

State of Rhode Island and Providence Plantations

Budget



Fiscal Year 2013

Volume III – Education

Lincoln D. Chafee, Governor

Agency

Rhode Island Atomic Energy Commission

Agency Mission

To operate and maintain the facilities at the RINSC, to support projects in all areas and to actively seek commercial projects, and to provide assistance to other state agencies in their radiation and emergency response programs.

Agency Description

The Rhode Island Nuclear Science Center (RINSC) is used for medical, biological, environmental, and materials research, education and commercial activities. The staff runs the Radiation Safety Program for the University of Rhode Island. The Director serves on the State Radiation Advisory Commission and has taken over responsibility for low-level radioactive waste disposal activities.

The center's state-of-the-art analytic laboratories and equipment are currently being used for several environmental monitoring programs sponsored by the Department of Environmental Management, the Narragansett Bay Commission and other agencies. Several years ago, the facility completed a multi-year, \$3 million dollar reactor upgrade program financed through Department of Energy Grants. In 1993, the reactor was converted to a new low enriched uranium fuel system that has greatly reduced security requirements and associated costs while providing a significant improvement in performance. Subsequent grants have resulted in the addition of required mechanical and electronic equipment necessary to substantially increase reactor capability. These improvements will permit the RINSC to compete successfully for production of medical isotopes and will provide the necessary neutron flux to conduct Neutron Capture Therapy that is a promising new method of curing brain cancer and skin cancer. Engineering, design and fabrication work is currently in progress for the construction of a cancer treatment facility and researchers at Brown University, and the RINSC has received a grant to develop new compounds for use at this facility. This multi-year grant supports a collaborative effort with the Massachusetts Institute of Technology (MIT) to develop a successful treatment for one of the most deadly forms of brain cancer.

A laboratory for the development of new radio-pharmaceuticals has been completed by R.I. Consultants. This company recently developed a new method of utilizing radio-isotopes to prevent clogging of the arteries after angioplasty and they are currently developing new products for several research groups. BioPAL Incorporated is making extensive use of the reactor to conduct analysis of medical samples for a variety of treatment and research purposes. They have developed a new method of using medical isotopes that eliminate the dose to patients during diagnostic treatments. SubChem Systems Inc. has just completed a new laboratory building on the South Lab Wing for the development of underwater sensors for weapons of mass destruction. RINSC is located at the University of Rhode Island, Bay Campus, in Narragansett. The center contains a state-of-the-art nuclear counting system, laboratories, a mass spectrometer, a class-100 clean room and facilities for handling and storage of radioactive material. The Rhode Island Nuclear Science Center has operated on a daily basis without incident since 1962.

Statutory History

R.I.G.L. 42-27 establishes the commission for matters relating to nuclear power.

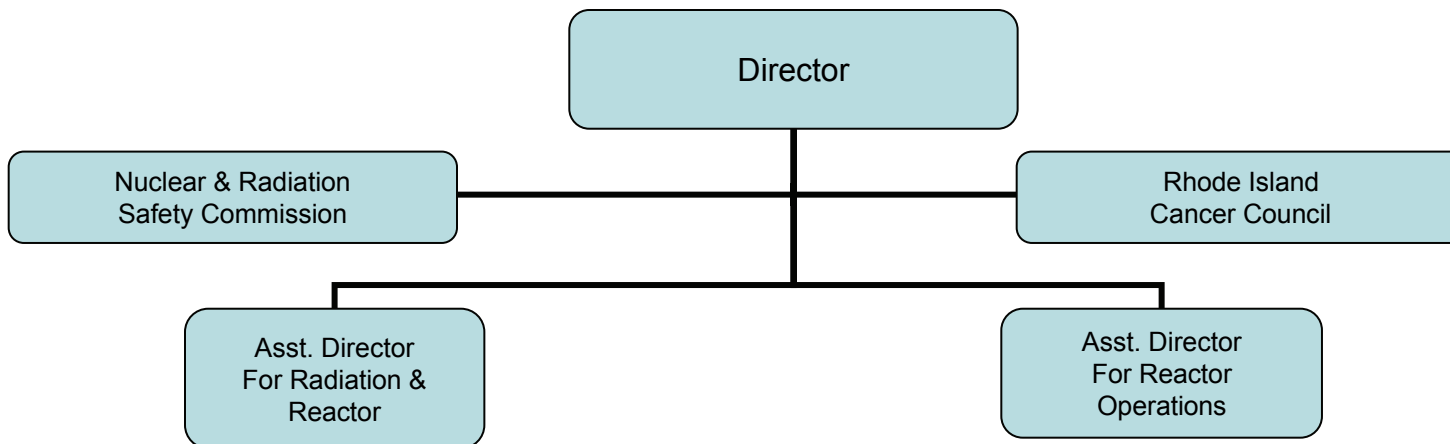
Budget

Rhode Island Atomic Energy Commission

	FY 2010 Audited	FY 2011 Audited	FY 2012 Enacted	FY 2012 Revised	FY 2013 Recommend
Expenditures By Program					
Central Management	1,141,723	1,198,881	1,511,526	1,394,387	1,389,551
Total Expenditures	\$1,141,723	\$1,198,881	\$1,511,526	\$1,394,387	\$1,389,551
Expenditures By Object					
Personnel	880,891	984,443	1,052,190	1,052,509	1,077,315
Operating Supplies and Expenses	225,904	175,600	389,336	257,392	240,236
Subtotal: Operating Expenditures	1,106,795	1,160,043	1,441,526	1,309,901	1,317,551
Capital Purchases and Equipment	34,928	38,838	70,000	84,486	72,000
Total Expenditures	\$1,141,723	\$1,198,881	\$1,511,526	\$1,394,387	\$1,389,551
Expenditures By Funds					
General Revenue	769,039	858,629	879,592	877,459	876,213
Federal Funds	130,200	76,635	324,104	183,752	180,216
Operating Transfers from Other Funds	242,484	263,617	307,830	333,176	333,122
Total Expenditures	\$1,141,723	\$1,198,881	\$1,511,526	\$1,394,387	\$1,389,551
FTE Authorization	8.6	8.6	8.6	8.6	8.6
Agency Measures					
Minorities as a Percentage of the Workforce	8.0%	8.0%	8.0%	8.0%	8.0%
Females as a Percentage of the Workforce	44.4%	44.4%	44.0%	44.0%	44.0%
Persons with Disabilities as a Percentage of the Workforce	11.0%	11.0%	11.0%	11.0%	11.0%
Service Hours as a Percentage of the Service Hours Goal of 100 Annually	N/A	34.0%	100.0%	100.0%	100.0%
Objective	100.0%	34.0%		100.0%	100.0%
Irradiations Sample-Hours Provided as a Percentage of the Research Goal of 20,000 Sample Hours Annually	14.0%	10.5%	15.0%	15.0%	20.0%
Objective	100.0%	100.0%		100.0%	100.0%
Outreach Hours Provided as a Percentage of the Outreach Goal of 500 Outreach Hours Annually	14.0%	104.0%	120.0%	120.0%	120.0%
Objective	100.0%	100.0%		100.0%	100.0%
Class/Instruction/Training (CIT) Hours Provided as a Percentage of the Goal of 2000 CIT Hours Annually	N/A	81.1%	100.0%	100.0%	100.0%
Objective	N/A	100.0%		100.0%	100.0%
Development Hours Provided as a Percentage of the Goal of 500 Development Hours Annually	N/A	80.0%	90.0%	90.0%	100.0%
Objective	N/A	100.0%		100.0%	100.0%

The Agency

Atomic Energy Commission



Personnel

Rhode Island Atomic Energy Commission Central Management

	Grade	FY 2012		FY 2013	
		FTE	Cost	FTE	Cost
Classified					
Director	0150A	1.0	160,962	1.0	160,962
Assistant Director for Operations	0139A	1.0	98,689	1.0	99,696
Assistant Director for Reactor Safety	0139A	1.0	96,760	1.0	96,760
Senior Facility Engineer	0132A	1.0	75,122	1.0	75,122
Reactor Supervisor, Nuclear Science Ctr.	0132A	1.0	62,536	1.0	64,821
Principal Reactor Operator	0124A	1.0	62,182	1.0	63,545
Health Physicist	0130A	1.0	59,162	1.0	61,939
Senior Clerk Typist	0109A	0.6	22,465	0.6	22,465
Student Intern (3)	0802H	-	26,676	-	26,676
Subtotal		7.6	\$664,554	7.6	\$671,986
Unclassified					
Information Systems Specialist	0816A	1.0	41,907	1.0	41,907
Subtotal		1.0	\$41,907	1.0	\$41,907
Turnover		-	(40,955)	-	(27,475)
Subtotal		-	(\$40,955)	-	(\$27,475)
Total Salaries		8.6	\$665,506	8.6	\$686,418
Benefits					
Defined Contribution Plan		-	-	-	6,597
FICA		-	47,693	-	49,417
Medical		-	85,563	-	94,077
Payroll Accrual		-	-	-	3,888
Retiree Health		-	45,044	-	45,258
Retirement		-	150,888	-	139,727
Subtotal		-	\$329,188	-	\$338,964
Total Salaries and Benefits		8.6	\$994,694	8.6	\$1,025,382
Cost Per FTE Position			\$115,662		\$119,230
Statewide Benefit Assessment		-	24,624	-	24,742
Temporary and Seasonal		-	12,000	-	12,000
Subtotal		-	\$36,624	-	\$36,742
Payroll Costs		8.6	\$1,031,318	8.6	\$1,062,124
Purchased Services					
Information Technology		-	400	-	400
Other Contract Services		-	4,250	-	4,250
Training and Educational Services		-	16,541	-	10,541
Subtotal		-	\$21,191	-	\$15,191

Personnel

Rhode Island Atomic Energy Commission Central Management

	Grade	FY 2012		FY 2013	
		FTE	Cost	FTE	Cost
Total Personnel		8.6	\$1,052,509	8.6	\$1,077,315
Distribution By Source Of Funds					
General Revenue		7.0	835,553	7.0	842,987
Federal Funds		-	23,856	-	37,000
Other Funds		1.6	193,100	1.6	197,328
Total All Funds		8.6	\$1,052,509	8.6	\$1,077,315

Rhode Island Atomic Energy Commission Performance Measure Narratives

Central Management

Service Hours as a Percentage of the Service Hours Goal of 100 Annually

The Rhode Island Nuclear Science Center provides its services to other agencies on both the state and local level. The Service Hour is a measurement of the time spent providing assistance to outside agencies such as hospitals, emergency personnel etc.

Irradiations Sample-Hours Provided as a Percentage of the Research Goal of 20,000 Sample Hours Annually

This indicator is the number of irradiation samples times length of irradiation provided by the reactor facility annually as a percentage of a realistic current service level budget goal of 20,000 sample-hours annually at the Rhode Island Nuclear Science Center. Irradiated samples are utilized in various types of commercial and research activities at universities and in industry, and are therefore related to the commission's stated research function. The 2010 performance measure continues to be low due to the poor economy. Our current commercial users are the basis for the projection.

Outreach Hours Provided as a Percentage of the Outreach Goal of 500 Outreach Hours Annually

This measures the amount of time the RINSC staff is interacting with the public. The RINSC has become a tourist destination for many local junior high schools, high schools, and universities. The RINSC also participates in the Graduate School of Oceanography's annual day at the bay. Each tour takes approximately two hours to complete. The number of tourists multiplied two is the function describing the outreach hour.

Class/Instruction/Training (CIT) Hours Provided as a Percentage of the Goal of 2000 CIT Hours Annually

The RINSC classroom is utilized by the RINSC staff and professors from local institutions to teach undergraduate and graduate classes. In addition to this the staff works with some students to train them as reactor operators and assists others in large research projects. On average it takes 150 hours of class and practical time to train a reactor operator. Most senior level projects require the student spend about 100 hours working under the supervision of a staff member. As such, the CIT hour will be the summation of the number of major projects that required staff assistance multiplied by 100 and the number of reactor operators trained multiplied by 150 and the number of hours the classroom/teaching labs were utilized.

Development Hours Provided as a Percentage of the Goal of 500 Development Hours Annually

In order to maintain a safe facility each new experiment must pass through a rigorous analysis. The analysis determines whether the experiment is safe for the reactor and those involved, and if the reactor is capable of producing results. Each experiment takes about 40 hours to analyze. The Development Hours will be calculated by multiplying the number of new experiments/demonstrations developed over the year by 40.