 expiration date. Any request for extension after the expiration date shall not be honored.

**Automated Standard Application For Payments (ASAP) 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 < <http://www.fms.treas.gov/asap/> >. 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, and Regional Financial Centers, which allows them to use the on-line 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.

**Audit Requirements**

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."

<http://www.whitehouse.gov/omb/circulars/a133/a133.html> Recipients are subject to the provisions of OMB Circular A-133 if they expend \$500,000 or more in a year in Federal awards.

The Form SF-SAC and the Single Audit Reporting packages for fiscal periods ending on or after January 1, 2008 must be submitted online.

1. Create your online report ID at <http://harvester.census.gov/fac/collect/ddeindex.html>
2. Complete the Form SF-SAC
3. Upload the Single Audit
4. Certify the Submission
5. Click "Submit."

Organizations expending less than \$500,000 a year are not required to have an annual audit for that year but must make their grant-related records available to NRC or other designated officials for review or audit.

## **II. Programmatic Requirements**

### **Performance (Technical) Reports**

a. The Recipient shall submit performance (technical) reports electronically to the NRC Project Officer and Grants Officer as specified in the special award conditions in the same frequency as the Federal Financial Report 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 2 CFR §215.51 which are incorporated in the award.

c. The submission for the six month period ending March 31<sup>st</sup> is due by April 30<sup>th</sup>. The submission for the six month period ending September 30<sup>th</sup> is due by October 31<sup>st</sup>. A formal report will be prepared documenting the results of the radiation and temperature analysis (Task 2.2). A single formal report will be prepared after completion of tensile strength testing (Task 2.6), crack growth rate testing (Task 2.8) and fracture toughness testing (Task 2.9). A final comprehensive report will be prepared documenting the results of crack initiation testing (Task 2.7), as well as the previously reported results for Tasks 2.2, 2.6, 2.8 and 2.9. These reports will be in standard EPRI format. In addition, informal summary program reports will be provided electronically (e.g., via e-mail). These reports shall contain a summary of tasks completed, including key results, as well as a forecast of planned work for the next six months.

### **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.

**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.

**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.

**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.

**III. Miscellaneous Requirements**

**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, loans, or other benefits.)
- b. False statements (18 USC § 287), 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), 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.

**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.

**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.

### **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.

### **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:

<http://www.ed.gov/about/offices/list/ocr/edlite-minorityinst.html>

### **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.

### **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 NRC 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."