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

1. GRANT/AGREEMENT NO.	2. MODIFICATION NO.	3. PERIOD OF PERFORMANCE	4. AUTHORITY
NRC-38-09-910	2	FROM: 7/1/2010 TO: 6/30/2011	Pursuant to Section 31b and 141b of the Atomic Energy Act of 1954, as amended

5. TYPE OF AWARD	6. ORGANIZATION TYPE	7. RECIPIENT NAME, ADDRESS, and EMAIL ADDRESS
[X] GRANT [ ] COOPERATIVE AGREEMENT	Public State-Controlled Institution of Higher ED DUNS: 072220825	Indian River 3209 Virginia Avenue Fort Pierce, FL 34981

8. PROJECT TITLE:
Nuclear Power Plant Technician

9. PROJECT WILL BE CONDUCTED	10. TECHNICAL REPORTS ARE REQUIRED	11. PRINCIPAL INVESTIGATOR(S) NAME, ADDRESS and EMAIL ADDRESS
PER GOVERNMENT'S/RECIPIENT'S PROPOSAL(S) DATED See Program Description AND APPENDIX A-PROJECT GRANT PROVISIONS	[X] PROGRESS AND FINAL [ ] FINAL ONLY [ ] OTHER (Conference Proceedings)	Indian River State College Attn: Dr. Jose Farinos Email: jfarinos@irsc.edu 772-462-7575

12. NRC PROGRAM OFFICE (NAME and ADDRESS)	13. ACCOUNTING and APPROPRIATION DATA	14. METHOD OF PAYMENT
NRC Attn: Randi Neff Office of Human Resources MS: GW5A6 (301) 492-2301 11545 Rockville Pike Rockville, Maryland 20852	APPN. NO: 31X0200 B&R NO: 0-8415-5C1116 JOB CODE: T8453 BOC NO: 4110 OFFICE ID NO: RFPA: HR-09-910	[ ] ADVANCE BY TREASURY CHECK [ ] REIMBURSEMENT BY TREASURY CHECK [ ] LETTER OF CREDIT [X] OTHER (SPECIFY) Electronic ASAP.gov (See Remarks in Item #20 "Payment Information")

15. NRC OBLIGATION FUNDS		16. TOTAL FUNDING AGREEMENT	
THIS ACTION	$120.000	NRC	$120.000
PREVIOUS OBLIGATION		RECIPIENT	
TOTAL	$120.000	TOTAL	$120.000

This action provides funds for Fiscal Year in the amount of See Page Two

17. NRC ISSUING OFFICE (NAME, ADDRESS and EMAIL ADDRESS)

U.S. Nuclear Regulatory Commission
Div. of Contracts
Attn: Sheila Bumpass
Mail Stop: TWB-01-B10M
Rockville MD 20852

18.	19. NRC CONTRACTING OFFICER
Signature Not Required	Sheila Bumpass (Signature) 7/1/10 (Date) NAME (TYPED): Sheila Bumpass TITLE: Contracting Officer TELEPHONE NO.: 301-492-3484

20. PAYMENT INFORMATION

Payment will be made through the Automated Standard Application for Payment (ASAP.gov) unless the recipient has failed to comply with the program objectives, award conditions, Federal reporting requirements or other conditions specified in 2 CFR 215 (OMB Circular A110).

21. Attached is a copy of the "NRC General Provisions for Grants and Cooperative Agreements Awarded to Non-Government Recipients.
Acceptance of these terms and conditions is acknowledged when Federal funds are used on this project.

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

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

TEMPLATE - ADM001 SUNSI REVIEW COMPLETE JUL 13 2010 ADM007

ATTACHMENT A - SCHEDULE

A.1 PURPOSE OF GRANT

The purpose of this Grant is to provide support to the "Nuclear Power Plant Technician Project" as described in Attachment B entitled "Program Description."

A.2 PERIOD OF GRANT

1. The effective date of this Grant is July 1, 2010. The estimated completion date of this Grant is June 30, 2011.

2. Funds obligated hereunder are available for program expenditures for the estimated period: July 1, 2010 – June 30, 2011.

A. GENERAL

1. Total Estimated NRC Amount:	$120,000
2. Total Obligated Amount:	$120,000
3. Cost-Sharing Amount:	$0
4. Activity Title:	Nuclear Power Plant Technician
5. NRC Project Officer:	Randi Neff
6. DUNS No.:	072220825

B. SPECIFIC

RFPA No.:	HR-09-910
FFS:	N/A
Job Code:	T8453
BOC:	4110
B&R Number:	0-8415-5C1116
Appropriation #:	31X0200
Amount Obligated:	$120,000

A.3 BUDGET

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

	Year 1
Personnel Cost	$31,841.00
Fringe Benefits	$9,113.00
Supplies	$53,882.00
Contractual	$15,000.00
Other	$1,275.00
Total Direct Costs	$111,111.00
Indirect Cost	$8,889.00
Yearly Total	**$120,000.00**

All travel must be in accordance with the Indian River State College Travel Regulations or the US Government Travel Policy absent Grantee's travel regulation.

A.4 AMOUNT OF AWARD AND PAYMENT PROCEDURES

1. The total estimated amount of this Award is $120,000 for the (1) year period.

2. NRC hereby obligates the amount of $120,000 for program expenditures during the period set forth above and in support of the Budget above. The Grantee will be given written notice by the Contracting Officer when additional funds will be added. NRC is not obligated to reimburse the Grantee for the expenditure of amounts in excess of the total obligated amount.

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

Attachment B – Program Description

Nuclear Power Plant Technician Project

Meeting Nuclear Workforce Demands - A National Need

In an economy where contracting industry is common, the nuclear energy sector is experiencing one of the largest expansion efforts in decades. Furthermore, it has been identified as a key contributor to our nation's economic strength, energy independence, and job creation 1. More than 15,000 jobs have been created over the past three years with an investment of over $4 billion in new nuclear plant development.

The anticipated growth of the nuclear energy industry coupled with the looming workforce drain due to the imminent retirement of its aging workforce creates a sense of urgency for the development of a pipeline of skilled technicians. The continuation of this grant squarely addresses the development of a trained workforce at the regional and national level.

Meeting Nuclear Workforce Demands - A Regional Need

To keep up with the average two percent growth in gross state product per year, over the past five years the State of Florida has been tasked with finding new energy sources to encourage the continuation of economic growth. In addition, the U.S. Energy Information Administration predicts an increase in the demand for energy by 21% by 2030. To meet this growth in demand in Florida, Florida Power & Light and Progress Energy (PE) have filed a license application with the U.S. Nuclear Regulatory Commission to build two reactors in Levy and two in Miami-Dade Counties. These new plants will service 3.3 million homes per year and it is estimated they will need approximately 1,000 additional skilled nuclear engineering technicians to operate these tacilities/.

In 2008, the Nuclear Energy Institute conducted a survey to determine the national training needs for technicians within the nuclear power industry. The NEI report, published September 2008, documented the need for additional engineering technicians to support the 104 existing nuclear power reactors operated by 32 companies in 15 regions nationwide. Florida, represented as Southeast Region 2 in the study, is projected to require 75 maintenance technicians, 45 non-licensed operators, and 30 radiation protection technicians per year to operate existing reactors. These figures should double in the next four to six years as the planned reactors begin operation in Florida.

The Florida Energy Workforce Consortium (FEWC) released a report in March of 2007 regarding the availability of training programs in Florida. The Report stated that only three of

Florida's 28 community colleges had programs preparing skilled workers for the nuclear energy industry. Postsecondary programs within Florida produced only 52 graduates in 2008 primarily addressing jobs in energy distribution. The lack of capacity to educate and train next-generation energy workers hinders the growth of Florida's energy sector, its economy and the nation as a whole. Starting in 2008, the Nuclear Power Plant Technology Institute at IRSC graduated its first cohort of 24 students followed by 24 additional graduates in 2009 for positions in the nuclear energy industry. In 2010, an additional 24 students will graduate and the thanks to the 1st year of this grant, IRSC will graduate 48 students in 2011. The sustainability and continued robustness of IRSC's program after this expansion is heavily dependent on financial support to complete the necessary purchase of laboratory equipment and the development of instructional resources.

Indian River State College
IRSC- Historical Success: 1980-2008
Indian River State College has partnered with Florida Power and Light (FPL) to provide training at the St. Lucie Nuclear Power Plant since 1980. During this period the training took place both at the college and at the power plant.

In 2006, the Nuclear Power Plant Technology Institute was created at IRSC to support the growing need for maintenance technicians at FPL's Saint Lucie Nuclear Power Plant. An industry-driven initiative, this Institute is the result of intense collaboration and negotiations between Florida Power and Light's management, representatives from the International Brotherhood of Electrical Workers, and Indian River State College. This training program responds to the immediate need of FPL to replace retiring workers, update skills of the existing workforce, create a career ladder for incumbent workers, open additional opportunities for professional development and advancement within the company, and create a brand new pipeline of workers to meet the growing needs of the company.
As a model partnership between industry and education, the Nuclear Power Plant Technology program received the 2007 Innovation of the Year Award Winner from the League for Innovation in the Community College and has been featured in numerous local, state and national articles over the past 2 years (samples are provided in the Appendix).

A national need for technical training in the nuclear energy sector has led IRSC's program to build partnerships with NEI, NRC and the Institute of Nuclear Power Operations (IN PO). These partnerships are designed to align training at the national level with the Uniform Curriculum Guidelines for Nuclear Power Plant Technician, Maintenance, and Non-licensed Operations Personnel Associate Degree Programs. As a member of this pilot program, IRSC focuses on gap analysis and alignment of the program with the unified curriculum.
Based on INPO's ACAD criteria, an AS degree in Electronics Engineering Technology was infused with the courses necessary to prepare maintenance technicians in a nuclear power plant. The specializations developed from this endeavor include:
Instrumentation and Control
Electrical Maintenance
Mechanical Operators

The Nuclear Power Plant Technology Institute graduated its first cohort group of 24 students in 2008 and went on to graduate 24 students 2009. 90% of these graduates have been placed in positions at FPL.

IRSC Accomplishments from 151 year of Curriculum Development Grant
During the first year of this grant, IRSC has successfully expanded the Nuclear Power Plant

Technology Institute in two distinct ways: 1) through the development of the Virtual Resource Center for Nuclear Energy and 2) through the addition of specializations for Non-Licensed Operators (NLO) and Radiological Protection (RP) Technicians.
Specifically, the Nuclear Power Plant Technology Institute at IRSC has expanded its capacity to accommodate 53 new students, more than doubling its original size. Of these students 17 are Indian River State College enrolled in the RP track and 12 in the NLO track. Bartlett Energy Inc. has also become an industrial partner. Bartlett will provide advice, internships and employment opportunities. Currently, IRSC has internship commitments from both FPL and Bartlett Energy Inc. The Virtual Resource Center for Nuclear Energy has gone live at www.vrcnuclear.com. The ultimate purpose of this site is to provide a centralized location to collect, organize, and coordinate training resources for nuclear training programs across the country. This site includes course descriptions, specific objectives, track outlines, and laboratory equipment lists that are needed to launch a track or program. In addition, the site also provides alternative training resources to supplement learning objectives in a classroom environment. These resources will include interactive flash presentations and video tutorials filmed in the IRSC Digital Media Center. We are currently taping a series of tutorials on radiation protection using subject matter experts from our industrial partners.

In order to accomplish the goals stated in the original grant, IRSC has encumbered 100% of the 151 year grant funding of $150,000. $70,000 of these funds have been spent on necessary equipment to launch the RP and NLO tracks with basic supplies. Additional equipment is needed to scale the program appropriately.

IRSC is committed to the development and enrichment of curriculum based on the Uniform Curriculum Guidelines for Nuclear Technicians for the five specific areas of specialization: Instrumentation and Control, Electrical, Mechanical, Radiation Protection Technicians, and Non-Licensed Operators. This curriculum, under the Associate in Science degree in Electrical Power Technology, offers students a career path in each of these five specializations critical to the nuclear energy industry. It will also create a career ladder for graduates who elect to continue their education through a baccalaureate degree, expanding their career opportunities to management.

Objectives of the 2nd Year Curriculum Development Grant
IRSC is applying for second year funding to complete the following objectives:

1. Optimizing and enhancing the RP and NLO tracks created during the 1st year of this grant.
2. Continuing and developing of the Virtual Resource Center for Nuclear Energy and its training resources.
3. Creating a summer academy for secondary students. The summer program will focus on reaching students at the high school level in order to educate and guide them toward career paths in the nuclear energy industry.

The Radiation Protection and Non-licensed Operator tracks were launched in January 2010. It will take several years and multiple levels of funding to build these programs to the optimal level of quality and sustainability expected by industry. During the 151 year of the grant, IRSC spent over $70,000 to purchase equipment for these tracks. In addition, FPL has contributed over $500,000 worth in instructional resources, faculty and equipment to support this program. As the program grows to meet anticipated demand, more equipment is needed to adequately equip its laboratories. For instance, 17 students are currently enrolled in the RP track; however IRSC was able to purchase only 8 dosimeters to teach monitoring techniques making it necessary to

repeat hands on lessons in order for all students to gain proper training. It is estimated that with another $70,000 the RP and NLO tracks can be equipped to the proper levels.
Indian River State College
Further enhancements and optimizations of the curriculum within these two specializations will include ensuring that all learning outcomes have been thoroughly assessed and appropriate revision measures are in place. This will guarantee compliance with project goals and will positively contribute to the sustainability of the nuclear power industry.

Review of Student Outcomes: A review of outcomes in terms of student achievement will be performed to reconcile the demands of the workplace and the skills of the students graduating from the program. This will be accomplished through a team based approach with IRSC's industrial partners. This review of student achievement will provide the program with additional feedback along with direct curriculum review to ensure the viability and true impact of the two added specializations. The principal investigator, along with faculty, subject matter experts, and the advisory council will evaluate student competencies and make recommendations for continuous quality enhancement.

Industry Input: A critical component of the viability and success of this program rests on the direct input of the advisory council. This council, composed primarily of industry representatives, provides counseling and monitoring of the program objectives and quality standards. All equipment purchased for the courses will go through a comprehensive review to make sure all equipment and its uses are up to date with industry trends and advances.

Year 2: The Virtual Resource Center for Nuclear Energy

The initial phase of the Virtual Resource Center for Nuclear Energy provides a centralized location to collect, organize, and coordinate training resources for nuclear training programs across the country. Included on this site are course descriptions, specific objectives, track outlines, and laboratory equipment lists needed to launch a track or program. Everything posted on this portal is public and made available to students, faculty, and industry throughout the country.

During the second year of the grant, IRSC will add digital learning modules that complement and enrich existing learning objectives. The expansion to the virtual resource center will provide universal access to instructional materials, contributing to the dissemination and uniformity of training program across the nation. By showcasing model partnerships between industry, education, and government, the Uniform Curriculum will be easily replicated. The additional virtual learning tools will enhance course objectives by incorporating advanced digital components into core curriculum, such as 3D flash, simulations, and cinematic components. IRSC is committed to expanding learning opportunities with the use of effective technologies for teaching and learning. The College has developed a strong record of providing high-quality distance, blended, and traditional education to ensure that students receive the same highquality learning experience regardless of modality.

Named three consecutive years as the nation's #1 mid-size community college in technology for teaching and learning, IRSC has become a major recipient of accolades from the Center for Digital Education of the American Association of Community Colleges. In November of 2007, IRSC was awarded the AT&T Accelerator grant for Instructional Technology. For the past 10 years, IRSC has developed rich on-line training curricula offering more than 400 courses on-line per semester.

As the first community college to join iTunes University, IRSC has enabled faculty to record lectures and make them available live or on demand to students in our service area and, Indian River State College increasingly outside of it. IRSC has also created River-Net TV, an IP based video distribution system which provides for both the live delivery of instruction to any internet connected PC or device in addition to providing for the recording of content and storage for playback in a video on demand scenario that can be distributed to iTunes.

Year 2: The High school Summer Academy

To further expand the outreach of the Nuclear Power Plant Technology Institute, a summer nuclear power academy will be developed with the aim of reaching high school students. The academy will consist of a four-day course designed to introduce students to career opportunities in the nuclear power industry. The goal of the summer academy is to reach high school students between their junior and senior years when they are at the age of deciding what career path to choose and to provide them with the following tools: in depth information about educational pathways, review and training in requirements for entry into a nuclear power training program, understanding of related career opportunities, and a thorough knowledge of the nuclear power industry from the global to the local perspective. The first group of students will begin the academy in the Summer Term of 2011.

Design Coursework and Lesson Plans: IRSC faculty and staff along with subject matter experts from FPL will meet to determine coursework content and additional lab activities most suitable and instructive for students at the high school level. Detailed lesson plans for the course with a basis on the diverse specializations offered at IRSC's Nuclear Power Plant Technology Institute, will be prepared in the Fall of 2010.

Acquire Materials for Course Offering: All necessary equipment, tools, textbooks, and additional training materials will be acquired by IRSC. All materials will be purchased by the Spring Term of 2011 and realigned with the lesson plans and any updates in recruiting strategies.

Target local high schools in recruitment: IRSC has established partnerships with all high schools along the Treasure Coast. With campuses in Fort Pierce, Port Saint Lucie, Stuart, Okeechobee, and Vero Beach, the college has a strong presence in each community, leading to a large pool of applicants with diverse backgrounds. IRSC has also partnered with area businesses, including energy providers, for over 30 years and has become a leader in economic and workforce development.

Brochures and flyers will be disseminated through all IRSC buildings on every campus, and IRSC outreach specialists will visit select local high schools to disseminate information to prospective students and counselors. Specific efforts will be made to meet directly with the students and prospective students' parents to make them aware of the Summer Nuclear Power Academy. The specialists will create a prospective student database and follow up with phone calls, emails, and postal mail making sure each interested and qualified student is provided an opportunity to apply for the summer program. Recruitment efforts will begin in the Fall Term of 2010 and continue throughout the duration of the grant period.

Implementation Strategy

Evaluation, enhancement, and optimization of curriculum along with additions to the Virtual Resource Center for Nuclear Energy will occur simultaneously during the 2nd year of this grant. In addition, the Summer Nuclear Power Academy will be implemented during this period.

Year 2: Academic year 2010 - 2011: will focus on assessing and enriching existing curriculum and adding necessary training materials, equipment, and tools for Non-Licensed Operators and Radiation Protection Technicians.

The Summer Nuclear Power Academy will be created with a focus on recruiting and educating high school students in nuclear power operations. Specific lesson plans will be identified and completed by the end of Fall Term 2010. The first group of students will begin the Institute in the Summer Term of 2011.

Year 3: Academic year 2011 - 2012: will continue development of the virtual resources, expand summer youth academy, and publish best practices based on the feedback from graduating classes. The best practices and the outcomes of the project will the disseminated statewide and nationally to other educational institutions, NEI and other members within the nuclear energy industry.

Institutional Capability

IRSC serves the educational and workforce development needs of the four counties that comprise the Research Coast (also known as the Treasure Coast): Indian River, Martin, Okeechobee, and St. Lucie. IRSC is a public, comprehensive college, founded in 1960, accredited by the Southern Association of College and Schools, Commission on Colleges, to offer the associate and baccalaureate degree. The IRSC Main Campus is located in Fort Pierce with branch campuses in the cities of Stuart, Port St. Lucie, Okeechobee, and Vero Beach - bringing a college education to within a forty-minute drive of every area resident. IRSC had a 2008-2009 unduplicated headcount of 34,758 students - 11,975 full-time equivalent (FTE) - served by 663 full-time and 1,124 part-time employees, including 168 full-time faculty. The College President, Dr. Edwin R. Massey, serves as the chief administrator of the College. Since its inception, IRSC has consistently fulfilled its mission and goals by responding to the needs of the community. Between 35 and 40% of area high school graduating classes matriculate to IRSC each year. The institution is the foremost human resource development agency in the community. Programs are in place to recruit, educate/train, and graduate single parents, dislocated workers, ethnic minorities, individuals with disabilities, and others who desire to continue their education.

IRSC is a financially stable Level II state institution. The College has been able to support all of its current programs through annual operating budgets. IRSC is part of the Florida College Indian River State College System and is state-supported with 74% of the operating fund annual budget derived from state appropriations. The College receives 26% of its annual operating funds from student tuition, fees, grants and other revenue. The State of Florida receives the majority of its funding through tourist tax and property tax. IRSC is currently experiencing an 11 percent increase in total enrollment.

The IRSC business office includes a grants management team that is responsible for managing and tracking all external funds coming into the college. The team works closely with Project Directors to ensure that funds are expended according to the EDGAR guidelines, state and federal regulations, and IRSC standard procedures. The college budget, including grants, is audited annually by staff from the Office of the Florida Auditor General. For the last eight years, IRSC has had an outstanding audit.

IRSC District - The Research Coast

For 50 years, IRSC has lead economic development on the Treasure Coast. Understanding that the energy sector will be a major economic driver for the state of Florida, IRSC is building the Center for Innovation and Entrepreneurship (CIE) at its Main Campus in Fort Pierce, Florida. The CIE will house a comprehensive energy training complex including the expanded Nuclear Power Plant Institute.

This complex will include classrooms and laboratories for training and education in nuclear, fossil, and sustainable energies, from solar, wind, and hydrogen fuel cells to energy storage and biomass solutions. The Energy Center will include the *Nuclear Energies Suite, Alternative Energies Lab* and the *Sustainable Building Design Suite* and will house programs in *Architecture, Engineering, Photonics,* and *Nanotechnology and Micro-fabrication Materials Science Laboratory.* A major goal of this inclusive design is to promote the interdependence of these disciplines in creating sound energy solutions for Florida's future.

This new facility represents IRSC's commitment to continue to be the premier resource for training and education on the Research Coast. This commitment includes taking a new step toward the transformation of our region into a more diversified economy which will attract highpaying jobs for younger generations. Planning and building the $20 million CIE has been made possible through PECO funding and an Economic Development grant from the Department of Commerce.' Currently in the construction stage, the 18-month CIE project is scheduled for completion in mid-2011, for Fall Semester 2011.

Attachment C – Standard Terms and Conditions

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

Preface

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

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

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

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

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

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

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

I. Mandatory General Requirements

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

1. Applicability of 2 CFR Part 215

a. All provisions of 2 CFR Part 215 and all Standard Provisions attached to this grant/cooperative agreement are applicable to the Grantee and to sub-recipients which meet the definition of "Grantee" in Part 215, unless a section specifically excludes a sub-recipient from coverage. The Grantee and any sub-recipients must, in addition to the assurances made as part of the application, comply and require each of its sub-awardees employed in the completion of the project to comply with Subpart C of 2 CFR 215 Part 180 and include this term in lower-tier (subaward) covered transactions.

b. Grantees must comply with monitoring procedures and audit requirements in accordance with OMB Circular A-133. < http://www.whitehouse.gov/omb/circulars/a133_compliance/08/08toc.aspx >

2. Award Package

Grant Performance Metrics:

The Office of Management and Budget requires all Federal Agencies providing funding for 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 FY 2010 HR curriculum development grant awards, in addition to the customary performance progress report requested on the SF-PPR, SF-PPR-B, and SF-PPR-E forms, HR requires the following metrics to be reported on by the awardees as follows:

1. Overall number of new courses developed in NRC designated STEM areas;
2. Number of students enrolled in new STEM courses;
3. Number of these enrolled students retained in STEM major.

§ 215.41 Grantee responsibilities.

The Grantee is obligated to conduct such project oversight as may be appropriate, to manage the funds with prudence, and to comply with the provisions outlined in 2 CFR 215.41 Within this framework, the Principal Investigator (PI) named on the award face page, Block 11, is responsible for the scientific or technical direction of the project and for preparation of the project performance reports. This award is funded on a cost reimbursement basis not to exceed the amount awarded as indicated on the face page, Block 16., and is subject to a refund of unexpended funds to NRC.

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

Subgrants

Appendix A to Part 215—Contract Provisions

Sub-recipients, sub-awardees, and contractors have no relationship with NRC under the terms of this grant/cooperative agreement. All required NRC approvals must be directed through the Grantee to NRC. See 2 CFR 215.180 and 215.41.

Nondiscrimination

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

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

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

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

Modifications/Prior Approval
NRC prior written approval may be required before a Grantee 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 of, and obtained from, the NRC Grants Officer in advance of the change or obligation of funds. All requests for NRC prior approval must be made, in writing (which includes submission by e-mail), to the designated Grants Specialist and Program Office no later than 30 days before the proposed change. The request must be signed by both the PI and the authorized organizational official. Failure to obtain prior approval, when required, from the NRC Grants Officer may result in the disallowance of costs, termination of the award, or other enforcement action within NRC's authority.

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

The Grantee shall comply with provisions of 31 USC § 1352. This provision generally prohibits the use of Federal funds for lobbying in the Executive or Legislative Branches of the Federal Government in connection with the award, and requires disclosure of the use of non-Federal funds for lobbying.

The Grantee receiving in excess of $100,000 in Federal funding shall submit a completed Standard Form (SF) LLL, "Disclosure of Lobbying Activities," regarding the use of non-Federal funds for lobbying within 30 days following the end of the calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed. The Grantee must submit the SF-LLL, including those received from sub-recipients, contractors, and subcontractors, to the Grants Officer.

§ 215.13 Debarment And Suspension.
The Grantee agrees to notify the Grants Officer immediately upon learning that it or any of its principals:

(1) Are presently excluded or disqualified from covered transactions by any Federal department or agency;

(2) Have been convicted within the preceding three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, receiving stolen property, making false claims, or obstruction of justice; commission of any other offense indicating a lack of business integrity or business honesty that seriously and directly affects your present responsibility;

(3) Are presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b); and

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

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

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

'Debarment, Suspension, Ineligibility, and Voluntary Exclusion

The Grantee certifies that neither it nor its principals is presently excluded or disqualified from participation in this transaction by any Federal department or agency. The policies and procedures applicable to debarment, suspension, and ineligibility under NRC-financed transactions are set forth in 2 CFR Part 180.'

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

Implementation of E.O. 13224 -- Executive Order On Terrorist Financing
The Grantee 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 Grantee 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.
Award Grantees must comply with Executive Order 13224, Blocking Property and Prohibiting Transactions with Persons who Commit, Threaten to Commit, or Support Terrorism. Information about this Executive Order can be found at: www.fas.org/irp/offdocs/eo/eo-13224.htm.

Procurement Standards, § 215.40
Sections 215.41 through 215.48 set forth standards for use by Grantees in establishing procedures for the procurement of supplies and other expendable property, equipment, real property and other services with Federal funds. These standards are furnished to ensure that such materials and services are obtained in an effective manner and in compliance with the provisions of applicable Federal statutes and executive orders. No additional procurement standards or requirements shall be imposed by the Federal awarding agencies upon Grantees, unless specifically required by Federal statute or executive order or approved by OMB.

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

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

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

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

Equipment procedures shall follow provision established in 2 CFR 215.34.

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

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

Inventions Report - The Bayh-Dole Act (P.L. 96-517) affords Grantees the right to elect title and retain ownership to inventions they develop with funding under an NRC grant award ("subject inventions"). In accepting an award, the Grantee 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 Grantee report all subject inventions to the awarding agency (NRC) as well as include an acknowledgement of federal support in any patents. NRC participates in the trans-government Interagency Edison system (http://www.iedison.gov) and expects NRC funding Grantees to use this system to comply with Bayh-Dole and related intellectual property reporting requirements. The system allows for Grantees to submit reports electronically via the Internet. In addition, the invention must be reported in continuation applications (competing or non-competing).

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

Data, Databases, and Software - The rights to any work produced or purchased under a NRC federal financial assistance award are determined by 2 CFR 215.36. Such works may include data, databases or software. The Grantee 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 Grantee 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 Grantee employees may be copyrighted but only the part authored by the Grantee is protected because, under 17 USC § 105, works produced by Government employees are not copyrightable in the United States. On occasion, NRC may ask

the Grantee to transfer to NRC its copyright in a particular work when NRC is undertaking the primary dissemination of the work. Ownership of copyright by the Government through assignment is permitted under 17 USC § 105.

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

Organizational Prior Approval System
In order to carry out its responsibilities for monitoring project performance and for adhering to award terms and conditions, each Grantee organization shall have a system to ensure that appropriate authorized officials provide necessary organizational reviews and approvals in advance of any action that would result in either the performance or modification of an NRC supported activity where prior approvals are required, including the obligation or expenditure of funds where the governing cost principles either prescribe conditions or require approvals.

The Grantee shall designate an appropriate official or officials to review and approve the actions requiring NRC prior approval. Preferably, the authorized official(s) should be the same official(s) who sign(s) or countersign(s) those types of requests that require prior approval by NRC. The authorized organization official(s) shall not be the principal investigator or any official having direct responsibility for the actual conduct of the project, or a subordinate of such individual.

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

Dispute Review Procedures
a. Any request for review of a notice of termination or other adverse decision should be addressed to the Grants Officer. It must be postmarked or transmitted electronically no later than 30 days after the postmarked date of such termination or adverse decision from the Grants Officer.

b. The request for review must contain a full statement of the Grantee's position and the pertinent facts and reasons in support of such position.

c. The Grants Officer will promptly acknowledge receipt of the request for review and shall forward it to the Director, Office of Administration, who shall appoint a review committee consisting of a minimum of three persons.

d. Pending resolution of the request for review, the NRC may withhold or defer payments under the award during the review proceedings.

e. The review committee will request the Grants Officer who issued the notice of termination or adverse action to provide copies of all relevant background materials and documents. The committee may, at its discretion, invite representatives of the Grantee and the NRC program office to discuss pertinent issues and to submit such additional information as it deems appropriate. The chairman of the review committee will insure that all review activities or proceedings are adequately documented.

f. Based on its review, the committee will prepare its recommendation to the Director, Office of Administration, who will advise the parties concerned of his/her decision.

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

Monitoring and Reporting § 215.51

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

- Payment – 2 CFR 215.22
- Cost Share – 2 CFR 215.23
- Program Income – 2 CFR 215.24
  - Earned program income, if any, shall be added to funds committed to the project by the NRC and Grantee and used to further eligible project or program objectives.
- Budget Revision – 2 CFR 215.25
  - In accordance with 2 CFR 215.25(e), the NRC waives the prior approval requirement for items identified in sub-part (e)(1-4).
  - The Grantee is not authorized to rebudget between direct costs and indirect costs without written approval of the Grants Officer.
  - Allowable Costs – 2 CFR 215.27

b. **Federal Financial Reports**

Effective October 1, 2008, NRC transitioned from the SF–269, SF–269A, SF–272, and SF–272A to the Federal Financial Report (SF-425) as required by OMB:
http://www.whitehouse.gov/omb/fedreg/2008/081308_ffr.pdf
http://www.whitehouse.gov/omb/grants/standard_forms/ffr.pdf
http://www.whitehouse.gov/omb/grants/standard_forms/ffr_instructions.pdf

The Grantee shall submit a "Federal Financial Report" (SF-425) on a quarterly basis, for the periods ending 3/31, 6/30, 9/30 and 12/31, or any portion thereof, unless otherwise specified in a special award condition. Reports are due no later than 30 days following the end of each reporting period. A final SF-425 shall be submitted within 90 days after expiration of the award.

Period of Availability of Funds 2 CFR § 215.28

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

b. Unless otherwise authorized in 2 CFR 215.25(e)(2) or a special award condition, any extension of the award period can only be authorized by the Grants Officer in writing. Verbal or written assurances of funding from other than the Grants Officer shall not constitute authority to obligate funds for programmatic activities beyond the expiration date.

c. The NRC has no obligation to provide any additional prospective or incremental funding. Any modification of the award to increase funding and to extend the period of performance is at the sole discretion of the NRC.

d. Requests for extensions to the period of performance shall be sent to the Grants Officer at least 30 days prior to the grant/cooperative agreement expiration date. Any request for extension after the expiration date shall not be honored.

Automated Standard Application For Payments (ASAP) Procedures

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

Audit Requirements

Organization-wide or program-specific audits shall be performed in accordance with the Single Audit Act Amendments of 1996, as implemented by OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations." http://www.whitehouse.gov/omb/circulars/a133/a133.html Grantees are subject to the provisions of OMB Circular A-133 if they expend $500,000 or more in a year in Federal awards.

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

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

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

III. Programmatic Requirements

Performance (Technical) Reports

a. The Grantee shall submit performance (technical) reports electronically to the NRC Project Officer and Grants Officer as specified in the special award conditions in the same frequency as the Federal Financial Report unless otherwise authorized by the Grants Officer.

b. Unless otherwise specified in the award provisions, performance (technical) reports shall contain brief information as prescribed in the applicable uniform administrative requirements 2 CFR §215.51 which are incorporated in the award.

Unsatisfactory Performance

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

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

Other Federal Awards With Similar Programmatic Activities

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

Prohibition Against Assignment By The Grantee

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

Site Visits

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

IV. Miscellaneous Requirements

Criminal and Prohibited Activities

a. The Program Fraud Civil Remedies Act (31 USC §§ 3801-3812), provides for the imposition of civil penalties against persons who make false, fictitious, or fraudulent claims to the Federal government for money (including money representing grant/cooperative agreements, loans, or other benefits.)

b. False statements (18 USC § 287), provides that whoever makes or presents any false, fictitious, or fraudulent statements, representations, or claims against the United States shall be subject to imprisonment of not more than five years and shall be subject to a fine in the amount provided by 18 USC § 287.

c. False Claims Act (31 USC 3729 et seq), provides that suits under this Act can be brought by the government, or a person on behalf of the government, for false claims under federal assistance programs.

d. Copeland "Anti-Kickback" Act (18 USC § 874), prohibits a person or organization engaged in a federally supported project from enticing an employee working on the project from giving up a part of his compensation under an employment contract.

American-Made Equipment And Products
Grantees are herby notified that they are encouraged, to the greatest extent practicable, to purchase American-made equipment and products with funding provided under this award.

Increasing Seat Belt Use in the United States
Pursuant to EO 13043, Grantees should encourage employees and contractors to enforce on-the-job seat belt policies and programs when operating company-owned, rented or personally-owned vehicle.

Federal Employee Expenses
Federal agencies are generally barred from accepting funds from a Grantee 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 Grantee'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 Grantees or applicants regardless of the source.

Minority Serving Institutions (MSIs) Initiative
Pursuant to EOs 13256, 13230, and 13270, NRC is strongly committed to broadening the participation of MSIs in its financial assistance program. NRC's goals include achieving full participation of MSIs in order to advance the development of human potential, strengthen the Nation's capacity to provide high-quality education, and increase opportunities for MSIs to participate in and benefit form Federal financial assistance programs. NRC encourages all applicants and Grantees 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 Grantee 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 Grantee organization shall investigate the allegation and submit its findings to the Grants Officer. The NRC may accept the Grantee's findings or proceed with its own investigation. The Grants Officer shall inform the Grantee 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