



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

June 30, 2015

Mary Jo Parker, Ed. D
University of Houston-Downtown
Office of Sponsor Programs
One Main Street
Houston, TX 77002

VIA Electronic Mail
parkerm@uhd.edu

SUBJECT: GRANT NO: NRC-HQ-7P-15-G-0003

Dear Dr. Parker:

Pursuant to the authority contained in the Federal Grant and Cooperative Grantee Act of 1977 and the Atomic Energy Act of 1954, the Nuclear Regulatory Commission (NRC) hereby awards to the University of Houston-Downtown (hereinafter referred to as the "Recipient"), the sum of \$850,000 to provide support to the "Preparing Minorities for Nuclear-related Jobs through Research & Certification" 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 for the furtherance of program objectives during the period beginning with the effective date of June 30, 2015 and ending June 29, 2020.

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 \$118,170.00 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.

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. Sunshine Wilson by email at Sunshine.Wilson@nrc.gov.

Sincerely yours,

M'Lita Carr

M'Lita Carr

Grants Officer
Resources and Grants Team
Acquisition Management Division

Attachments:

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

TEMPLATE - Admin

SUNSI REVIEW COMPLETE

ANM002

Grant and Cooperative Agreement

CHOOSE ONE:

☐ COOPERATIVE AGREEMENT

☒ GRANT

 CHOOSE ONE: ☒ EDUCATION ☐ FACILITIES ☐ RESEARCH ☐ SDCR ☐ TRAINING

1. GRANT/COOPERATIVE AGREEMENT NUMBER NRC-HQ-7P-15-G-0003		2. SUPPLEMENT NUMBER		3. EFFECTIVE DATE 06/30/2015		4. COMPLETION DATE	
5. ISSUED TO NAME/ADDRESS OF RECIPIENT (No., Street, City/County, State, Zip) UNIVERSITY OF HOUSTON-DOWNTOWN 1 MAIN ST HOUSTON TX 770021014				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)				9. PRINCIPAL INVESTIGATOR/ORGANIZATION'S PROJECT OR PROGRAM MGR. (Name & Phone) Mary Jo Parker, Ed.D. parkerm@uhd.edu; 713-221-8471			
8. COMMERCIAL & GOVERNMENT ENTITY (CAGE) NO.							
10. RESEARCH, PROJECT OR PROGRAM TITLE Preparing Minorities for Nuclear-related Jobs through Research & Certification							
11. PURPOSE See Schedule							
12. PERIOD OF PERFORMANCE (Approximately) 06/30/2015 through 06/29/2020							
13A.		AWARD HISTORY		13B.		FUNDING HISTORY	
PREVIOUS		\$0.00		PREVIOUS		\$0.00	
THIS ACTION		\$850,000.00		THIS ACTION		\$140,000.00	
CASH SHARE		\$0.00		TOTAL		\$140,000.00	
NON-CASH SHARE		\$0.00					
RECIPIENT SHARE		\$118,170.00					
TOTAL		\$850,000.00					
14. ACCOUNTING AND APPROPRIATION DATA 2015-X0200-FEEBASED-7P-7PD001-51-K-214-1041-4110							
PURCHASE REQUEST NO.		JOB ORDER NO.		AMOUNT		STATUS	
SBCR-15-0012							
15. POINTS OF CONTACT							
	NAME	MAIL STOP	TELEPHONE	E-MAIL ADDRESS			
TECHNICAL OFFICER	TUWANDA M. SMITH		301-415-7394	Tuwanda.Smith@nrc.gov			
NEGOTIATOR							
ADMINISTRATOR	M'LITA R. CARR		(301) 415-6869	MLITA.CARR@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: <input type="checkbox"/> NO CHANGE IS MADE TO EXISTING PROVISIONS <input type="checkbox"/> FDP TERMS AND CONDITIONS AND THE AGENCY-SPECIFIC REQUIREMENTS APPLY TO THIS GRANT				18. APPLICABLE ENCLOSURE(S), IF CHECKED: <input type="checkbox"/> PROVISIONS <input type="checkbox"/> SPECIAL CONDITIONS <input type="checkbox"/> REQUIRED PUBLICATIONS AND REPORTS			
UNITED STATES OF AMERICA				COOPERATIVE AGREEMENT RECIPIENT			
CONTRACTING/GRANT OFFICER M'LITA R. CARR		DATE 06/30/2015		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)	AMOUNT (F)
	<p>CFDA Number: 77.007</p> <p>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.</p> <p>Payment:</p> <p style="padding-left: 40px;">ASAP GRANT FUNDS REIMBURSEMENT SYS</p> <p style="padding-left: 40px;">US TREASURY</p> <p>Period of Performance: 06/30/2015 to 06/29/2020</p> <p>NRC-HQ-7P-14-FOA-0001</p>				

ATTACHMENT A - SCHEDULE

A.1 PURPOSE OF GRANT

The purpose of this grant is to provide support to the "Preparing Minorities for Nuclear-related Jobs through Research & Certification" as described in Attachment B entitled "Program Description."

A.2 PERIOD OF GRANT

1. The effective date of this Grant is June 30, 2015. The estimated completion date of this Grant is June 29, 2020.
2. Funds obligated hereunder are available for program expenditures for the estimated period: June 30, 2015 - June 29, 2020.

A. GENERAL

1. Total Estimated NRC Amount: \$850,000.00
2. Total Obligated Amount: \$140,000.00
3. Cost-Sharing Amount: \$118,170.00
4. Activity Title: Preparing Minorities for Nuclear-related Jobs through Research & Certification
5. NRC Project Officer: Tuwanda Smith
6. DUNS No.: 039674494

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	Year 5
Personnel	\$ 22,263.00	\$ 37,114.00	\$ 38,228.00	\$ 39,375.00	\$ 40,556.00
Fringe Benefit	\$ 6,011.00	\$ 10,021.00	\$ 10,321.00	\$ 10,631.00	\$ 10,950.00
Travel	\$ 4,500.00	\$ 5,400.00	\$ 5,400.00	\$ 5,400.00	\$ 5,400.00
Supplies	\$ 3,836.00	\$ 8,700.00	\$ 8,700.00	\$ 8,700.00	\$ 8,700.00
Other	\$ 63,380.00	\$105,600.00	\$106,600.00	\$106,600.00	\$106,600.00
Indirect Costs (40%)	\$ 8,905.00	\$ 14,846.00	\$ 15,291.00	\$ 15,750.00	\$ 16,222.00
Yearly Total	\$108,895.00	\$181,681.00	\$184,540.00	\$186,456.00	\$188,428.00

All travel must be in accordance with the University of Houston-Downtown Travel 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 \$968,170.00 for the five year period, inclusive of cost share.
2. NRC hereby obligates the amount of \$140,000.00 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 Grants 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.

ATTACHMENT B – PROGRAM DESCRIPTION

The University of Houston-Downtown (UHD) in cooperation with Texas A & M University (TAMU) Nuclear Engineering Department (NEUN), TAMU Nuclear Power Institute (NPI), the University of Texas-Houston Graduate School of Biomedical Sciences (UTH GSBS), the South Texas Project Nuclear Operating Company (STP NOC), and Comanche Peak Nuclear Power Plant (CP NPP) (long-time partners on two active UHD NRC awards #NRC-27-10-1121 and #NRC-HQ-12-G-38-0006), propose to extend these current awards to a broader minority audience through a program entitled "Preparing Minorities for Nuclear-related Jobs through Research & Certification". This project's objectives are to: 1) provide minority undergraduate scholarships to complete a science, technology, engineering, and mathematics (STEM) baccalaureate degree, 2) provide extensive exposure to nuclear-related graduate and workforce program through field trip/seminar exposure; 3) support completion of the five-course Nuclear Power Institute (NPI) certificate program qualifying graduates to enter nuclear power plant jobs and nuclear engineering studies, 4) provide a dedicated health physics program of study qualifying students for radiation safety/health physics positions, and 5) provide mentored nuclear-related research experiences in radiochemistry, control and instrumentation, math, physics/material science, & computational radiochemistry. With an ever increasing underrepresented population and the increased likelihood of the current nuclear workforce facing retirement age, UHD as an Hispanic-Serving and Minority-Serving Institution in the fourth largest city in the U.S. is perfectly positioned to address this much needed workforce. Further, with the world's best medical center with the notable M.D. Anderson Cancer Center located a mere 15 minutes west of UHD, the world's most notable Nuclear Engineering and Health Physics Program at Texas A&M University only 1.5 hours northwest of UHD, and finally with two nuclear power plants within driving distance from UHD (all of whom have been partnership on current NRC awards) UHD is centrally located to all major nuclear-related workforce players in the southern U.S. and in NRC Region 4. UHD PI/Co-PIs have clearly shown their ability to recruit, expand, graduate and direct into nuclear-related graduate programs/jobs among UHD minority STEM populations to-date. With the addition of the *NPI certificate* program through this proposal and the addition of nanotechnology and nuclear-related chemical sensors research, UHD will be able to continue preparing minorities for nuclear-related industries. *This proposal seeks to widen the current UHD pipeline into nuclear-related science graduate programs and workforce employment.* This project uses NRC metrics to evaluate the success of the program and UHD longitudinal tracking of these metrics to inform the program objectives through the five-year project period and five year following the end of the project. This project will produce up to 56 new STEM graduates within the five year period with 50% entering graduate programs and 50% entering the workforce.

UHD, established in 1974, provides access to quality higher education at the undergraduate level and at the second most affordable tuition rate in Texas. Our rapidly expanding Hispanic student body makes UHD one of the main centers of higher education for Hispanics in Texas. Ethnically diversity, UHD's 14,000 students mirror the multicultural and multilingual character of the City of Houston: 37% Hispanic; 29% African-American; 22% Caucasian; 10% Asian; and 2% Other. 60% of the UHD students are female. UHD has a complement of 40 baccalaureate degrees in the arts, sciences, business, and engineering technology. The NPI certificate program is in its second year and only one of a hand-full of current certificates offered by UHD to its undergraduates and to the current workforce. Scholars Academy (SA) is an academically competitive program at UHD that promotes scholarship and student success for minorities majoring in STEM. Its mission is to increase the number of qualified, skilled, and highly competent STEM graduates. SA mirrors UHD minority demographics and has made a significant impact on increasing numbers of traditionally

underrepresented minorities and women baccalaureates in STEM then transitioning them into graduate school and/or the STEM workforce. SA uses a five-point STEM model yielding not only student success, but also a template for replication. The five-point model includes: Point 1: Scholarship Support; Point 2: Faculty and Peer Mentoring; Point 3: Broadening Experiences; Point 4: Graduate School & Workforce SoftSkill Preparation; and Point 5: Mentored Research with PhD faculty. SA's current membership is 160 STEM undergraduates. SA's 15-year existence offers an alumni base of over 700 graduates with over 41% of all SA members continuing on to graduate school or professional programs and over 52% of SA graduates continue to work in STEM industries. In total 91% of all SA graduates either work in STEM areas or have continued on to pursue post-baccalaureate degrees in STEM areas. *SA has a proven record of recruitment, retention, completion and entrance of females and other minorities into graduate/professional levels of education or the STEM workforce.*

Long-time Nuclear-related Project Partners

TAMU NUEN offers the largest nuclear engineering program in the U.S. TAMU's NUEN department's composition is primarily male and with very few minorities (81% male and 19% female; 26% are underrepresented minorities [2010 data]). UTH GSBS is the graduate program for both the University of Texas M.D. Anderson Cancer Center and the University of Texas Health Science Center. A number of our faculty conduct research in areas related to biophysics, radiation biology, nuclear medicine, and medical physics. STP NOC is an industry leader, as an electric generating station continues to partner with UHD through participation in recruitment fairs and sponsored facility tours. As one of the newest, largest nuclear power facilities in the nation, STP NOC produces electricity to two million Texas homes (STP NOC, 2004). CP NPP continues to partner with UHD through recruitment and sponsored facility tours for undergraduate NRC Scholars.

Project Aims and Objectives

Changing workforce demographics demand that the underrepresented be brought into the undergraduate and graduate educational pipeline to address growing needs in STEM areas across nuclear sciences and medicine arenas. The current STEM talent pool does not fully represent the American labor force. Several factors should be considered in addressing this imbalance including: 1) the need for increased federal research funding, 2) increased scholarships, 3) improved participation rates of women/underrepresented minorities, and 4) easier access to STEM careers by non-traditional students or re-entry by former workers (CPST, 2007; Hira, 2007). Of special importance in addressing the increased need of Hispanics, and other underrepresented, in the STEM labor force, during the college years, is the need for scholarship and mentored research support as a guiding component to entering any nuclear-related work or advanced study arena. This proposal seeks to widen an already well-established four-year university pipeline to the workforce and nuclear-related graduate programs through addition of new mentored research experience areas (nanotechnology nuclear sensors, mathematical modeling, control and instrumentation, and health physics) as well as continue radiochemistry, computation nuclear chemistry, and thermal materials analysis, scholarship and academic support to new incoming UHD students, and support of NPI certificate coursework (*Fundamentals of NPP; NPP Systems; Human Performance for NPP Engineers; and NPP Operations*).

Aims

The well-defined and focused project aims include: 1) provide scholarship funding for undergraduates to complete a STEM baccalaureate degree, 2) provide extensive exposure to nuclear-related graduate and workforce program through industry/graduate program exposure; 3) support completion of the five-course NPI certificate program qualifying graduates to enter nuclear power plant jobs, 4) provide a dedicated health physics program of study complimenting

the STEM degree, and 5) produce STEM graduates qualified and prepared to enter viable nuclear-related jobs or graduate programs of study with nuclear-related emphasis.

Objective 1: Continued use of the successful Scholars Academy mentoring and broadening activities with nuclear-related partners to increase and impact exposure to nuclear workforce and graduate programs for all STEM majors: The number and percentage of STEM graduates who take jobs in STEM or STEM-related fields will be supported by this objective.

Objective 2: Expand and Increase Mentored Research Opportunities and Stipends Supporting a Widening of the Existing Research Opportunities across Nuclear-related Programs: Minority undergraduate research experiences significantly motivate students to remain in STEM careers and provide the confidence and skills necessary for successful entrance into advanced degrees and/or the workforce. Three new PhD professors and labs will be included into existing labs of current awards. These include: CIET-Dr. Feng; Nanotechnology sensors-Dr. Jiang; and Applied Mathematics-Dr. Jegdic.

Objective 3: Provide Scholarship Assistance to Minority STEM Undergraduates thereby Supporting and Increasing the number of minority graduates qualified to enter nuclear-related workforce and/or graduate programs: Barriers to underrepresented project participants are eliminated through academic scholarships. Support extends to conference registrations, travel costs to attend/present at local/national scientific conferences, and summer onsite, offsite, and international research opportunities. To be eligible, project participants must be approved for admissions to UHD and accepted by the SA application faculty review committee. Academic scholarship support ranges from \$4500 to \$5000 per year, and would require a minimum 12-hour college course load, as well as the participant be a U.S. citizen or a permanent resident, and maintain good academic standing in the SA and a 3.0 GPA.

Objective 4: Provide full support of Nuclear Power Industry Certificate Coursework for all NRC Scholars, thereby increasing qualifications and eligibility for entrance into nuclear workforce arenas and nuclear engineering/health physics advanced studies. NPI certificate courses at lower UHD tuition costs will guarantee a level of advanced preparedness and a more competent NRC Scholar for entry into the nuclear workforce and graduate programs.

Objective 5: Promote and provide a Health Physics program through the Natural Sciences Physics concentration. This objective will motivate more biology majors to seek nuclear-related entry into radiation safety and radiation health workforce. The goal of these objectives is to ultimately produce minority STEM graduates qualified and prepared to enter viable nuclear-related jobs or graduate programs of study with nuclear-related emphasis, thus preparing the needed workforce of the near future.

Plan of Operation

Recruitment begins with the entire UHD campus, the CST college and all bridge feeder systems (community college and high school districts). Current NRC scholars are excellent recruiters in attracting high caliber students into this project. This project will also work with UHD Admission Recruiters to widen the access for all potential applicants. UHD, the SA, and HUNSTEM websites provide an internet recruitment presence. Print media, such as posters, flyers, and brochures, explain the nature of the project. Also, during UHD Recruitment Events and SA K-20 Educational and Industry/Business Council meetings, special recruitment announcements will be extended to recruitment targets. High school Principals, counselors, and community college department chairs and deans will receive electronic versions of all print materials promoting UHD, SA, and the project. Once admitted to UHD, all project participants must apply and be accepted into the SA. The criteria for acceptance includes: 1) A cumulative GPA of 3.0 in High School or at UHD if already enrolled, 2) A declared STEM major, 3) A one-page essay describing their interest in STEM and commitment to fulfilling the terms of the program, 4) Two letters of recommendation from high school math/science teachers or faculty members from their community college or UHD STEM faculty member, 5) Review by the SA Faculty Review Committee and 6) Signing an NRC Agreement form. Application materials will be maintained online at the SA website. Removal of barriers to underrepresented STEM participant success is

crucial. This support comes in the form of academic scholarships and summer research stipends, foundational to retention and graduation as undergraduates, and allowing preparation and entrance into graduate programs in nuclear-related sciences). Every project participant receives undergraduate enrichment and mentored support through the SA program. Special courses, core to the development of community and undergraduate knowledge, is offered through the SA, entitled Freshman and Transfer Seminar courses. The SA Director teaches these courses each semester. Also, mentoring is foundational to the project. A major component supporting successful mentored research opportunities, as part of the project, already established is continued and expanded to include new STEM disciplines. Opportunities for research thrive through: 1) on-site UHD Co-PIs working in chemistry/ physics / nanotechnology/mathematical/control and instrumentation nuclear science relevant research, 2) off-site partner TAMU/SURG-led summer research on nuclear energy topics, and 3) on-site nuclear power plant internships widen the already established pipeline from undergraduate to graduate program to industry level research opportunities for the project participants. Undergraduate seminars and field trips will continue through established project partnerships on focused topics and nuclear-related facilities. All attendance will be tracked by the SA Director (UHD PI) and Program Manager (UHD Other Personnel).

Project Start Date

This project anticipates a June 30, 2015 start date. Planning and coordination begins immediately as part of the proposal process. Because creating a pipeline between SA/UHD and TAMU forms a critical product of the project, one PI is needed, acting as the leader and responsible party for the project at each end of the undergraduate-to-graduate pipeline. UHD PI will coordinate all institutional-partnership communications and activities. All grant reports will be the responsibility of the UHD PI. SA Program manager will assist in preparation of all financial reports. UHD PI will initiate conference calls and email to support development of the enhanced curriculum piece by all project Co-PIs and partners.

SA/UHD Roles and Responsibilities

SA/UHD will plan, coordinate and implement all undergraduate recruitment, coordinate scholarships through UHD Financial Aid office, and interface with all project partners to establish field trips/seminars/research schedules and opportunities annually (see Objectives 1-5). Timelines and applications will be expanded upon those currently used now by UHD.

Evaluation of the Project

Evaluation occurs through monitoring progress each semester. Evaluation is the role of the UHD PI. UHD PI and Program Manager monitor all academic progress to ensure a full-time status is maintained, grade point averages satisfy SA requirements, co-curricular support activities are satisfied, research activities are undertaken, and progress toward on-time graduation occurs for all participants. SA Program manager is responsible for maintaining tracking data. UHD PI is responsible for data reports for expected products and results. Summer research experience monitoring reports are the PhD researchers' responsibility. If academic progress falters, meetings with PI and mentor faculty will occur. A plan for regaining academic progress is made and executed. The main metrics of success this project include: 1) #-% of STEM graduates taking STEM jobs; 2) #-% students participating in scientific activities or research experiences in industry, gov't. or not-for-profit sectors; 3) #-% students research presentations or student science exchange events; 4) #-% students participating in interdisciplinary research or educational experiences; 5) #-% students engaging in research experiences in an academic, gov't or not-for-profit industry; 6) #-% of graduate and post-doctoral fellowships completing a STEM graduate/post-doctoral program; 7) #-% program completers employed in STEM or STEM-related fields; and 8) #-% students participating in scientific activities, research, or internship experiences. UHD Co-PIs lead summer research activities on-site and through coordinated efforts with all off-site committed partners. UHD PI,

Co-PIs and Program manager develop in-house summer research programs targeting project participants. SA Director and Program manager oversee recruitment all summer research opportunities. Project PIs, Co-PIs, and Program Manager will hold an annual one-day meeting in late July to review program evaluation data, examine any modifications which may be needed to ensure academic and program progress of the project. Semi-annual reports will be reviewed with TAMU PI and all Co-PIs or Senior Personnel of the project at this time. Bi-annual meetings with scholarship recipient undergraduates will be held.

UHD Qualified Personnel and Past Successes

Dr. Mary Jo Parker, Project PI, Natural Sciences Faculty and Scholars Academy Director, directs the project. Dr. Parker has experience with minority STEM undergraduates through courses taught at UHD. She brings extensive experience in pre-college program management at both the K-12 STEM, high-minority magnet school and higher education level through her Director position here at UHD. Dr. Parker is currently PI/Co-PI on two large NRC projects and PI on two other federal projects (DOED and NOAA). Dr. Parker demonstrates successful project management of federally-funded research projects. Highly qualified Co-PIs and brief synopses of the individual research are found below.

Team Mem	PhD Researcher	Nuclear Focus	Brief Synopsis of Nuclear-Related Research Focus
Co-PI	Dr. Mian Jiang,	Radiochemistry	Nanotechnology sensor development; Study of chemical sensing on species of nuclear interests; Portable sensor for field testing; Electrochemical remediation and treatment of low-level nuclear waste
Co-PI	Dr. Maria Benavides	Radiochemistry	Computational chemistry & nuclear medicine
Co-PI	Dr. Weining Feng	Control and Instrumentation	Automated control of electrical and chemical functions; analog & digital
Co-PI	Dr. Katarina Jegdic	Mathematics	Use of Riemann initial data to model analytically and numerically
Other Personnel	Dr. Janusz Grebowicz Dr. Rube Williams	Radiochemistry, Material Science	Thermal analysis of materials such as granite, salt, other

Previous NRC Project Summary Results:

Current award results displayed below indicate UHD's careful and steady progress toward increasing the number of underrepresented students participating in nuclear-related research, disseminating results from the same research, completing degrees and entering either advanced graduate programs or the workforce.

Previous NRC Award Metrics	#	%	Degree Areas
UHD Student Receiving Scholarships	33	100%	Chem; Math; SAD; CIET; Bio; Geol; CS;
UHD Students in Scientific Research or Activities	25	76%	Radiochem; Eng; Math; Material Sci; NucMed; Med;
UHD Student Conference Research Presentations	41	130%	Poster & Paper presenters; Attendees
UHD Entering Graduate Programs/Workforce	11	33%	TAMU NUEN; Rice; UMich; BCM; TAMU Math; UTHSC-SA

Project Timetable, Dissemination, & Expected Results

An annual timetable includes ongoing recruitment benchmarks, assignment of research mentees, fall and spring research submission by participants to student conferences (internal and external), semi-annual progress and financial reports, and PI/Co-PI team meetings as well as meetings with partners. Fall/spring field trips and seminars round out the major elements of each year of a five-year schedule. Dissemination efforts occur through recognized conference presentation submissions of annual programs, such as South Texas Chapter of Health Physics Society (STC HPS)-Sept/Apr, SACNAS-Oct, American Nuclear Society (ANS)-Mar/Apr, and the Council on Undergraduate Research (CUR). PI/Co-PIs lead the submission efforts to professional organizations related to program outcomes and new research data. Further dissemination will include project participants' submissions to recognized student conferences. Results of increased retention/ graduation rates of minority UHD STEM students are seen to continue an equal to greater rates (see previous awards summary data). Addition of the NPI certificate program anticipates 100% of all new NRC scholars graduating as NPI certified, thus qualified or immediate entry into partnering programs. Widespread interest in nuclear sciences

by non-scholar participants is anticipated. Up to 56 minority undergraduates will be educated and trained for advancement into nuclear-related sciences.

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 U.S.C. § 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 Part 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 Part 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, must be made, in writing (which includes submission by e-mail), to the designated Grants Officer at least 30 days before the proposed change. The request must 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 limits 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 U.S.C § 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." The form concerns 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 §§ 200.327-329

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
 - Recipients are to be careful with providing excessive cost share or match since at the end of the grant, if the identified match has not been provided, then a portion of the federal share may be required to be returned to the Government.
- 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 be deducted from the total project cost for the grant, as directed by the Grants Officer or indicated in the terms and conditions of the 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 Project Officer and the Grants Officer.
 - The Recipient is not authorized to re-budget between direct costs and indirect costs without written prior 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 §§ 200.401-403
- See section 2 CFR §§ 200.330-332 for Subrecipient Monitoring and Management.

Federal Financial Reports - In accordance with 2 CFR § 200.327, the Recipient will 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 authorized by the Grants Officer. 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 a semi-annual basis for the periods ending March 31, and 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 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, SBCR requires the following metrics to be reported on by the awardees as follows:

1. The number and percentage of STEM graduates who take a job in a STEM or STEM related Field
2. The number and percentage of students who participate in scientific activities or research experiences in industry, government, or the not-for-profit sector.
3. The number and percentage of students that present research findings at scientific meetings or student science exchange events.
4. The number of students who participate in inter disciplinary research or educational experiences.
5. The number of students who engage in research experiences in an academic, government, or not-for-profit industry
6. The number and percentage of graduate and post-doctoral fellowships who complete a STEM graduate or post-doctoral program
7. The number and percentage of program completers who are employed in a STEM or STEM-related field.
8. The number and percentage of students who participate in scientific activities or research experiences in industry, government, or the not-for-profit sector. This metric will include internships.

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.