FY 2014 Trade School and Community College Scholarship Program Grant Award

Institution	Amount	Title
Chattanooga State Community College	$142,927	Chattanooga State Community College's Nuclear Scholarship Program
Onondaga Community College	$149,270	Onondaga Nuclear Technology (NET) Scholars Program
Estrella Mountain Community College	$148,760	Estrella Mountain Nuclear Industry Scholarship Program
Linn State Technical College	$150,000	Linn State Technical College's (LSTC's) Nuclear Education Scholarships
Wharton County Jr. College	$150,000	Wharton County Junior College Nuclear Education Scholarship Project
Central Piedmont Community College	$150,000	Visual Testing (VT) Specialty Certificate Program, East Center – Central Piedmont Community College
University of Houston – Downtown	$150,000	Teaming Up to Produce Nuclear Power Certificates (University of Houston-Downtown Nuclear Prep)
Lakeshore Technical College	$50,600	Lakeshore Technical College's (LTC's) Nuclear Technology Scholarship Program

Chattanooga State Community College's Nuclear Scholarship Program

Executive Summary:

The objective of Chattanooga State Community College's Nuclear Scholarship Program is to provide 32 scholarships over the next two years averaging $4,000 per year (two semesters) to full-time students within nuclear related programs of study (AAS Engineering Technology: Nuclear Power Engineering Technology, Radiation Protection, Non-Destructive Testing Technology and Quality Assurance/Quality Control).

Chattanooga State Community College is supporting the Southeast United States' nuclear power industry workforce by increasing the number of highly skilled and highly qualified technicians. This scholarship will become an instrumental tool in the Engineering Technology Division's recruiting, retaining and educating of nuclear technicians during a time where attrition of the current workforce is prevalent and of high concern.

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Onondaga Nuclear Technology (NET) Scholars Program

Executive Summary:

Onondaga Community College (Onondaga) seeks support for its NET Scholars Program, a new scholarship program designed to increase awareness of Onondaga's Nuclear Technology (NET) A.A.S program, recruit academically talented students, and support the success of approximately 32 NET students over the next 2 years. Onondaga launched its Nuclear Technology (NET) A.A.S. program in fall 2013 in order to meet the workforce needs of the nuclear energy industry. Onondaga enrolled 22 students in its first cohort in fall 2013 and awarded scholarships to 3 NET students in spring 2014 through its STEM Scholars program. However, the need for scholarships among NET students exceeded the funding available. The NET Scholars program will help meet unmet need among NET students, and scholarship recipients will be supported by an orientation program and activities designed to encourage high academic performance, including mentoring, monitoring, academic support, and career preparation activities. The program will leverage a contribution from CENG Corporate and Nine Mile Point Nuclear Station (NMP). Employees from CENG/NMP will be engaged in the program and will recruit graduates in accordance with program requirements. Students will benefit from scholarships, engagement activities, and the ability to prepare for rewarding careers in the nuclear industry. In addition, the project will play an important role in strengthening the pipeline of individuals qualified to fill anticipated vacancies in the nuclear energy industry.

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Estrella Mountain Nuclear Industry Scholarship Program

Executive Summary:

Estrella Mountain Community College will provide scholarships of $2,500 to each of 50 eligible students to complete the college's Associate's Degree (AAS) program in Power Plant Technology. The project will prepare students for apprenticeships and careers in the energy industry including nuclear power generation and nuclear-related industries. The degree program incorporates Nuclear Uniform Curriculum Program defined credentials. Students who complete their AAS degree in Power Plant Technology meet all the job competencies, knowledge, skills and abilities identified by Institute for Nuclear Power Operations standards.

Principal Investigator: Clay Goodman, clay.goodman@estrellamountain.edu

Linn State Technical College's (LSTC's) Nuclear Education Scholarships

Executive Summary:

Funds are requested for Linn State Technical College (LSTC) to provide scholarships for students attending or accepted into the Associate of Applied Science degree in Nuclear Technology during 2014-2015. The Nuclear Technology program offers three options: *Radiation Protection*, *Reactor Operations*, and *Instrumentation and Controls*. These two-year degree programs support the nuclear energy industry workforce by providing a pool of highly qualified technicians and craft personnel ready for employment, an essential element to continued safe, efficient, and reliable electricity production. Future and present workforce shortages caused by the aging workforce within the nuclear industry is a widely-recognized problem that has been analyzed and addressed in numerous studies and public venues. This scholarship program is playing a major role in providing much needed funds for qualified students to attend and complete one of the LSTC nuclear degree programs. Having a scholarship available specifically for the nuclear program is an integral part of the successful recruitment of qualified students. It assists in advertising the program, makes the program financially feasible for some students, and gives the degree credibility from the start.

The LSTC Nuclear Technology degree is a successful program that is being emulated by other educational institutions that endeavor to deliver a two-year nuclear degree. This scholarship has been offered since 2008 and has been a successful tool in the recruitment process. Two factors that have been impacted include increased enrollment of highly qualified students and a broader public awareness of the two-year degree in Nuclear Technology and the knowledge that it is the doorway to a professional and rewarding career.

Principal Investigators: Jeff Fletcher, jeff.fletcher@linnstate.edu; John Blosser, john.blosser@linnstate.edu; Lauren Neuner, lauren.neuner@linnstate.edu

Wharton County Junior College Nuclear Education Scholarship Project

Executive Summary:

Wharton County Junior College (WCJC) proposes to continue its Nuclear Education Scholarship Project (NES Project) from August 1, 2014 through July 31, 2016. The goals of the NES Project are the improvement and expansion of educational opportunities for academically talented students as well as academically eligible students with demonstrated financial needs, who enroll in the Associate Degree (AAS) program in Nuclear Power Technology or in Process Technology (Nuclear Enhanced Skills Certificate Option). The project's objectives are: (1) recruit a 15-student cohort each year for two years through recruitment efforts at the college and at high schools in the WCJC service area, especially in communities near the STP Nuclear Power Plant located near Bay City, Texas; and (2) award at least 15 scholarships per semester averaging approximately $2,500 each. Funds would also be awarded for Summer Session classes, if needed. Maximum award for any student during the 2-year period of the grant is $10,000.

The NES Project will enable at least 15 students per semester to enroll in WCJC's nuclear studies programs who otherwise might not be able to enroll or to persist in college studies to completion of a degree. Women, minority students, veterans, and physically challenged individuals will be encouraged to apply. This project will benefit both the students and the nuclear power generation industry. Upon graduation, students will receive an AAS degree in Nuclear Power Technology or Process Technology (Nuclear Option) and will possess the prerequisite skills to become employed at a nuclear power generation facility in Texas or elsewhere in the USA, or to pursue a baccalaureate degree in nuclear studies.

Principal Investigator: Rudolph Henry, henryr@wcjc.edu

Visual Testing (VT) Specialty Certificate Program, East Center – Central Piedmont Community College

Executive Summary:

CPCC requests $150,000 to develop and implement a new certificate program as part of the College's Non-Destructive Examination Technology Associate of Applied Science degree. The Advanced Visual Testing (VT) certificate program will prepare individuals to support the maintenance, construction, operation and regulation of nuclear facilities. CPCC will thoroughly select 30 eligible, highly qualified students for scholarship support and enrollment in the Advanced VT certificate program.

CPCC anticipates achieving the following primary objectives with support from the Nuclear Regulatory Commission's Trade School and Community College Scholarship Grant:

- Establish a new certificate program focused on Visual Testing (NDE)
- Enroll 30 students in the program, emphasizing recruitment of minorities and females
- Provide academic support and job placement assistance for students'
- Develop a level II examination to certify graduates in Visual Testing with industry partner EPRI

Principal Investigator: Anver Classens, Anver.Classens@cpcc.edu

Teaming Up to Produce Nuclear Power Certificates (University of Houston-Downtown Nuclear Prep)

Executive Summary:

The University of Houston-Downtown (UHD) in cooperation with Houston Community College-North West – West Houston Center for Science and Engineering (HCC-NW WHC) and supported by an ongoing, long-term partnership with Texas A&M University (TAMU) Nuclear Engineering Department, and the University of Texas-Houston Graduate School of Biomedical Sciences (UTH GSBS), the South Texas Project Nuclear Operating Company (STP NOC), and Comanche Peak Nuclear Power Plant (CP NPP) (long-time partners on two active UHD NRC awards: #s NRC-27-10-1121 and NRC-HQ-12-G-38-0006) propose to establish a community college-to-four-year university training and pipeline project entitled, "Teaming Up to Produce Nuclear Power Certificates (UHD Nuclear Prep)." This project will target three primary goals to increase the minority undergraduates at HCC becoming prepared to enter nuclear-related jobs through the following:

1. Provide minority undergraduate scholarships to science, technology, engineering, and mathematics (STEM) community college students seeking a degree, certification, and employment;
2. Provide extensive exposure to nuclear-related undergraduate, graduate, and workforce programs through UHD-arranged field trips/seminars co-curricular opportunities;
3. Support completion of the five-course *Nuclear Power Institute (NPI) certificate program* qualifying graduates to enter nuclear power plant jobs and nuclear engineering studies;
4. Provide extensive mentored summer research experiences in radiochemistry, physics, material science, polymer-related nuclear chemistry & computational radiochemistry with UHD PhDs already heavily involved in two active UHD NRC awards, as referenced above.

This project will transition HCC Nuclear Prep Scholars into UHD NRC MSIP (currently in year three of five years) and the UHD NRC Scholarship project (currently in a no-cost extension year) to extend the associates degree and enable completion of the four-year degree while also completing the NPI certificate, thereby qualifying these students for entrance into a Master's degree program or nuclear-related employment.

This proposal seeks to open nuclear power certificate coursework to the associate level undergraduate while also connecting research experiences at UHD to strongly encourage transfer and completion of an undergraduate baccalaureate for minorities.

This project uses NRC performance metrics to evaluate the success of the program with both HCC-NW WHC and UHD providing longitudinal tracking to inform the attainment of project objectives over the two-year period. This project plans to support up to 20 community college Nuclear Prep Scholars over two years with full credit course loads. Also, we expect 18 of 20 (90%) to complete at least one NPI certificate course per year. We expect 16 (80%) total to enroll at UHD as the two-year project ends.

Principal Investigator: Mary Jo Parker, parkerm@uhd.edu

Lakeshore Technical College's (LTC's) Nuclear Technology Scholarship Program

Executive Summary:

The project objective is to provide financial assistance for 23 full-time students in Lakeshore Technical College's Nuclear Technology Associate Degree program. Of the total college student enrollment, 19% are economically disadvantaged and 75% attend part time due to employment while in school. The benefit of this project is to provide students with much needed financial support for full-time enrollment, degree completion in two years, and to fill critical workforce needs in nuclear power generation.

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