

# Grant and Cooperative Agreement

CHOOSE ONE:  
 COOPERATIVE AGREEMENT  
 GRANT

CHOOSE ONE:  EDUCATION     FACILITIES     RESEARCH     SDCR     TRAINING

|  |                      |                                 |                    |
|--|----------------------|---------------------------------|--------------------|
| 1. GRANT/COOPERATIVE AGREEMENT NUMBER<br>31310018M0024 | 2. SUPPLEMENT NUMBER | 3. EFFECTIVE DATE<br>07/01/2018 | 4. COMPLETION DATE |
|--|----------------------|---------------------------------|--------------------|

|   |  |
|---|--|
| 5. ISSUED TO<br>NAME/ADDRESS OF RECIPIENT (No., Street, City/County, State, Zip)<br>PENNSYLVANIA STATE UNIVERSITY, THE<br>Attn: [REDACTED]<br>110 TECHNOLOGY CENTER<br>UNIVERSITY PARK PA 168027000 | 6. ISSUED BY    U.S. NRC - HQ<br><b>Mailing Address:</b> Acquisition Management Division<br>Mail Stop: TWFN-07B20M<br>Washington DC 20555-0001 |
|---|--|

|  |   |
|--|---|
| 7. TAXPAYER IDENTIFICATION NO. (TIN)         | 9. PRINCIPAL INVESTIGATOR/ORGANIZATION'S PROJECT OR PROGRAM MGR. (Name & Phone)<br>[REDACTED] |
| 8. COMMERCIAL & GOVERNMENT ENTITY (CAGE) NO. |   |

10. RESEARCH, PROJECT OR PROGRAM TITLE  
The Pennsylvania State University Nuclear Education Fellowship Program

11. PURPOSE  
See Schedule A.1

12. PERIOD OF PERFORMANCE (Approximately)  
07/01/2018 through 06/30/2022

| 13A.            | AWARD HISTORY | 13B.         | FUNDING HISTORY |
|-----------------|---------------|--------------|-----------------|
| PREVIOUS        | \$0.00        | PREVIOUS     | \$0.00          |
| THIS ACTION     | \$0.00        | THIS ACTION  | \$0.00          |
| CASH SHARE      | \$0.00        | <b>TOTAL</b> | \$0.00          |
| NON-CASH SHARE  | \$0.00        |              |                 |
| RECIPIENT SHARE | \$40,401.00   |              |                 |
| <b>TOTAL</b>    | \$0.00        |              |                 |

14. ACCOUNTING AND APPROPRIATION DATA  
2018-X0200-IUPMRU-60-60D099-60B991-1148-72-S-164-4110-72-S-164-1148

| PURCHASE REQUEST NO. | JOB ORDER NO. | AMOUNT | STATUS |
|----------------------|---------------|--------|--------|
| RES-18-0202          |               |        |        |

15. POINTS OF CONTACT

|                   | NAME           | MAIL STOP  | TELEPHONE    | E-MAIL ADDRESS              |
|-------------------|----------------|------------|--------------|-----------------------------|
| TECHNICAL OFFICER | NHEBRONISREAL  | TWFN10BB56 | 301-415-6996 | Nancy.Hebron-Isreal@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:<br><input type="checkbox"/> NO CHANGE IS MADE TO EXISTING PROVISIONS<br><input type="checkbox"/> FDP TERMS AND CONDITIONS AND THE AGENCY-SPECIFIC REQUIREMENTS APPLY TO THIS GRANT | 18. APPLICABLE ENCLOSURE(S), IF CHECKED:<br><input type="checkbox"/> PROVISIONS <input type="checkbox"/> SPECIAL CONDITIONS<br><input type="checkbox"/> REQUIRED PUBLICATIONS AND REPORTS |
|---|---|

|                                 |  |
|---------------------------------|--|
| <b>UNITED STATES OF AMERICA</b> | <b>COOPERATIVE AGREEMENT RECIPIENT</b> |
|---------------------------------|--|

|   |                    |                           |      |
|---|--------------------|---------------------------|------|
| CONTRACTING/GRANT OFFICER<br>M'LITA R. CARR | DATE<br>06/29/2018 | AUTHORIZED REPRESENTATIVE | DATE |
|---|--------------------|---------------------------|------|

# Grant and Cooperative Agreement

| ITEM NO.<br>(A) | ITEM OR SERVICE (Include Specifications and Special Instructions)<br>(B)  | QUANTITY<br>(C) | UNIT<br>(D) | ESTIMATED COST    |               |
|-----------------|---|-----------------|-------------|-------------------|---------------|
|                 |   |                 |             | UNIT PRICE<br>(E) | AMOUNT<br>(F) |
|                 | <p>CFDA Number: 77.008</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>Period of Performance: 07/01/2018 to 06/30/2022</p> |                 |             |                   |               |



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

July 1, 2018

[REDACTED]  
The Pennsylvania State University  
Office of Sponsored Programs  
110 Technology Center Building  
University Park, PA 16802-7000

VIA Electronic Mail  
[REDACTED]

SUBJECT: GRANT NO: 31310018M0024

Dear [REDACTED]:

Pursuant to the authority contained in the Federal Grant and Cooperative Agreement Act of 1977, as amended, and the Atomic Energy Act of 1954, as amended, the Nuclear Regulatory Commission (NRC) hereby awards to The Pennsylvania State University (hereinafter referred to as the "Grantee" or "Recipient"), the sum of \$400,000.00 to provide support for "The Pennsylvania State University Nuclear Education Fellowship" entitled "Program Description."

This award is effective July 1, 2018 and shall apply to expenditures made by the Recipient furtherance of program objectives during the period beginning with the effective date of July 1, 2018 and ending June 30, 2022.

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 Provisions); all of which have been agreed to by your organization. In addition your grant application proposes [REDACTED] in cost share for this program. 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 issues/concerns discussed with your Authorized Representative during the review. Within 60 days of the effective award date, SBCR will conduct a periodic review to ensure compliance with applicable Civil Rights statutes. SBCR will notify, within the 60 days, the institution's Authorized Representative as to the results of the review and requirements, if any, for compliance. The institution's cooperation with SBCR is essential. The continued eligibility for 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 Supreme Court Decisions including *Fisher*, *Gratz*, and *Grutter*.

As a recipient of this award you are required to have an active account with FedConnect, please confirm your account status at [www.FedConnect.com](http://www.FedConnect.com).

Sincerely yours,

M'Lita Carr  
Assistance Agreement Officer  
Operations Branch B  
Acquisition Management Division

Attachments:

Attachment A – Schedule

Attachment B – Program Description

Attachment C – Standard Terms and Condition

## Attachment A - Schedule

### A.1 PURPOSE OF GRANT

The purpose of this Grant is to provide support to the "The Pennsylvania State University Nuclear Education Fellowship" as described in Attachment B entitled "Program Description."

### A.2 PERIOD OF GRANT

1. The effective date of this Grant is July 1, 2018. The estimated completion date of this Grant is June 30, 2022.
2. Funds obligated hereunder are available for program expenditures for the estimated period: July 1, 2018 – June 30, 2022.

### A.3 GENERAL

- |                                |  |
|--------------------------------|--|
| 1. Total Estimated NRC Amount: | \$400,000.00   |
| 2. Total Obligated Amount:     | \$400,000.00   |
| 3. Cost-Sharing Amount:        | [REDACTED]   |
| 4. Activity Title:             | The Pennsylvania State University Nuclear Education Fellowship |
| 5. NRC Project Officer:        | Nancy Hebron-Isreal  |
| 6. DUNS No.:                   | [REDACTED]   |

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

1. The total estimated amount of this Award is \$ [REDACTED] for the four year period; inclusive of [REDACTED] 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 Recipient in accordance with procedures set forth in the Automated Standard Application for Payments (ASAP) Procedures set forth below.

### A.5 BUDGET

Revisions to the grant award budget shall be made in accordance with Revision of Grant Budget in accordance with [2 CFR § 200.308](#).

## ATTACHMENT B - PROJECT DESCRIPTION

### Overview

The Penn State Nuclear Engineering Program is requesting \$400,000 in funds from the U.S. Nuclear Regulatory Commission (NRC) Nuclear Education Program Fellowship Grant Program for the Fiscal Year 2018 which supplemented by our cost match will fund two (2) Graduate Nuclear Education Fellowships for students seeking advanced degrees in nuclear engineering. Two full fellowships will be issued for a four-year period. The full amount of a fellowship is approximately equivalent to our graduate research assistant support and will provide the fellows with stipend, fringe benefits, partial summer wages, and full tuition & fees coverage. Recipients will be selected based on their previous academic performance, recommendations, and their research interests in nuclear engineering. Consideration will also be given to candidates that will increase diversity of our nuclear engineering graduate programs. Our graduate program's size, coupled with our strong curriculum in nuclear power, means each year Penn State produces a large number of new nuclear engineers that enter the nuclear power workforce. Our MSc, MEng and PhD graduates are highly recruited by all sectors associated with nuclear power. We believe that these new fellowships will attract academically strong students to continue in or to enter the field of nuclear engineering. We are confident that these students as graduates with a power engineering background will become the future leaders in the future expansion of nuclear power.

### Background on Nuclear Engineering at Penn State

Penn State first became engaged in nuclear engineering education in 1955, the time of the founding of the Penn State Breazeale Nuclear Reactor, the oldest operating research reactor in the United States. Since that time Penn State has produced graduates educated in nuclear engineering that have made numerous contributions to the advancement of nuclear power and nuclear science in our nation and the world. Penn State established the Department of Nuclear Engineering in 1959. Recognizing the importance of nuclear engineering and nuclear power, Penn State chose to administratively merge the Department of Nuclear Engineering and the Department of Mechanical Engineering in 1998 to keep the nuclear engineering program healthy through the period of low enrollment levels, especially at the undergraduate level. The Department of Mechanical and Nuclear Engineering awards baccalaureate, masters and doctoral degrees in both mechanical and nuclear engineering.

Undergraduate enrollments have risen dramatically in the last 10 years while the number of students in our on-campus graduate programs has remained strong. In 2016-2017, we conferred 63 BS degrees in nuclear engineering, the largest number in the country. Our

Master of Engineering in nuclear engineering through distance learning program in nuclear engineering is in high demand with an enrollment in 2016 of over 70 students. Using web streaming, we offer two to three courses per semester to off-campus students, most of who are working full-time.

Students attracted to Penn State's nuclear engineering graduate programs are often seeking careers in nuclear power. Over the last five years a large percentage of our Ph.D. graduates have been employed with nuclear organizations, including vendors, utilities, National Laboratories, Naval Nuclear Laboratories (former Bettis and Knolls Atomic Power Laboratories) and the Nuclear Regulatory Commission. Research funding comes from a variety of sources including utilities, vendors and suppliers, national laboratories and federal agencies. All of our nuclear engineering faculty members are active in research and advise graduate students. The yearly research funding for our nuclear faculty is above \$500,000/ year per faculty member.

In addition to having strong departmental support, the nuclear engineering field has strong endorsement university-wide. The Penn State Institutes of Energy and the Environment (PSIEE) was formed with the intent of pursuing the newest research frontiers in energy and the environment. PSIEE promotes cooperation across disciplines and the participation of the local, state, federal, and international stakeholders. One of the thrust areas endorsed by PSIEE's engineering task force was also identified as nuclear power generation.

#### 1. The Proposed Fellowship Program

Penn State is proposing two (2) new graduate Nuclear Education Fellowships for students entering the nuclear engineering graduate program. The program will begin in the Fall 2018 semester. Both recipients will be awarded a 12-month fellowship for four years. The full fellowship award will be \$50,000 per student per year. Supplemented by a cost match this amount is equivalent to our graduate research assistant support. A recipient must maintain a minimum cumulative grade point average (GPA) of 3.3/4.0 to retain their fellowship.

The fellowships will be awarded to entering graduate students who are at the start of their PhD in nuclear engineering. The fellows will be advised in both academic and research by a graduate faculty member in nuclear engineering. The fellow will select his or her advisor based on the fellow's and faculty member's mutual research interests and thesis topic. Penn State will provide the tools necessary for conducting the fellow's thesis research, such as office space, a computer, laboratory equipment, and laboratory space.

The Nuclear Education Fellowships will encourage strong academic students to enter our nuclear engineering program and ultimately pursue a career in the nuclear workforce.

Service agreements will be signed by the student and by the NRC Program Manager, prior to the student receiving financial support. The recipient shall facilitate the distribution of the service agreement to the students and submitting the signed copies to the NRC Program Manager. The service agreement requires fellowship and scholarship recipients to serve six (6) months in nuclear-related employment for each full or partial year of academic support. The service obligation begins after the student has completed their degree program.

#### 2. Recruitment Activities and Marketing of Strategies

We plan to announce the availability of the Nuclear Education Fellowships through our Engineering Newsletter, sent to all students and faculty members in the College of Engineering, through our University Financial Aid Office, our Multicultural Engineering Program (MEP), and our Women in Engineering Program (WEP). These avenues have proven very effective in disseminating information to our current and prospective students. Penn State's Office of Student Aid and the Graduate School disseminate information on graduate fellowships opportunities. We will publicize the Nuclear Education Fellowship opportunities through Penn State's existing financial aid organizations and to our applicants during our recruiting events and to other institutions in targeted recruiting pool.

Nuclear Engineering holds several graduate recruiting activities each year. The Blue Chip recruiting weekend, held in February, brings about 35 students interested in nuclear and mechanical engineering to campus for two days. Prospective students tour laboratories, visit the Breazeale Nuclear Reactor, interview with faculty, tour the campus, talk with current graduate students, and enjoy several informal sessions with Department and College of Engineering representatives. Throughout the spring, prospective students are invited to visit Penn State to meet with faculty and to tour laboratories. In the fall, a senior luncheon is held with all nuclear engineering seniors to explain both the basics of graduate degrees and to encourage students to consider seeking an advanced degree in nuclear engineering. Throughout the year, students from colleges without nuclear engineering programs travel to our Radiation Science and Engineering Center to conduct nuclear experiments using our laboratories and the Breazeale Nuclear Reactor. These students also learn about nuclear engineering graduate opportunities.

We will continue to promote awareness of the Nuclear Education Fellowship s, in our website and graduate newsletter, explaining the goals, eligibility and obligations of the fellowships. Prospective candidates will apply for admission to Penn State Nuclear Engineering using the existing on-line graduate application process.

Students applying for graduate admission must submit the information necessary to assess their eligibility for the Nuclear Education Fellowships. The nuclear engineering admissions committee reviews all applications. The committee will recommend that individuals who meet the minimum criteria be considered for a Fellowship.

### 3. Fellowship Selection Process

The selection process will be similar to those currently in place for other assistantships and fellowships. Students will either be self-nominated or nominated by faculty members at Penn State or their undergraduate institutions.

The current nuclear engineering graduate admissions committee, the Professor-In-Charge of Mechanical and Nuclear Graduate Programs and the Program Chair of Nuclear Engineering will serve as the selection committee. Applications received by the announced deadline will be reviewed for completeness and to confirm the applicants meet the minimum criteria for the award:

- US citizen or permanent resident,
- Have a minimum overall and major GPA at or above 3.3/4.0,
- Be entering nuclear engineering as a full-time graduate student, and
- Indicate an intention to seek nuclear-related employment following completion of their degree.



Those applications deemed to be complete will be evaluated independently by the selection committee members using a weighting system developed by the committee prior to the review. Ranking consideration will take into account:

- Overall grade point average,
- Major grade point average,
- Graduate record examination scores,
- Reference letters,
- Courses and total credit hours completed,
- Need and/or diversity considerations,
- Candidates statement of purpose, and
- Any additional academic and leadership accomplishments that distinguish the applicant.

After selection, the top two applicants will be submitted to the NRC for review and approval.

#### 4. Ability of the Institution to Conduct an Effective Fellowship Program

Penn State's Mechanical and Nuclear Engineering Department is a vibrant department with highly productive faculty that educates our students with the support of our staff. With over 1,000 students in the department, all of the necessary faculty and administrative support facilities and personnel are in place to manage the two Nuclear Education Fellowships at the Departmental and College of Engineering and Graduate School levels.

The Penn State Nuclear Engineering Program is led by [REDACTED], Chair of the Nuclear Engineering Program, and [REDACTED], Head of the Department of Mechanical and Nuclear Engineering. In addition, the department has a Graduate Programs Office under the direction of [REDACTED], with two full-time staff assistants, a business office with two financial Administrative Assistants and one staff assistant, a Diversity Officer and numerous other staff assistants. The Department also has an Undergraduate Programs Office under the direction of [REDACTED]. This office has two full-time staff members and a part-time staff member.

The Mechanical and Nuclear Engineering Department comprises 50 tenured or tenure-track faculty members who hold their primary appointment in the Department. Forty-two are mechanical engineering faculty and eight are nuclear engineering faculty. Two faculty searches in nuclear engineering are in progress. Collectively, we have broad expertise in mechanical and nuclear engineering, as well as many other areas of engineering, science, and mathematics. Seven of our faculty members hold the title of University Distinguished Professors (including one nuclear engineering professor) and four of our faculty have endowed professorships or chairs (including one in nuclear engineering). Many of our faculty members have been recognized with university teaching awards as well as Penn State Engineering Alumni Society (PSEAS) awards for their teaching, research, and advising.

Our current nuclear engineering faculty members conduct sponsored research in many nuclear energy related areas. All nuclear engineering faculty members advise graduate students in research. Example research areas include modeling of current and future reactor cores, systems and components; large-scale core experimental heat-transfer measurements and safety studies; analysis of current and proposed reactor designs and proposed components used in severe accident management; and studying the fundamental mechanisms of corrosion of zirconium alloys and nuclear materials damage. Our Department has annual research expenditures that are approximately \$27.5 million, which equates to, on

average, \$550,000 per faculty member per year. In addition, there are numerous other staff members who assist the faculty with their research and teaching needs.

We work closely with industrial clients with between 25% and 35% of our research expenditures coming from industry. The major industry partners specific to our nuclear engineering program include: Westinghouse, AREVA, General Electric, Exelon, First Energy, Holtec, and EPRI. We also maintain a strong research partnerships with the Naval Nuclear Laboratories and with the Nuclear Regulatory Commission.

## 5. Details of the Nuclear Engineering Graduate Programs

The Penn State Nuclear Engineering course offering has a strong emphasis in areas traditionally associated with nuclear power production. These include courses in thermal hydraulics, thermal design, power plant simulation, reactor instrumentation and control, fuel management, nuclear materials, and neutron transport theory. Additionally, students take courses in radiation detection, radiation safety and mathematics. Available experimental courses include reactor physics laboratory, reactor operations laboratory, thermal hydraulic laboratory and instrumentation and control laboratory. Each graduate degree program is individually tailored to fit the background and the needs of the student. Two graduate colloquiums are offered each semester with one focused on mechanical engineering and the other on nuclear engineering. These colloquiums are weekly with most speakers coming from outside Penn State to give our students a broader picture of the fields in which they are doing research. All the nuclear engineering graduate students are required to attend the nuclear engineering colloquium.

Academic and research advising of nuclear engineering graduate students is done by the student's faculty advisor and in the case of a PhD student, his or her dissertation committee. The MNE Graduate Programs office and the Graduate School monitor each student's academic performance with regard to University and fellowship and assistantship requirements.

Penn State offers four graduate degrees in nuclear engineering: a Master of Science with thesis, a Master of Science with paper, a Master of Engineering and a Doctor of Philosophy. We do not provide funding for students seeking the MS with paper or the Master of Engineering degree. While we anticipate that the fellowship recipients will be seeking a PhD degree, a description of the Master of Science is given below for completeness. Full details of the degree requirements are available on our departmental website ([www.mne.psu.edu](http://www.mne.psu.edu)).

Our nuclear engineering graduate program is ranked 8<sup>th</sup> in the nation by *U.S. News & World Report*.

## 6. Determining the Effectiveness of the Scholarship Program

The Penn State Nuclear Engineering Program has a demonstrated record of attracting strong nuclear engineering graduate students and retaining them in the program through completion of their nuclear engineering degree. However, we wish to attract the best students in the nation and believe that fellowships, such as the Nuclear Education Fellowships, will aid in accomplishing this goal.

To quantify the success of the fellowship program, we have established a tracking program for the students who apply to the program, including both those who receive a fellowship and those who do not. Interviews with fellowship recipients are used to determine motivation to select Penn State's nuclear engineering graduate program, to reinforce career path decisions, and to retain the student in a nuclear engineering or science career after graduation.

Since we are only proposing two fellows who are not expected to graduate until May of 2020, we will have no problem monitoring their progress during graduate programs or after graduation.

#### 7. Schedule of Tuition, Fees and Cost at Penn State

The budget for the two fellowships was based on the estimated costs incurred by students seeking a graduate degree in nuclear engineering at the Penn State University Park campus. The costs estimates are based on in-state tuition at current rates, and assumes off-campus housing.

#### 8. Scholarships in State or Regional Plan

These fellowships are not an integrated element of a State or Regional strategic plan.

## 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 grant or cooperative agreement. The following also apply:

- 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.

### **Registration in FedConnect®**

The Nuclear Regulatory Commission (NRC) uses Compusearch Software Systems' secure and auditable two-way web portal, FedConnect®, to communicate with vendors and contractors. FedConnect® provides bi-directional communication between the vendor/contractor and the NRC throughout pre-award, award, and post-award acquisition phases. Therefore, in order to do business with the NRC, vendors and contractors must register to use FedConnect® at <https://www.fedconnect.net/FedConnect>. The individual registering in FedConnect® must have authority to bind the vendor/contractor. There is no charge for using FedConnect®. Assistance with FedConnect® is provided by Compusearch Software Systems, not the NRC. FedConnect® contact and assistance information is provided on the FedConnect® web site at <https://www.fedconnect.net/FedConnect>.

### **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.

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

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 issues/concerns discussed with your Authorized Representative during the review. Within 60 days of the effective award date, SBCR will conduct a periodic review to ensure compliance with applicable Civil Rights statutes. SBCR will notify, within the 60 days, the institution's Authorized Representative as to the results of the review and requirements, if any, for compliance. The institution's cooperation with SBCR is essential. The continued eligibility for Federal financial assistance is conditioned upon compliance with anti-discrimination regulations.

### **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 extension, must be made, in writing (which includes submission by e-mail), to the designated Grants Officer at least 30 business 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.

No-Cost Extension Requests that are not received in a timely manner as described above may result in requests being disapproved by the NRC Program Managers and Grant Officer.

### **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 shall submit, at the time of application, a completed "Certification Regarding Lobbying" form, regardless of dollar value.

If applicable, the Recipient receiving in excess of \$100,000.00 in Federal funding shall submit a completed Standard Form (SF-LLL), "Disclosure of Lobbying Activities" for any persons engaged in lobbying activities, as discussed at 31 U.S. Code § 1352 – Limitation on use of appropriated funds to influence certain Federal contracting and financial transactions. 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. If 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, 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 the recipient's 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: <http://www.gsa.gov/portal/category/21222> and the per diem rates set forth at: <http://www.gsa.gov/portal/content/104877>, 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.

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.

Federal funds may not be used to travel to countries identified under the US Department of States, Directorate of Defense Trade Controls, Country Policies and Embargoes, [http://www.pmdtc.state.gov/embargoed\\_countries/index.html](http://www.pmdtc.state.gov/embargoed_countries/index.html).

**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, 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, or their designees.

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 §§ 200.403](#)

- See section [2 CFR §§ 200.330-332](#) for Subrecipient Monitoring and Management.

### **FEDERAL FINANCIAL REPORTS**

Federal Financial Reports (SF-425) are semi-annually, for the periods ending March 31 and September 30, or any portion thereof, regardless of the award date. Reports are due within 30 calendar days following the end of the reporting period and must be submitted through [FedConnect](#). The SF-425 form and instructions are available at [Grant.gov](#).

### **PERFORMANCE PROGRESS REPORTS**

The performance (technical) progress report indicated below is subject to [2 CFR §200.328](#).

#### **Fellowship**

Performance Progress reports must be submitted annually, for the period ending September 30, or any portion thereof, regardless of the award date. Reports are due within 30 days following the end of each reporting period and must be submitted through [FedConnect](#). Click the link to find the required format and information when submitting the [NRC Performance Progress Report \(PPR\)](#).

Final Reports - The Recipient is required to submit final reports, both Financial (SF-425) and Performance within 90 days of the grant expiration. In addition to these reports, a final SF-428, Tangible property report, is also required, if applicable. The final PPR (for Scholarship, Fellowship, and Trade School and Community College Scholarship awards) must include the names of all students with up to date contact information (mailing address, telephone/cell phone, email address). The reports must be submitted through [FedConnect](#).

#### **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. The recipient must submit a no cost extension request no less than 30 days prior to the award end date. Any request for a no cost extension after the grant has expired will not be approved. Any modification of the award to increase funding and/or to extend the period of performance is at the sole discretion of the NRC.

#### **Incremental Funding (if applicable refer to Attachment A - AVAILABILITY OF FUNDS)**

Additional funding for this award is contingent upon the availability of appropriated funds, satisfactory performance, and the recipient's capacity to manage the award and comply with

award requirements. The Recipient agrees to perform work up to the amount obligated as specified in Attachment A of the grant award. NRC is not obligated to reimburse the Recipient for expenditures in excess of the total funds obligated by NRC. The Recipient is not authorized to continue performance beyond the amount obligated to this award. Any work performed by the grantee beyond the funding amount obligated in Section A will be at the grantee's risk.

### **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](http://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 the recipient's 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**

The recipient is responsible for providing documentation to the NRC that tracks each student's progress in achievement of the academic program for which federal funds were provided. This includes: (1) ensuring the service agreement is signed by the student prior to providing support; (2) providing the NRC with student contact information upon student entry into the program, upon completion or withdrawal from the program, and upon request by the NRC; and (3) monitoring the student's fulfillment of the service agreement for the duration of the award. The

NRC shall be notified immediately if a student is not fulfilling the academic program or the service agreement.

### **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.

As part of the OMB requirements indicated above (for metric reporting), the recipient shall address the following questions and submit responses with the required progress reports:

#### **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?

As part of the PPR, include the following information for each student supported under this award. The information must be provided in the format below:

| Student Name   | Estimated Graduation Date | Support in Years Required                | Amount of Grant Funds Received Cumulative of award | Status                        | Comments/Place of work   | Position Held at Employment | Is the position Nuclear Related? |
|--|---------------------------|--|--|-------------------------------|--|-----------------------------|----------------------------------|
|  | *month/day/year           | *6 months for every full or Partial year |  | *Choose an option below       | *If employed where does the student work?  |                             |                                  |
|  |                           |  |  | <i>Student</i>                | *If withdrawn - why and please include updated contact information below. And please indicate if funds were repaid |                             |                                  |
|  |                           |  |  | <i>Employed - Not Nuclear</i> |  |                             |                                  |
|  |                           |  |  | <i>Employed - Nuclear</i>     |  |                             |                                  |
|  |                           |  |  | <i>Withdrawn</i>              |  |                             |                                  |
| <b>Update New Student Contact information (if changed)</b> |                           |  |  |                               |  |                             |                                  |
| Address  |                           |  |  |                               |  |                             |                                  |
| Phone  |                           |  |  |                               |  |                             |                                  |
| Email  |                           |  |  |                               |  |                             |                                  |

**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. Additional 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.