Agenda Item 2.a

New Program Proposal
Associate in Industrial Technology
Major in Radiation Protection Technology
Aiken Technical College

Summary

Aiken Technical College requests approval to offer a program leading to the Associate in Industrial Technology degree with a major in Radiation Protection Technology, to be implemented in Fall 2009.

The proposal was approved by State Board of Technical and Comprehensive Education on January 27, 2009. The Program Planning Summary was reviewed without substantive comment by the Advisory Committee on Academic Programs on January 15, 2009, and was approved unanimously. At the meeting Dr. Morrison asked if the college will receive any external funding to alleviate some of the costs of the program. The institution's representative stated that a gift of $200,000 has been given to the certificate program by the United Research Services-Washington Group. The college will also receive a $40,000 grant from Savannah River Nuclear Solutions. The full proposal was received by the Commission on Higher Education on February 12, 2009.

According to the proposal, the purpose of the program is to meet the growing demand for Radiation Protection Technicians in the college's service area. The proposal states that in the near future the nuclear industry is facing a critical shortage of workers. Studies by organizations such as the Nuclear Energy Institute, the Health Physics Society, and the Radiation Protection Working Group of the Department of Energy Facilities Contractors Group indicate that in the next five to ten years, over half (57%) of personnel in the industry will be eligible for retirement. The college's regional needs survey showed that government and private sector employers estimate a need for 95 full-time radiation protection positions in the college's service area over the next five years.

According to the proposal, South Carolina ranks third among the 31 states with nuclear capacity and has the largest nuclear capacity in the southeastern United States. A recent statewide forum conducted by Aiken Technical College in partnership with the SC Council on Competitiveness and the Southern Growth Policies Board found that the Washington Savannah River Company (WSRC), the prime Department of Energy contractor for the Savannah River Site, will need to hire at least 50 Radiation Protection Technologists over the first five years of the program's operation. In addition, several private contractors and external government entities will have a combined demand for approximately 45 new Radiation Protection Technologists.

Aiken Technical College is the second of the technical colleges to seek approval to offer this type of program in South Carolina. Spartanburg Community College was recently approved to offer a Radiation Protection Technology program. The program is designed with two distinct paths. One path leads to a terminal degree for those students who elect to enter directly into the workforce. The second path focuses on building the foundation needed for students to continue their studies at a four-year institution. Aiken Technical College states that it is interested in pursuing articulation agreements with four-year colleges and universities once the Radiation Protection Technology Protection degree program is approved.

The curriculum for the proposed program will consist of a total of 68 credit hours. These credit hours include 28 hours in major requirements and 40 credit hours of general education requirements. Aiken Technical College plans to offer the Radiation Technology Protection program to two cohorts of students: a day-time cohort and an evening cohort. The college utilized the curriculum developed by the University of Missouri through a Department of Labor grant for the Center of Excellence for Radiation Technology Protection Education and Training. The proposed program is an expansion of the current Radiation Technology Protection certificate program offered at Aiken Technical College. Implementation of the program will require two new courses to be added to Aiken Technical College's catalogue. All other courses in the program are included in the college's catalog of approved courses.

The proposal states that no new faculty, staff, or administration will be required to implement the proposed program because personnel are already in place to manage the Radiation Protection Technology certificate program. Three adjunct faculty members will be hired as necessary.

The proposal states that the college anticipates that the program will enroll 30 new students (30.4 FTE) in the first year, rising to 48 (49.6 FTE) in the second and third years of the program's implementation. If the estimated student enrollments are met, the program will meet the Commission on Higher Education's program productivity requirements.

Aiken Technical College's library is housed in the Dale Phelon Information Technology Center, which has a collection of over 55,000 items in print, audiovisual, and electronic resources accessible to students, faculty, staff, and the community. The proposal states that library and learning resources are currently able to provide a variety of materials for this program because of the electronic databases which are available to students and faculty members through PASCAL. The College anticipates spending a total of $912 within the first year of the program's implementation to purchase books to support the program.

No new equipment purchases are anticipated for the program. Aiken Technical College has received donations from the Southern Company, loaned equipment from Savannah River National Site, and a $200,000 grant from United Research Services (URS)-Washington, which was utilized for equipment, curriculum development, and first-year instructor salaries in the Radiological certificate program. The proposed program also indicates that a total of $15,000 for three years for supplies and materials will be necessary to support the program. No new physical plant requirements will be needed for the first three years of the proposed program's implementation.

Total new costs are estimated by the institution at $314,468 for the first three years of the program. The categories for these operational costs include faculty salaries ($296,556), supplies and materials ($15,000), library resources ($911.95), and other ($3,000).

Shown below are the estimated Mission Resource Requirement (MRR) costs to the state and new costs not funded by the MRR associated with the implementation of the proposed program for its first three years. Also shown are the estimated revenue projected under the MRR and the Resource Allocation Plan as well as student tuition.

Estimated Program Costs and Revenue

	Estimated Program Costs		**Estimated Program Revenue**				
	(A) MRR Cost	**(B) Other Costs***	**(C) Actual State Funding**	**(D) Tuition**	**(E) Additional Revenue**	**(F) Total Revenue (C+D+E)**	**(G) Total Revenue - Total Costs (F-(A+B))**
Year 1	$343,927	$0	N/A	$107,840	$240,000	$347,840	$3,913
Year 2	$560,906	$0	$193,512	$175,784	$0	$369,296	-$191,611
Year 3	$560,906	$0	$315,898	$175,784	$0	$491,682	-$69,224
Year 4	$0	$0	$315,898	$0	$0	$315,898	$315,898
Year 5	$0	$0	$0	$0	$0	$0	$0

*Includes costs of an extraordinary nature not otherwise included in the MRR cost calculation (e.g., costs for a new building required to support a program).

These data demonstrate that if Aiken Technical College can meet the projected student enrollments and contain costs as they are shown in the proposal, the program will

be able to cover new costs with revenues in the first year of the program, but not in the second and third years of its implementation. Nevertheless, the institution has provided assurances that it has the resources necessary to implement the program appropriately.

Recommendation

The staff recommends that the Committee on Academic Affairs and Licensing commend favorably to the Commission the program leading to the Associate in Industrial Technology degree with a major in Radiation Protection Technology at Aiken Technical College, to be implemented in Fall 2009, provided that no "unique cost" or other special state funding be required or requested.