UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

September 30, 2015

Dr. Wayne D. Newhauser
Louisiana State University and A&M College
Office of Sponsored Programs
202 Himes Hall
Baton Rouge, LA 70803-0001

VIA Electronic Mail
newhauser@lsu.edu

SUBJECT: GRANT NO: NRC-HQ-84-15-G-0017

Dear Dr. Newhauser:

Pursuant to the authority contained in the Federal Grant and Cooperative Grantee Act of 1977, as amended and the Atomic Energy Act of 1954, the Nuclear Regulatory Commission (NRC) hereby awards to the Louisiana State University and A&M College (hereinafter referred to as the "Recipient"), the sum of $400,000.00 to provide support to the "LSU Fellowships Program in Health Physics" as described in attachment B entitled "Program Description."

This award is effective as of the date of this letter and shall apply to expenditures made by the Recipient furtherance of program objectives during the period beginning with the effective date of September 30, 2015 and ending September 29, 2019.

This award is made to the Recipient on condition that the funds will be administered in accordance with the terms and conditions as set forth in Attachment A (the Schedule); Attachment B (the Program Description); and Attachment C (the Standard Terms & Conditions); all of which have been agreed to by your organization. In addition your grant application proposes $342,504.00 in cost share. Please ensure your cost share conforms to the provisions in 2 CFR 200, and is reported on the semi-annual Federal Financial Report.

Based on the pre-award compliance review conducted by NRC's Small Business and Civil Rights Office (SBCR), your institution is placed in a periodic status pending resolution of concerns raised during the review. Within 60 days, SBCR will conduct a periodic review to ensure compliance with applicable Civil Rights statutes. Your cooperation with SBCR is essential. The continued eligibility of Federal financial assistance is conditioned upon compliance with anti-discrimination regulations.

Please ensure individuals selected as beneficiaries of support under this grant meet the legal requirements consistent with recent Supreme Court Decisions including *Fisher, Gratz, and Grutter.*

Please sign the enclosed grant to acknowledge your receipt of the award, and return as a pdf file to Ms. Shashi Malhotra by email at Shashi.Malhotra@nrc.gov.

Sincerely yours,

Erika Eam

Erika Eam
Grants Officer
Resources and Grants Team
Acquisition Management Division

Attachments:
Attachment A – Schedule
Attachment B – Program Description
Attachment C – Standard Terms and Conditions

TEMPLATE - ADM001

SUNSI REVIEW COMPLETE

ADM002

Grant and Cooperative Agreement

CHOOSE ONE:
- [ ] COOPERATIVE AGREEMENT
- [x] GRANT

CHOOSE ONE: [x] EDUCATION [ ] FACILITIES [ ] RESEARCH [ ] SDCR [ ] TRAINING

1. GRANT/COOPERATIVE AGREEMENT NUMBER	2. SUPPLEMENT NUMBER	3. EFFECTIVE DATE	4. COMPLETION DATE
NRC-HQ-84-15-G-0017		09/30/2015	

5. ISSUED TO
NAME/ADDRESS OF RECIPIENT (No., Street, City/County, State, Zip)
LOUISIANA STATE UNIVERSITY
202 HIMES HALL
BATON ROUGE LA 70803-0100

6. ISSUED BY U.S. NRC - HQ
Mailing Address: Acquisition Management Division
Mail Stop: 3WFN-05-C64MP
Washington DC 20555-0001

7. TAXPAYER IDENTIFICATION NO. (TIN)

8. COMMERCIAL & GOVERNMENT ENTITY (CAGE) NO.

9. PRINCIPAL INVESTIGATOR/ORGANIZATION'S PROJECT OR PROGRAM MGR. (*Name & Phone*)
Wayne D. Newhauser
Ph: (225) 578-2762 Email: newhauser@lsu.edu

10. RESEARCH, PROJECT OR PROGRAM TITLE
LSU Fellowships Program in Health Physics

11. PURPOSE

12. PERIOD OF PERFORMANCE (*Approximately*)
09/30/2015 through 09/29/2019

13A.	AWARD HISTORY	13B.	FUNDING HISTORY
PREVIOUS	$0.00	PREVIOUS	$0.00
THIS ACTION	$400,000.00	THIS ACTION	$400,000.00
CASH SHARE	$0.00	TOTAL	$400,000.00
NON-CASH SHARE	$0.00		
RECIPIENT SHARE	$342,504.00		
TOTAL	$400,000.00		

14. ACCOUNTING AND APPROPRIATION DATA
2015-X0200-IUPMRU-84-84D002-51-K-164-T8458-4110

PURCHASE REQUEST NO.	JOB ORDER NO.	AMOUNT	STATUS
OCHCO-15-0159			

15. POINTS OF CONTACT

	NAME	MAIL STOP	TELEPHONE	E-MAIL ADDRESS
TECHNICAL OFFICER	NANCY V. HEBRON-ISREAL	3WN/3AF12	301-285-0718	Nancy.Hebron-Isreal@nrc.gov
NEGOTIATOR				
ADMINISTRATOR	SHASHI MALHOTRA		301-415-7803	Shashi.Malhotra@nrc.gov
PAYMENTS				

16. THIS AWARD IS MADE UNDER THE AUTHORITY OF:
Pursuant to Section 31b and 141b of the Atomic Energy Act of 1954, as amended.

17. APPLICABLE STATEMENT(S), IF CHECKED:
- [ ] NO CHANGE IS MADE TO EXISTING PROVISIONS
- [ ] FDP TERMS AND CONDITIONS AND THE AGENCY-SPECIFIC REQUIREMENTS APPLY TO THIS GRANT

18. APPLICABLE ENCLOSURE(S), IF CHECKED:
- [ ] PROVISIONS
- [ ] SPECIAL CONDITIONS
- [ ] REQUIRED PUBLICATIONS AND REPORTS

UNITED STATES OF AMERICA		COOPERATIVE AGREEMENT RECIPIENT	
CONTRACTING/GRANT OFFICER ERIKA EAM Erika Eam	DATE 9/10/2015	AUTHORIZED REPRESENTATIVE	DATE

Grant and Cooperative Agreement

ITEM NO. (A)	ITEM OR SERVICE (Include Specifications and Special Instructions) (B)	QUANTITY (C)	UNIT (D)	ESTIMATED COST UNIT PRICE (E)	ESTIMATED COST AMOUNT (F)
	CFDA Number: 77.008 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 200 (OMB Circular A110). Payment: ASAP GRANT FUNDS REIMBURSEMENT SYS US TREASURY Period of Performance: 09/30/2015 to 09/29/2019 DUNS: 075050765				

ATTACHMENT A - SCHEDULE

A.1 PURPOSE OF GRANT

The purpose of this grant is to provide support to the "LSU Fellowships Program in Health Physics" as described in Attachment B entitled "Program Description."

A.2 PERIOD OF GRANT

1. The effective date of this Grant is September 30, 2015. The estimated completion date of this Grant is September 29, 2019.

2. Funds obligated hereunder are available for program expenditures for the estimated period: 09/30/2015 – 09/29/19.

A. GENERAL

1. Total Estimated NRC Amount:	$400,000.00
2. Total Obligated Amount:	$400,000.00
3. Cost-Sharing Amount:	$342,504.00
4. Activity Title:	LSU Fellowships Program in Health Physics
5. NRC Project Officer:	Nancy Hebron-Israel
6. DUNS No.:	075050765

A.3 BUDGET

Revisions to the budget shall be made in accordance with Revision of Budget and Program Plans in accordance with 2 CFR 200.308.

	Year 1	Year 2	Year 3	Year 4
Personnel (Stipend)	$52,500	$52,500	$52,500	$52,500
Travel	$2,574	$2,574	$2,574	$2,574
Supplies	$788	$788	$788	$788
Tuition	$17,325	$17,325	$17,325	$17,325
Total Direct Cost	$73,187	$73,187	$73,187	$73,187
Indirect Cost Base @ 48% of MTDC	$55,862	$55,862	$55,862	$55,862
Indirect Costs 48%	$26,813	$26,813	$26,813	$26,813
Total	**$100,000**	**$100,000**	**$100,000**	**$100,000**

All travel must be in accordance with the Louisiana State University and A&M CollegeTravel Regulations or the US Government Travel Policy absent Recipient's travel regulation.

A.4 AMOUNT OF AWARD AND PAYMENT PROCEDURES

1. The total estimated amount of this Award is $742,504.00 for the four year period; inclusive of $342,504.00 in cost share.

2. NRC hereby obligates the amount of $400,000.00 for program expenditures during the period set forth above and in support of the Budget above. NRC is not obligated to reimburse the Grantee for the expenditure of amounts in excess of the total obligated amount.

3. Payment shall be made to the Grantee in accordance with procedures set forth in the Automated Standard Application For Payments (ASAP) Procedures set forth below.

Attachment B – Program Description

Background

With a looming wave of retirements, additional radiation professionals are needed to meet the needs in the energy, medical, defense, and security sectors. Currently the National Council on Radiation Protection (NCRP), the Congressionally chartered organization charged to advise the U.S. government on radiation protection issues, is working with stakeholders to formulate a comprehensive, coordinated strategy to define the situation and propose solutions at the national level. Workforce issues in Louisiana are similar to elsewhere in the U.S., but with some unique challenges and opportunities. Challenges include a growing demand (mainly in the energy and medicine sectors), shrinking state funding for higher education, and difficulty in retaining young professionals to a state that lacks the amenities, affluence, and quality of life enjoyed in most other states. However, LSU has a small, high-quality Health Physics training program that is popular with students, university leaders, and local industries; this offers the opportunity to increase training capacity in a fast and cost effective manner.

Proposed Program

The applicant institution has the ability and capacity to successfully complete the objectives of the proposed program. The proposed program will increase the number of students graduating with the Master of Science degree in Health Physics to 3 per year, or a 6-fold increase over the average rate from recent years. This growth in training capacity is achievable because our training program already has faculty, curricula, facilities and resources, research opportunities, administrative support structures, and experience.

The quality of students served by the proposed program is high. We draw from a diverse pool of well-qualified applicants with BS degrees in physics and engineering. Minimum admission standards of successful applicants typically include an undergraduate GPA 3.0 with good performance in science and math courses, GRE scores of 150 quantitative and 150 verbal, 3 strong letters of recommendation, a compelling written personal statement, and excellent communication skills as assessed in interviews with program faculty. International students must meet LSU's requirements regarding TOEFL/IELTS exam scores. All admissions to this program will comply with the NRC's citizenship requirements, as specified in NRC-HQ-84-15-FOA-0001.

The proposed support for students includes a stipend, fringe benefits, tuition recovery, and travel to in-state training sites (see Budget). Each fellowship will provide a $17,500 stipend per year per student for one year. Other support includes academic advising, mentored research training, and administrative support. The academic advising will be performed by the PI and co-PI and the research mentoring will be performed by faculty listed as key personnel in this proposal. Academic administrative support will be provided by existing departmental and program staff. The training will be conducted mainly by LSU A&M College with participation of the following associated institutions: Tulane University, Southern University, Biomedical Research Foundation of Northwest Louisiana, and Mary Bird Perkins Cancer Center.

The quality of the technical program, including faculty and facilities, is excellent. The faculty are highly qualified to teach and supervise students in this program. The faculty includes 7 full-time LSU faculty members (Deibel, Dey, Guzik, Jia, Matthews, Newhauser, Wang) of which 1 holds ABHP certification (Wang) and another 3 are board certified medical physicists (Matthews, Jia, Newhauser). One of these is currently a radiation safety officer (Wang) and another previously was (Newhauser). Two faculty members (Deibel and Guzik) were hired under an NRC faculty development grant (Erno Sajo, PI, Award NRC-38-10-933, 2010-2014). At least 4 additional instructors will participate (Day, Lokitz, Lonsberry, Stam), of which all are radiation safety officers and 2 are ABR certified. The quality of the curriculum is high thanks to

modernization and expansion that was funded by an NRC curriculum development grant (Erno Sajo, PI, Award NRC-38-09-895, 2009-2010). The MS curriculum requires a minimum of 24 credit hours of core and elective courses and 6 credit hours of thesis research. Each student is required to write a research thesis based on an original research project. The research project is performed under the mentorship of a faculty member on topics in health physics, such as radiation measurement, radiation protection, and dose and risk assessment. The degree requires approximately three years of full-time effort to complete. The curriculum is described in detail at http://www.phys.lsu.edu/newwebsite/graduate/plan_md_healthphys.html. All of the key personnel already contribute to the health physics education program.

Several institutions are associated with the program to provide a spectrum of instruction, research opportunities, and practical operational experience. For example, we offer a formal practicum course in which the student selects three modules. Each module comprises practical experience to reinforce and extend knowledge obtained from classroom learning. Examples of available modules include radiation safety at an academic university (LSU, Baton Rouge, LA), radiation safety in a synchrotron accelerator research facility (LSU Center for Advanced Microstructures and Devices, Baton Rouge, LA), a cyclotron facility for medical isotope production (Biomedical Research Foundation, Shreveport, LA), a cancer radiation therapy center with electron accelerators and a wide variety of byproduct sealed sources (Mary Bird Perkins Cancer Center, Baton Rouge, LA), and a basic science and medical research institution (Tulane Medical School). Interestingly, LSU is the only provider of graduate training in Health Physics in the State of Louisiana.

The education outcomes have been excellent, as evidenced by the 100% placement rate of our trainees in the radiation professions. Our trainees and recent graduates have a high passing rate on the ABHP certification examination. Our students typically receive multiple job offers prior to graduation. Several of our former trainees hold RSO and other leadership positions, in government, academia, and industry.

Other statistics on our Program suggest the feasibility for sustained growth of the program. Using only passive advertising via our web site, the number of seriously interested prospective graduate students averages about 12 per year. Nearly all of these prospective students require financial support, the lack of which has constrained admissions to our program. Active recruiting and marketing efforts, with announcement of a higher rate of planned admissions, will undoubtedly increase the application rate.

LSU and Southern University (SU) have established an innovative cooperative agreement to facilitate student exchange, sharing of library privileges, and sharing of academic programs (http://catalog.lsu.edu/content.php?catoid=12&navoid=835). This program allows students from SU, an HBCU institution, to take Health Physics courses at LSU without any additional fees. This augments the diversity of our applicant pool by allowing undergraduate students to learn about careers in the radiation sciences and the Health Physics Program.

The Health Physics Program enjoys strong institutional support at all levels, as evidenced by increasing faculty lines to the program in recent years. Co-PI Wang (LSU Radiation Safety Director) has provided instruction and committed resources to the Health Physics and Medical Physics Program since 2003. As the Director of the Medical Physics and Health Physics Education Program, PI Newhauser has worked to increase the educational activities in Health Physics research and education. Since the Program Director arrived in 2011, we have recruited two new faculty members to the program, with one additional search for a junior tenure track faculty member currently in progress. During an era of economic hardship, the allocation of scarce faculty lines to our Program is perhaps the strongest indicator of institutional commitment for sustained long-term growth of the Program.

LSU's plan for sustaining the proposed gains from this project includes maintaining laboratory and office space for students and faculty, maintaining existing and seeking new

partnerships in Health Physics education with public and private organizations, and seeking additional extramural funding for fellowships, scholarships, and faculty development.

The funding requested in this proposal is vitally and urgently needed because of chronic reductions in funding for higher education by the State of Louisiana since 2008. To attract and retain qualified graduate students to our Program, offers of admission need to include financial support, *e.g.*, a fellowship and/or tuition waiver. Without this, many qualified prospective students will be lost to non-nuclear programs. Our proposal offers a good return on investment because it will increase the supply of radiation professionals and because it leverages significant fixed costs (e.g., faculty salaries) covered by the applicant university.

Recruitment Activities and Marketing Strategies

To attract a large and diverse pool of applicants, we will implement several recruitment activities and marketing strategies that include active and passive initiatives.

Active efforts will include contacting program directors of undergraduate programs with announcements of fellowship opportunities, as well as site visits with presentations to undergraduate students in physics and engineering programs in the state and region. LSU hosts a variety of events to help STEM undergraduates learn more about career opportunities; our faculty will continue to participate in these annual events, such as "Women in Physics" conferences, which are designed to attract a high quality and diverse pool of applicants. We will continue to actively recruit students from HBCUs, Hispanic-serving institutions, and other schools with the support of LSU's Office of Strategic Initiatives (see letter of support from Dr. Gloria Thomas). Another active recruitment method is promoting awareness of opportunities in our program *via* our alumni, which number more than 100. We will feature such opportunities in our program's semi-annual newsletter, which is distributed electronically. We will also engage our department's recruitment specialist to utilize social media, such as Facebook and Twitter, to reach alumni and interested prospective students. We will also advertise our Program with oral and poster presentations at professional and scientific meetings (e.g., HPS, ANS, AAPM, NCRP) regarding educational and fellowship opportunities.

Passive recruitment and marketing efforts will include enhancements to the scope and content of the program's web site. Specifically, we will add, update, or enhance the descriptions of fellowship opportunities, faculty research interests, student research opportunities, testimonials from former students, and tables of data on rates of application, admissions, offers, matriculation, completion, placement, and passing of the ABHP certification exam.

Applicant Selection Process

The Selection Process is based on merit, with enhancement of diversity as a metric to differentiate equivalent candidates. Students apply to the LSU Health Physics Program using the LSU Graduate School's online application system. The application package includes transcripts, a personal statement, standardized exam scores, and letters of recommendation. Applications are evaluated by an Admissions Committee, which comprises active Program faculty. Applications are ranked by merit, with considerations for enhancement of diversity and in conformance with Title IX and all other applicable federal, state, and university rules.

Each member of the Admissions Committee independently ranks the merit of each applicant based on considerations of undergraduate preparation, prior graduate coursework when applicable, letters of recommendation, educational and career goals described in the personal statement, GRE scores, TOEFL scores for non-native speakers, and any relevant research and work experience. The Admissions Committee discusses each applicant; the discussion includes oral presentation by a primary and a secondary reviewer, followed by open discussion of the committee. Discussion may include programmatic factors relevant to admission decisions, such as the availability of faculty to mentor specific applicants, the goodness of fit of an applicant's

educational needs and interests to the program and prospective faculty mentor, and other factors. After the discussion of individual applications, the committee generates a final ranked list of applicants. Beginning with the highest-ranked applicant, offers of admission are extended to selected applicants; an on-hold list is maintained to allow additional offers in case any are declined.

Evaluation Plan to Quantify Effectiveness of Program

The Health Physics Program has a feasible and complete plan to evaluate and report on the impact and effectiveness of the proposed program in attracting, preparing, and retaining students in nuclear careers. The program utilizes faculty, support staff, information systems, and administrative processes to accomplish those tasks.

To evaluate the effectiveness in attracting students, we will analyze composited data on applications for each admission cycle. For example, we will tabulate the number of applicants to the program, their academic "quality" (using pre-defined criteria determined by the Admissions Committee) and goodness of fit to the program's opportunities. To assess the effectiveness of attracting applicants from underrepresented groups, we will review statistics on race and gender that are provided to us by the LSU Graduate School, which is based on information provided by the applicant (we note that applicants are not required to provide this information and consequently it is not always available to us). Similarly, each year we will analyze, tabulate, and report on the numbers and rates of offers of admission, acceptance, and matriculation.

The preparation of our students is evaluated in several ways. The Program Director reviews each student's progress and performance at least twice per year. The student is matched to a major professor, after which the student's progress is monitored by a Supervisory Committee, typically comprising 5 faculty members, including the major professor. The Supervisory Committee convenes at intervals of 6 months or less. The major professor submits meeting reports to the Program Director. Prior to graduation, the student defends the research project before an Examination Committee, typically comprised of the same members as the Supervisory Committee. Other examples of performance monitoring include reporting of completion rates, placement rates, progress toward board certification, and other factors. We seek feedback from employers to ensure that our curriculum prepares students for successful careers.

To evaluate the effectiveness of our program in retaining former trainees in nuclear careers, we maintain contact with them to collect information about their professional status, such as the nature of their job, their board certification status, geographic location, and so forth. We collect, analyze, and tabulate this data to look for program-related factors that correlate with long term retention in nuclear careers. We will amplify aspects of the Program that positively correlate with retention and attenuate features that correlate with attrition.

We will also seek to evaluate the overall effectiveness of program, taking into account the evaluations above and additional factors. We will compare the effectiveness data from our program with similar programs and/or composited data from programs in the United States. The results of our analyses will be reported to the sponsor.

Schedule of Tuition, Fees, and Other Pertinent Costs for Students

Per the FOA, we list tuition and required fees per semester in dollars for full-time (9 credit hours or more) graduate students enrolled at LSU. However, graduate assistants appointed on research assistantships will receive a tuition exemption from LSU. LSU will assess tuition remission at 33% of the recipient's annual stipend, or 33% x $17,500/y = $5,775/y, which includes the fall, spring, and summer semesters. Please see Budget and Budget Justification for details. Students are responsible for fees, which are subject to change.

Credit Hours	Tuition	Required Fees	Academic Excellence Fee	Technology Fee	Building Use Fee	Oper-ational Fee	Resident Total	Nonresident Fee	Nonresident Total
9	3,732	594	215	45	48	80	4,715	8,913	13,628
10	3,789	594	225	50	48	80	4,787	8,926	13,713
11	3,848	594	235	55	48	80	4,861	8,937	13,798
12	3,905	594	245	60	48	80	4,933	8,950	13,883
13	3,958	594	245	65	48	80	4,991	8,957	13,948
14	4,007	594	245	70	48	80	5,045	8,967	14,012
15	4,059	594	245	75	48	80	5,102	8,976	14,078

Alignment and Integration of Proposal with LSU System's Strategic Plan

The goals of the proposed project are closely aligned with the "LSU A&M College 2014-2015 through 2018-2019 Strategic Plan", which may be obtained at the following location (www.lsu.edu/flagshipagenda/pdfs/LSU_AM_StratPlanLSU2014_2015through2018_2019_June 28_2013_Final.pdf). Specifically, it is relevant to Strategy I.1.1: Enhance recruiting efforts for high-achieving undergraduate and graduate students and Strategy I.1.2: Expand outreach programs to recruit minority students. The project goals are also aligned with those of the LSU "Flagship 2020 Agenda" (http://www.lsu.edu/flagshipagenda/goals2020.shtml).

Arrangements With Non-federal Agencies That Provide Support to the Goals of this Grant

LSU and Mary Bird Perkins Cancer Center (MBPCC) have a partnership agreement governing their graduate educational programs in Medical and Health Physics. The Program includes two accredited degree programs: an MS in Medical Physics and Health Physics, and a PhD in Physics (Concentration in Medical Physics). We also run an accredited post-doctoral training certificate program in Medical Physics.

The program also has made arrangements with Tulane University for students to train in operational health physics in a research university setting, LSU's Center for Advanced Microstructures and Devices (a synchrotron accelerator research laboratory) for radiation protection in an accelerator laboratory, and the Biomedical Research Foundation for training in radiation safety of accelerator produced medical isotopes.

Student Fellowship Recipients to Accept Terms of FOA

LSU requires students to agree to terms set by NRC-HQ-84-15-FOA-001 if Fellowship is accepted. LSU agrees to provide compliance monitoring of recipients' academic performance.

Attachment C – Standard Terms and Conditions

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

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 Grant and Cooperative Agreement.
- 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 Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

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 (E.O.), Office of Management and Budget (OMB) Circulars, the NRC's Mandatory Standard Provisions, special award conditions, and standard award conditions.

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 200 All provisions of 2 CFR Part 200 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 2 Part §200.86, 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 D of 2 CFR 200 and include this term in lower-tier (sub-award) covered transactions.

Recipients must comply with monitoring procedures and audit requirements in accordance with 2 CFR Part 200, Subpart F—AUDIT REQUIREMENTS.

2. Award Package
The Recipient is obligated to conduct project oversight as may be appropriate, to manage the funds with prudence, and to comply with the provisions outlined in 2 CFR Part 200. Within this framework, the Principal Investigator (PI) named on the award face page, 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, and is subject to a refund of unexpended grant funds to the NRC.

The non-Federal entity alone must be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements related to its grant award. These issues include, but are not limited to, source evaluation, protests, disputes, and claims. These standards do not relieve the non-Federal entity of any financial or fiduciary responsibilities or obligations arising under its grant, including sub-contracts and sub-awards, or any other contractual or financial obligation. The Federal awarding agency will not substitute its judgment for that of the non-Federal entity unless the matter is primarily a Federal concern. Violations of law will be referred to the local, State, or Federal authority having proper jurisdiction. See 2 CFR § 200.318(k), General Procurement Standards.

Subawards

Appendix II to Part 200 Contract Provisions for Non-Federal Entity Contracts Under Federal Awards

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 § 200.318.

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.

The Recipient agrees to comply with the non-discrimination requirements below:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d et seq.), which prohibits discrimination on the grounds of race, color, or national origin in any program or activity receiving federal financial assistance.
- Title IX of the Education Amendments of 1972 (20 U.S.C. §§ 1681 et seq.), which prohibits discrimination on the basis of sex in any education program or activity receiving federal financial assistance.
- Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis of disability in any program or activity receiving federal financial assistance.
- The Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101 et seq.), which prohibits discrimination on the basis of age in any program receiving federal financial assistance.
- The Americans with Disabilities Act of 1990 (42 U.S.C. §§ 12101 et seq.), which prohibits recipients from discriminating on the basis of disability in employment (Title I); State and local government services (Title II); and places of public accommodation and commercial facilities (Title III).
- Parts II and III of E.O. 11246, as amended by E.O.11375, 11478, 12086, 12107, 13279, 13665, and 13672, which prohibits federal contractors and federally assisted construction contractors and subcontractors, who do over $10,000 in Government business in one year, from discriminating in employment decisions on the basis of race, color, religion, sex, or national origin and requires that government contractors take affirmative action to ensure that equal opportunity is provided in all aspects of their employment.
- E.O.13166, "Improving Access to Services for Persons with Limited English Proficiency," which clarifies that national origin discrimination under Title VI includes discrimination on the basis of limited English proficiency (LEP) and requires that the recipient take reasonable steps to ensure that LEP persons have meaningful access to programs and activities.

- Any other applicable non-discrimination law(s).

Generally, Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 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 U.S.C. § 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's 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 or cooperative agreement, it must be requested and obtained from the NRC Grants Officer in advance of the change or obligation of funds. All requests for NRC prior approval, including requests for extensions to the period of performance, should be made, in writing (which includes submission by e-mail), to the designated Grants Officer 30 days before the proposed change. The request should be signed by the authorized organizational official. Failure to obtain prior approval, when required, from the NRC Grants Officer, may result in the disallowance of costs, 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 will 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 $100,000.00 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.

Debarment And Suspension – (See 2 CFR Part 180; 2 CFR § 200.205; 2 CFR § 200.113; and 2 CFR Part 200, Appendix II.)

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); or

(4) Have had one or more public transactions (Federal, State, or local) terminated for cause or default within the preceding three years.

(5) The Recipient agrees that, unless authorized by the Grants Officer, it will not knowingly enter into any subaward or contracts under this grant/cooperative agreement with a person or entity that is not included on the System for Award Management (SAM) (https://www.sam.gov).

The Recipient further agrees to include the following provision in any subaward 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 2 CFR Part 180 and 2 CFR Part 200.

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 U.S.C. §§ 8101-8106.

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.

The Recipient must comply with E.O. 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:
Implementation of Executive Order 13224 Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten To Commit, or Support Terrorism , amended by E.O. 13268, 13284, and 13372.

Procurement Standards - 2 CFR §§ 200.318-200.326
Sections 200.318 - 200.326 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 will be imposed by the Federal awarding agencies upon Recipients, unless specifically required by Federal statute, executive order, or approved by OMB.

Travel and Transportation
Travel must be in accordance with the Recipient's Travel Regulations or the U.S. Government Travel Policy and Regulations at: www.gsa.gov/federaltravelregulation and the per diem rates set forth at: www.gsa.gov/perdiem, absent Recipient's travel regulations. Travel and transportation costs for the grant must be consistent with provisions as established in 2 CFR § 200.473-474.

All other travel, domestic or international, must not increase the total estimated award amount for the grant.

Domestic Travel:
Domestic travel is an appropriate charge to this award and prior authorization for specific trips are not required, if the trip is identified in the Recipient's approved program description and approved budget. Domestic trips not stated in the approved budget require the written prior approval of the Grants Officer, and must not increase the total estimated award amount for the grant.

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, in writing, from the Grants Officer.

International Travel:
International travel requires **PRIOR** written approval by the Project Officer and the Grants Officer, even if the international travel is stated in the approved program description and the approved budget.

The Recipient will comply with the provisions of the Fly America Act (49 U.S.C 40118), as implemented at 41 CFR §§ 301-10.131 through 301-10.143.

Property Standards
Property standards of this award shall follow provisions as established 2 CFR §§ 200.310-200.316.

Intangible Property
Intangible and intellectual property of this award shall generally follow provisions established in 2 CFR § 200.315.

Inventions Report - The Bayh-Dole Act (P.L. 96-517) affords Recipients the right to elect and retain title 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.

Patent Notification Procedures - If the NRC or its 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, E.O.12889 requires NRC to notify the owner. 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 imply 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, such as data, databases or software are determined by Subpart D of 2 CFR Part 200. 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 U.S.C. § 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 U.S.C. § 105.

Record Retention and Access
Recipient shall follow established provisions in 2 CFR §§ 200.333-337.

Conflict Of Interest
Conflict of Interest standards for this award will follow the Organizational Conflict of Interest (OCOI) requirements set forth in Section 170A of the Atomic Energy Act of 1954, as amended, and provisions set forth at 2 CFR § 200.112, Conflict of Interest.

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 Acquisition Management Division, unless otherwise delegated, who shall appoint an intra-agency Appeal Board to review a recipient appeal of an agency action, if required, which will consist of the program office director, the Deputy Director of Office of Administration, and the Office of General Counsel.

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.

Remedies for Noncompliance
Termination of this award will follow provisions as established and described above in "Dispute Review Process" in 2 CFR §§ 200.338-342.

Performance and Financial Monitoring and Reporting 2 CFR 200.327-200.329
Recipient Financial Management systems must comply with the provisions in 2 CFR §200.302

- Payment – 2 CFR §200.305
- Cost Share or Matching – 2 CFR §200.306
- Program Income – 2 CFR §200.307
  - Earned program income, if any, will be added to funds committed to the project by the NRC and Recipient and used to further eligible project or program objectives or deducted from the total project cost allowable cost as directed by the Grants Officer or the terms and conditions of award.

- Revision of Budget and Program Plans – 2 CFR §200.308
  - The Recipient is required to report deviations from the approved budget and program descriptions in accordance with 2 CFR §200.308 (b) and request prior written approval from the Program Officer and the Grants Officer.
  - The Recipient is not authorized to rebudget between direct costs and indirect costs without written approval of the Grants Officer.
  - The Recipient is authorized to transfer funds among direct cost categories up to a cumulative 10 percent of the total approved budget. The Recipient is not allowed to transfer funds if the transfer would cause any Federal appropriation to be used for purposes other than those consistent with the original intent of the appropriation.
  - Allowable Costs – 2 CFR §200.401- §200.403

- See section 2 CFR §§ 200.330-332 for Subrecipient Monitoring and Management.

  Federal Financial Reports - The Recipient is required to submit a "Federal Financial Report" (SF-425) 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-425 is due within 90 days after expiration of the award. The report should be submitted electronically to: Grants_FFR.Resource@NRC.GOV. ***(NOTE: There is an underscore between Grants and FFR).***

  Performance Progress Reports - In accordance with 2 CFR § 200.328, the Recipient will submit Performance Progress Reports (SF-PPR, SF-PPR-B, and the SF-PPR-E) on an semi-annual basis for the period ending September 30, or any portion thereof, unless otherwise authorized by the Grants Officer. Reports are due no later than 30 days following the end of the reporting period. Performance reports are sent to the Program Officer at the email address indicated in the Notice of Award, and to Grants Officer at: Grants_PPR.Resource@NRC.GOV. ***(NOTE: There is an underscore between Grants and PPR).***

Final Reports - The Recipient is required to submit final reports, both Financial (SF-425) and Performance (SF-PPR, SF-PPR-B, SF-PPR-E) within 90 days of the grant expiration. In addition to these reports, a final SF-428, Tangible property report, is also required, if applicable.

Period of Performance – 2 CFR § 200.309
The recipient may charge to the Federal award only allowable costs incurred during the period of performance and any costs incurred before the NRC or pass-through entity made the Federal award that was authorized by the NRC or pass through entity.

Unless otherwise authorized in 2 CFR Part 200 or by special award condition, any extension of the award period can only be authorized by the Grants Officer in writing. Assurances of funding from other than the Grants Officer shall not constitute authority to obligate funds for programmatic activities beyond the expiration date.

The NRC Grant Officer may authorize a no cost extension of the period of performance. However, 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.

Automated Standard Application For Payments (ASAP) Procedures
Unless otherwise stated, Recipient payments are made using the Department of Treasury's Automated Standard Application for Payment (ASAP) system, ASAP.gov, through preauthorized electronic funds transfers. To receive payments, 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 is required to make ASAP withdrawals: (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).

II. Audit Requirements

Audits
Organization-wide or program-specific audits are performed in accordance with the Single Audit Act of 1996, as amended, and as implemented by 2 CFR Part 200, Subpart F—AUDIT REQUIREMENTS. Recipients are subject to the provisions of this subpart if they expend $750,000 or more in a year in Federal awards. See 2 CFR 2 CFR § 200.501.

The Form SF-SAC and the Single Audit Reporting packages for fiscal periods ending on or after January 1, 2008 are submitted online, as follows:

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; and
5. Click "Submit."

Organizations expending less than $750,000 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.

III. Programmatic Requirements

Grant Performance Metrics

The Office of Management and Budget requires all Federal Agencies providing funding for educational scholarships and fellowships as well as other educational related funding to report on specific metrics. These metrics are part of the Academic Competitiveness Council's (ACC) 2007 report and specifically relates to Science, Technology, Engineering, and Mathematics (STEM) curricula.

The performance (technical) reports will contain brief information as prescribed in the applicable uniform administrative requirements 2 CFR §200.328. In addition to the customary performance progress report requested on the SF-PPR, SF-PPR-B, and SF-PPR-E forms, OCHCO requires the following metrics to be reported on by the awardees as follows:

Fellowship Metrics:

1. How many graduate students have been sponsored by NRC funding?
   a. Response is the number of students, for this reporting period and cumulative to the grant.

2. How many students, supported by NRC funding, have received M.S. or equivalent degrees?
   a. Response is the number of students, for this reporting period and cumulative to the grant.

3. How many students, supported by NRC funding, have received Ph.D. or equivalent degrees?
   a. Response is the number of students, for this reporting period and cumulative to the grant.

4. How many students, supported by NRC funding, have accepted a job and are employed in the nuclear industry?
   a. Response is the number of students, for this reporting period and cumulative to the grant.

5. How many items have students produced, for example, Professional Journal articles, publications, patents, or conference reports?
   a. Response is the type and number of items, for this reporting period and cumulative to the grant.

Unsatisfactory Performance

Failure to perform the work in accordance with the terms of the award and maintain at least a satisfactory performance rating may result in designation of the Recipient as high risk and the assignment of special award conditions. Further action may be required as specified in the standard term and condition entitled "Remedies for Noncompliance."

Failure to comply with the award provisions may result in a negative impact on future NRC funding. In addition, the Grants Officer may withhold payments; change the method of payment from advance to reimbursement; impose special award conditions; suspend or terminate the grant.

Other Federal Awards With Similar Programmatic Activities

The Recipient will immediately notify the Project Officer and the Grants Officer in writing if after award, other financial assistance is received to support or fund any portion of the program description stated in the NRC award. NRC will not pay for costs that are funded by other sources.

Prohibition Against Assignment By The Recipient
The Recipient will not transfer, pledge, mortgage, or otherwise assign the award, or any interest to the award, or any claim arising under the award, to any party, banks, trust companies, or other financing or financial institutions without the written approval of the Grants Officer.

Site Visits
The NRC, through authorized representatives, has the right to make site visits to review project accomplishments and management control systems and to provide technical assistance as 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 reasonable access to all facilities and provide necessary assistance for the safety and convenience of the Government representative in the performance of his/her official duties.

IV. Miscellaneous Requirements

Criminal and Prohibited Activities
The Program Fraud Civil Remedies Act (31 U.S.C. §§ 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).

False statements (18 U.S.C. § 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.

False Claims Act (31 U.S.C. § 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.

Copeland "Anti-Kickback" Act (18 U.S.C. § 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 encouraged to purchase American-made equipment and products with funding provided under this award.

Increasing Seat Belt Use in the United States
E.O. 13043, amended by E.O. 13652, requires Recipients to encourage employees and contractors to enforce on-the-job seat belt policies and programs when operating company-owned, rented or personally-owned vehicle.

Federal Leadership of Reducing Text Messaging While Driving
E.O. 13513 requires Recipients to encourage employees, sub-awardees, and contractors to adopt and enforce policies that ban text messaging while driving company-owned, rented

vehicles or privately owned vehicles when on official Government business or when performing any work for or on behalf of the Federal Government.

Federal Employee Expenses
Federal agencies are 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 E.O.s 13230 and 13270, amended by E.O. 13316 and 13385, 13532, 13592, 13555, 13515, and 13621, 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."

Trafficking In Victims Protection Act Of 2000 (as amended by the Trafficking Victims Protection Reauthorization Act of 2003)
Section 106(g) of the Trafficking In Victims Protection Act Of 2000 (as amended as amended, directs on a government-wide basis that:

> "...any grant, contract, or cooperative agreement provided or entered into by a Federal department or agency under which funds are to be provided to a private entity, in whole or in part, shall include a condition that authorizes the department or agency to terminate the grant, contract, or cooperative agreement, without penalty, if the recipient or any subrecipient, or the contractor or any subcontractor (i) engages in severe forms of trafficking in persons or has procured a commercial sex act during the period of time that the grant, contract, or cooperative agreement is in effect, or (ii) uses forced labor in the performance of the grant, contract, or cooperative agreement." (See 22 U.S.C. §7104(g).)

EXECUTIVE COMPENSATION REPORTING
2 CFR § 170.220 directs agencies to include the following text to each grant award to a non-federal entity if the total funding is $25,000 or more in Federal funding.

Reporting Subawards and Executive Compensation.

a. *Reporting of first-tier subawards.*

1. *Applicability.* Unless you are exempt as provided in paragraph d. of this award term, you must report each action that obligates $25,000.00 or more in Federal funds that does not include Recovery funds (as defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111–5) for a subaward to an entity (see definitions in paragraph e. of this award term).

2. *Where and when to report.*

i. You must report each obligating action described in paragraph a.1. of this award term to *http://www.fsrs.gov.*

ii. For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)

3. *What to report.* You must report the information about each obligating action that the submission instructions posted at *http://www.fsrs.gov* specify.

b. *Reporting Total Compensation of Recipient Executives.*

1. *Applicability and what to report.* You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if—

i. the total Federal funding authorized to date under this award is $25,000.00 or more;

ii. in the preceding fiscal year, you received—

(A) 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR § 170.320 (and subawards); and

(B) $25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR § 170.320 (and subawards); and

iii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at *http://www.sec.gov/answers/execomp.htm*.)

2. *Where and when to report.* You must report executive total compensation described in paragraph b.1. of this award term:

i. As part of your registration profile at *http://www.sam.gov* .

ii. By the end of the month following the month in which this award is made, and annually thereafter.

c. *Reporting of Total Compensation of Subrecipient Executives.*

1. *Applicability and what to report.* Unless you are exempt as provided in paragraph d. of this award term, for each first-tier subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if—

i. in the subrecipient's preceding fiscal year, the subrecipient received—

(A) 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR § 170.320 (and subawards); and

(B) $25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and

ii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at *http://www.sec.gov/answers/execomp.htm*.)

2. *Where and when to report.* You must report subrecipient executive total compensation described in paragraph c.1. of this award term:

i. To the recipient.

ii. By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year

(*i.e.,* between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.

d. *Exemptions*

If, in the previous tax year, you had gross income, from all sources, under $300,000.00, you are exempt from the requirements to report:

i. Subawards,

and

ii. The total compensation of the five most highly compensated executives of any subrecipient.

e. *Definitions.* For purposes of this award term:

1. *Entity* means all of the following, as defined in 2 CFR Part 25:

i. A Governmental organization, which is a State, local government, or Indian tribe;

ii. A foreign public entity;

iii. A domestic or foreign nonprofit organization;

iv. A domestic or foreign for-profit organization;

v. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

2. *Executive* means officers, managing partners, or any other employees in management positions.

3. *Subaward:*

i. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.

ii. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see Sec. __ .210 of the attachment to OMB Circular A–133, "Audits of States, Local Governments, and Non-Profit Organizations)

iii. A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.

4. *Subrecipient* means an entity that:

i. Receives a subaward from you (the recipient) under this award; and

ii. Is accountable to you for the use of the Federal funds provided by the subaward.

5. *Total compensation* means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR § 229.402(c)(2)):

i. *Salary and bonus.*

ii. *Awards of stock, stock options, and stock appreciation rights.* Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.

iii. *Earnings for services under non-equity incentive plans.* This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.

iv. *Change in pension value.* This is the change in present value of defined benefit and actuarial pension plans.

v. *Above-market earnings on deferred compensation which is not tax-qualified.*

vi. Other compensation, if the aggregate value of all such other compensation (e.g., severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds $10,000.00.