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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

January 27, 2000

CHAIRMAN

The Honorable Richard W. Riley
Secretary of Education
U.S. Department of Education
Washington, D.C. 20202

Dear Secretary Riley:

In response to your November 15, 1999 letter, I am enclosing the Nuclear Regulatory Commission's (NRC's) Fiscal Year 1999 Annual Federal Performance Report on Executive Agency Actions to Assist Historically Black Colleges and Universities (HBCU). The enclosed report reflects the Commission's continuing efforts to assist HBCUs through our Faculty and Student Research Participation Program, which is conducted through a Cooperative Agreement with the Oak Ridge Institute for Science and Education. As requested, the NRC's annual report was also forwarded to Ms. Catherine LeBlanc, Executive Director of the White House Initiative on Historically Black Colleges and Universities, U.S. Department of Education, and Ms. Jennifer Kron, Program Examiner, Education Branch, Office of Management and Budget.

If you have questions regarding this report or the agency's HBCU Program, please contact Mrs. Irene P. Little, Director, Office of Small Business and Civil Rights, at (301) 415-7380 or ipl@NRC.gov.

Sincerely,

Richard A. Meserve

Enclosures: As stated

cc: Ms. Catherine LeBlanc, Edu/HBCU
Ms. Jennifer Kron, OMB

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**U.S. NUCLEAR REGULATORY COMMISSION
ANNUAL FEDERAL PERFORMANCE REPORT
FISCAL YEAR 1999
HISTORICALLY BLACK COLLEGES AND UNIVERSITIES (HBCUs)**

A. EXECUTIVE SUMMARY

Goals and Objectives

The Nuclear Regulatory Commission's (NRC's) HBCU Faculty and Student Research Participation Program is conducted through a Cooperative Agreement with the Oak Ridge Institute for Science and Education. NRC's program enables HBCU faculty and students to conduct technical research and development activities on campus and at Department of Energy (DOE) facilities where a substantial portion of NRC's research and technical assistance activities is performed.

The principal goals of this program are to enhance academic studies in science, mathematics, and engineering and to increase the number of available scientists, engineers, and related professionals. Participants concentrate on research and development work that directly support NRC's mission.

Exemplary HBCU Programs

During this fiscal year, the program continued to focus on assigning HBCU faculty, graduates, and undergraduates to NRC technical assistance projects at DOE laboratories, where a majority of this work is performed. A total of 14 participants performed work at 5 different DOE laboratories, and an additional 5 participants were assigned to on-campus research projects. Three of these projects will continue into Fiscal Year 2000 and are scheduled for completion in June 2000.

NRC's program continues to provide HBCU students and faculty opportunities to learn state-of-the-art research techniques and to be exposed to research that is conducted in a nationally recognized laboratory. Examples of projects where participants had hands-on participation include: (1) investigating issues associated with implementing wireless measurement and control systems in harsh environmental conditions, particularly with nuclear power plants; (2) applying virtual reality in dealing with hazardous waste; and (3) wavelet processing of ultrasonic signals backscattered from coarse-grained materials.

In conjunction with an on-campus research project, one participant presented a paper¹ at the SPECTRUM International Conference on Decommissioning and Decontamination and on Nuclear Hazardous Waste Management. The paper was published in the proceedings of the SPECTRUM conference. Another paper² was presented by this same participant at the Inter-American Congress of Chemical Engineering.

Total HBCU Awards and Comparisons to Previous Fiscal Year

During Fiscal Year 1999, a total of \$213,740 was available for the HBCU Program. The NRC provided \$189,161 of the total amount available to 19 recipients (12 faculty and 7 students). The remaining \$24,579 will be expended during Fiscal Year 2000 as work continues for three on-campus research projects that were initiated in Fiscal Year 1999. For Fiscal Year 1998, NRC provided a total of \$227,862 to 24 recipients (16 faculty and 8 students).

B. SUMMARY OF TOTAL AGENCY AWARDS BY CATEGORY

Attachment A presents the total awards (i.e., amount expended).

C. TABLE OF AGENCY AWARDS TO HBCUs, BY INSTITUTION AND CATEGORY

Attachment B presents a listing of NRC awards to each HBCU by category.

D. AWARDS TO HBCUs AND NARRATIVE INFORMATION

Attachment C is NRC's HBCU recipient list, which includes their major field of study, location of research project, and award amount.

ENCLOSURE 1

¹ *Development and Validation of Ion-Exchange Phase-Equilibrium Model for Sorption of Pb and Cs Mixtures on Zeolitized Volcanic Tuff*

² *Modeling Sorption of Mixtures of Radionuclides on Zeolitized Volcanic Tuff and Clay Minerals*

SUMMARY OF TOTAL AWARDS TO HBCUs, BY CATEGORY: FY 1999

1. U. Nuclear Regulatory Commission
 AGENCY

2. Irene P. Little
 NAME/SIGNATURE OF REPRESENTATIVE

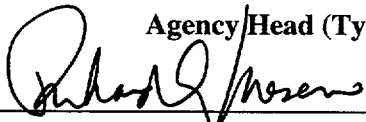
Director, Office of Small Business and Civil Rights
 TITLE

3. **TOTAL UNIVERSE OF FUNDS FOR INSTITUTIONS OF HIGHER EDUCATION (IHEs)**
\$5,327,862

CATEGORY	AWARDS TO IHE+	AWARDS TO HBCUs*	Awards to HBCUs as % of total Awards to IHE
1. Research & Development	\$5,327,862	\$189,161	3.5%
2. Program Evaluation			
3. Training			
4. Facilities and Equipment			
5. Fellowships, Traineeships, Internships, Recruitment, and IPAs			
6. Student Tuition Assistance, Scholarships, and Other Aid			
7. Direct Institutional Subsidies			
8. Third Party Awards			
9. Private Sector Involvement			
10. Administrative Infrastructure			
11. Other			
Total	\$5,327,862	\$189,161	3.5%

Richard A. Reserve, Chairman, U.S. Nuclear Regulatory Commission

Agency Head (Typed)



Agency Head (Signature)

+IHE = Institutions of Higher Education

*HBCUs = Historically Black Colleges and Universities

FEDERAL AGENCY AWARDS TO INSTITUTIONS
FY 1999

STATE/INSTITUTION	R&D	PE	TRAINING	F&E	FELLOWS	SFA	DIS	TPA	PSI	AI	OTHER	TOTALS
ALABAMA												
ALABAMA A&M												
ALABAMA STATE												
BISHOP STATE COMM.												
CARVER CAMPUS												
CONCORDIA COLLEGE												
FREDD STATE TECH												
GADSDEN STATE												
LAWSON STATE												
MILES COLLEGE												
OAKWOOD COLLEGE												
SELMA UNIVERSITY												
J.F. DRAKE TECH												
STILLMAN COLLEGE												
TALLADEGA COLLEGE												
TRENHOLM STATE TECH												
TUSKEGEE UNIVERSITY	6,121											6,121
ARKANSAS												
ARKANSAS BAPTIST												
PHILANDER SMITH												
SHORTER COLLEGE												
U. OF ARKANSAS @ PB												
DELAWARE												
DELAWARE STATE												
DISTRICT OF COLUMBIA												
HOWARD UNIVERSITY	2,776											2,776
UNIV. OF D. C.												

FEDERAL AGENCY AWARDS TO INSTITUTIONS (cont'd)

STATE/INSTITUTION	R&D	PE	TRAINING	F&E	FELLOWS	SFA	DIS	TPA	PSI	AI	OTHER	TOTALS
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FLORIDA

BETHUNE COOKMAN												
EDWARD WATERS												
FLORIDA A&M	5,778											
FLORIDA MEMORIAL												5,778

GEORGIA

ALBANY STATE												
CLARK ATLANTA U.	17,750											17,750
FORT VALLEY STATE												
INTERDENOMINATIONAL THEOLOGICAL CENTER												
MOREHOUSE COLLEGE	10,714											10,714
MOREHOUSE MEDICAL												
MORRIS BROWN												
PAINE COLLEGE												
SAVANNAH STATE												
SPELMAN COLLEGE												

KENTUCKY

KENTUCKY STATE												
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LOUISIANA

DILLARD UNIVERSITY												
GRAMBLING STATE												
SOUTHERN U. & A&M	954											954
SOUTHERN/BATON ROUGE												
SOUTHERN/NEW ORLEANS												
SOUTHERN/SHREVEPORT												
XAVIER UNIVERSITY	5,192											5,192

MARYLAND

BOWIE STATE												
COPPIN STATE												
MORGAN STATE	15,993											15,993
U. OF MARYLAND ES												

FEDERAL AGENCY AWARDS TO INSTITUTIONS (cont'd)

STATE/INSTITUTION	R&D	PE	TRAINING	F&E	FELLOWS	SFA	DIS	TPA	PSI	AI	OTHER	TOTALS
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MICHIGAN

LEWIS COLLEGE OF BUS.												
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MISSISSIPPI

ALCORN STATE												
COAHOMA JR. COLLEGE												
HINDS COMM. COLLEGE												
JACKSON STATE	12,400											12,400
MARY HOLMES												
MISSISSIPPI VALLEY												
RUST COLLEGE												
TOUGALOO COLLEGE												

MISSOURI

HARRIS STOWE STATE												
LINCOLN UNIVERSITY												

NORTH CAROLINA

BARBER-SCOTIA												
BENNETT COLLEGE	11,373											11,373
ELIZABETH CITY STATE												
FAYETTEVILLE STATE												
JOHNSON C. SMITH												
LIVINGSTONE COLLEGE	915											915
N. C. A&T STATE	34,153											34,153
N. C. CENTRAL												
ST. AUGUSTINE												
SHAW UNIVERSITY												
WINSTON-SALEM STATE												

OHIO

CENTRAL STATE												
WILBERFORCE UNIV.												

OKLAHOMA

LANGSTON UNIV.												
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FEDERAL AGENCY AWARDS TO INSTITUTIONS (cont'd)

STATE/INSTITUTION	R&D	PE	TRAINING	F&E	FELLOWS	SFA	DIS	TPA	PSI	AI	OTHER	TOTALS
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PENNSYLVANIA

CHEYNEY UNIV.												
LINCOLN UNIV.	1,038											1,038

SOUTH CAROLINA

ALLEN UNIVERSITY												
BENEDICT COLLEGE												
CLAFLIN COLLEGE												
CLINTON JR. COLLEGE												
DENMARK TECH.												
MORRIS COLLEGE												
S. C. STATE UNIV.	47,286											47,286
VOORHEES COLLEGE												

TENNESSEE

FISK UNIV.												
KNOXVILLE COLLEGE												
MORRISTOWN CAMPUS												
LANE COLLEGE												
LEMOYNE-OWEN												
MEHARRY MEDICAL												
TENNESSEE STATE												

TEXAS

HUSTON-TILLOTSON												
JARVIS CHRISTIAN												
PAUL QUINN COLLEGE												
PRAIRIE VIEW A&M												
SAINT PHILLIP'S												
SOUTHWESTERN CHRIST.												
TEXAS COLLEGE												
TEXAS SOUTHERN												
WILEY COLLEGE												

FEDERAL AGENCY AWARDS TO INSTITUTIONS (cont'd)

STATE/INSTITUTION	R&D	PE	TRAINING	F&E	FELLOWS	SFA	DIS	TPA	PSI	AI	OTHER	TOTALS
VIRGINIA												
HAMPTON UNIV.												
NORFOLK STATE												
SAINT PAUL'S												
VIRGINIA STATE	4,429											4,429
VIRGINIA UNION												
WEST VIRGINIA												
BLUEFIELD STATE												
W. VIRGINIA STATE	12,289											12,289
U.S. VIRGIN ISLANDS												
UNIV. OF THE V. I.												
GRAND TOTAL	\$189,161											\$189,161

CATEGORIES:

- R&D RESEARCH AND DEVELOPMENT
- PE PROGRAM EVALUATION
- TRAINING
- F&E FACILITIES AND EQUIPMENT
- FELLOWS FELLOWSHIP, RECRUITMENT, IPA
- SFA STUDENT FINANCIAL ASSISTANCE
- DIS DIRECT INSTITUTIONAL SUBSIDIES
- TPA THIRD PARTY AWARDS
- PSI PRIVATE SECTOR INVOLVEMENT
- AI ADMINISTRATIVE INFRASTRUCTURE

**HBCU PARTICIPANT LIST
FISCAL YEAR 1999**

RECIPIENT	*(S)	*(F)	HBCU	FIELD OF STUDY	**RESEARCH LOCATION	AWARD AMOUNT
Burdette, Deborah Ms.	1		West Virginia State College	Elec Engineering	ORNL	\$5,389
Johnson-Mayo, Ifayet Ms.	1		Tuskegee U.	Biology	NBL	6,121
Lewis, Jared Mr.	1		Xavier U. of Louisiana	Computer Science	LANL	5,192
Mayo, Jessie	1		Virginia State U.	Physics	NBL	4,429
McFarlane, Quaneshala Ms.	1		Florida A&M U.	Computer Science	LANL	5,778
Ward, Eric	1		Lincoln U./U. of VA	Electrical Engineering	SRTC	1,038
Williams, Jonathan	1		Southern University	Biology	NBL	954
Basavaraju, Sekhara Dr.		1	Bennett College	Biology	ORNL	11,373
Gobovic, Desa Dr.		1	West Virginia State College	Elec Engineering	ORNL	6,900
Isa, Saliman Dr.		1	South Carolina State U.	Elec Engineering	ORNL	12,412
Johnston, R. Dr.		1	Jackson State U.	Physics	PNNL	12,400
Jones, Andrew Dr.		1	Morehouse College	Math	ORNL	10,714
Lari, Saeed Dr.		1	South Carolina State U.	Eng Technology	+On Campus	15,307
Lee, Seong Dr.		1	Morgan State U.	Engineering	+On Campus	15,993
Rao, Gopala		1	Howard University	Chemical Engineering	On Campus	2,776
Sabaratham, Saskikala		1	Livingstone College	Biology	PNNL	915
Song, Yong Dr.		1	NC A&T State U.	Elec Engineering	On Campus	34,153
Talukder, Niranjan Dr.		1	Clark Atlanta U.	Engineering	SRTC	17,750
Whitney, Tom Dr.		1	South Carolina State U.	Eng Technology	+On Campus	19,567
TOTAL PARTICIPANTS	7	12				\$189,161
*S: Student; F: Faculty						
**BNL: Brookhaven National Laboratory				ORNL: Oak Ridge National Laboratory		
INEL: Idaho National Engineering Laboratory				PNNL: Pacific Northwest Laboratory		
LANL: Los Alamos National Laboratory				SNL: Sandia National Laboratories		
LLNL: Lawrence Livermore National Laboratory				SRTC: Savannah River Technology Center		
NBL: New Brunswick Laboratory				SRS: Savannah River Site		
+Project will continue into FY 2000.						