

# NWI Academy Overview

Employment Readiness Skills • Nuclear Industry Career Pathways

## Program Background

### Nuclear Workforce Demand

The United States' long-term demand for highly skilled nuclear industry workers is well-documented by the Nuclear Energy Institute [1]. Nearly 10,000 new nuclear workers are needed in the two-state region of Georgia and South Carolina alone [2]. The region includes the U. S. Department of Energy's (DOE) Savannah River Site (SRS). Just west of SRS, construction activities are progressing for two new nuclear power facilities at Plant Vogtle in Georgia. To the east of SRS, work is proceeding for two additional new nuclear power units at the V.C. Summer Nuclear Station in South Carolina.

### Nuclear Workforce Requirements

Young adults interested in preparing for jobs in the nuclear field must develop skills and knowledge, including a clear understanding of nuclear worker roles and responsibilities. The common expectation of nuclear industry workers is that they "are trustworthy, will perform their tasks in a reliable manner, are not under the influence of any substance, legal or illegal, that may impair their ability to perform their duties, and are not mentally or physically impaired from any cause that can adversely affect their ability to safely and competently perform their duties" [3 ].

### The Pipeline Challenge

Preparation for nuclear industry careers requires education and training. Successful students are able to enter well-paying career fields. However, many students are not equipped with an understanding of the elements that impact future employability when they enter education and training programs. As a result, these students often experience frustration and are deterred from pursuing nuclear industry careers.

### Proposed Solution - NWI Academy

Aiken Technical College, Augusta Technical College and the SRS Community Reuse Organization (SRSCRO) will design and implement a youth/young adult program to provide students with an educational and awareness experience that will prepare them for academic programs that lead to a position and career in a commercial or Department of Energy nuclear facility. The program will be called the Nuclear Workforce Initiative (NWI) Academy.

## Program Concept

### Goal

The NWI Academy goal is to increase nuclear industry career pathways for low-income, young adults. Success is defined by the number of students entering a nuclear industry-related job, or enrolling in a nuclear-industry related academic field of study following completion of the NWI Academy.

### Format

NWI Academy programs will be offered at both Aiken Technical College and Augusta Technical College.

**Phase I** - The NWI Academy will be taught by college faculty experienced in the nuclear industry and supported by guest speakers from the commercial and Department of Energy nuclear facilities. Students will also tour a local nuclear power plant and witness first hand work and life in a nuclear power plant. Course content reflects the collaboration of Aiken Technical College and Augusta Technical College. The delivery format will be structured in a boot-camp framework, offered during the summer of 2011. Phase I will be taught at Aiken Technical College.

**Phase II** – Lessons learned and identified course enhancements from Phase I will be included in Phase II. During Phase II, programs will be conducted at both Aiken Technical College and Augusta Technical College.

Due to variations in college systems across state lines, there are some variations between the NWI Academy programs at each institution. However, each program is designed to address nuclear industry fundamentals, GEICC required courses and tests, and each provides some type of industry credential for the student to use in advancing their career development.

### Target Audience

The Aiken Technical College and Augusta Technical College NWI Academy programs will each be designed for:

- 24 students per college program
- Low-Income Young Adults (approximate ages 18-20)

### Expected Outcomes

At the completion of the program, students will have completed testing and certification that could lead to some entry level positions in nuclear-related industries and students will be better prepared to successfully enroll in nuclear industry-related academic programs. Students will have developed an awareness of the nuclear industry career

opportunities, work environments, work requirements and educational programs that lead to long-term nuclear industry careers. Students will be aware of the elements that impact future employability in the nuclear industry and will have earned the following:

#### **Phase 1 –**

- South Carolina Work Readiness Certificate
- Skills USA Assessment
- 40 Hour HAZWOPER Certification
- 6 College Credits

#### **Phase 2 –**

- Work Readiness Certificate
- Skills USA Assessment results
- First Aid/CPR Certification (Augusta Technical College Program)
- 10-Hour OSHA Certification (Augusta Technical College Program)
- Continuing Education Credit (Augusta Technical College Program)
- 6 College Credits (Aiken Technical College Program)
- 40 Hour HAZWOPER Certification (Aiken Technical College Program)

## **Program Timeline**

### **PHASE I**

April 1, 2011 – May 31, 2011	Complete Phase I course development Finalize development/instructional funding details Finalize student fee/attendance funding with WIA Boards Recruit students with support from WIA sources
June 2011	Conduct Phase I NWI Academy at Aiken Technical College

### **PHASE II**

January 2012 – May 2012	Revise course content based on Phase I Lessons Learned Finalize development/instructional funding details Finalize student fee/attendance funding with WIA Boards Recruit students with support from WIA sources
June 2012	Conduct Phase II NWI Academy at Aiken Technical College and Augusta Technical College
September 2012	Provide Phase II course materials and metrics to GEICC as required



## Program Deliverables

The following deliverables will be provided to GEICC following completion of NWI Academy:

- NWI Academy Course Materials
- Metrics Associated with Attendees (ex: number of attendees, ages, action taken following NWI Academy)

## Sources:

1. Nuclear Energy Institute, "New Nuclear Plants," Retrieved 10/2010, (<http://www.nei.org/keyissues/newnuclearplants>).
2. Booz Allen Hamilton, "Nuclear Workforce Survey Report for SRSCRO," (June 8, 2009).
3. U.S. Nuclear Regulatory Commission Fitness for Duty Programs, Retrieved 3/30/2011 (<http://www.nrc.gov/reactors/operating/ops-experience/fitness-for-duty.html>).