

January 30, 2001

Mr. Earl Hayes, Acting Executive Director  
White House Initiative on Historically Black  
Colleges and Universities  
U.S. Department of Education  
1990 K Street, N.W.  
Washington, D.C. 20009-5120

Dear Mr. Hayes:

In response to a November 27, 2000 letter, signed by your predecessor, Catherine W. LeBlanc, I enclose the Nuclear Regulatory Commission's (NRC's) Fiscal Year 2000 Annual Federal Performance Report on Executive Agency Actions to Assist Historically Black Colleges and Universities (HBCU). The report reflects the NRC's continuing efforts to assist HBCUs through our Faculty and Student Research Participation Program. This program is conducted through a Cooperative Agreement with the Oak Ridge Institute for Science and Education. As requested, the agency's annual report was also forwarded to 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](mailto:ipl@NRC.gov).

Sincerely,

**/RA/**

Richard A. Meserve

Enclosures: As stated

cc: Ms. Jennifer Kron, OMB

**U.S. NUCLEAR REGULATORY COMMISSION  
ANNUAL FEDERAL PERFORMANCE REPORT  
FISCAL YEAR 2000  
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 are 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, graduate, and undergraduate students to NRC technical assistance projects at DOE laboratories where a majority of this work is performed. A total of 9 participants performed work at 2 different DOE laboratories, and an additional 7 participants were assigned to on-campus research projects. Two of these projects will continue into Fiscal Year 2001.

The agency'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 experience are as follows:

- Survey of modulation and coding techniques presently used in commercial wireless systems. The intent is to select a robust wireless communication technique and evaluate the possibility of its application in nuclear power plants. Part of this research was presented at the Sixth Annual West Virginia State College Research Festival held on April 28, 2000. This project was conducted by two HBCU participants from West Virginia State College in support of an NRC technical assistance project conducted by Oak Ridge National Laboratory.
- Use of virtual reality for visualization of nuclear storage facilities. By creating a three-dimensional graphic model of a facility, certain tasks can be performed without entering the facility, such as determining the time it takes to go through a

facility and how to remove or place certain containers; familiarizing oneself with equipment inside a facility; and training personnel involved in nuclear plant accident scenarios. This was an on-campus research project conducted by two HBCU participants from South Carolina State University.

*Total HBCU Awards and Comparisons to Previous Fiscal Year*

During Fiscal Year 2000, a total of \$192,231 was available for expending in the agency's HBCU Program. Actual amount expended involved 9 recipients (6 faculty and 3 students) and totaled \$178,764. The remaining \$13,467 will be expended during Fiscal Year 2001 as work continues for two on-campus research projects that were initiated in Fiscal Year 2000. For Fiscal Year 1999, a total of \$189,161 was expended for participation by 19 recipients (12 faculty and 3 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 agency 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.

**SUMMARY OF TOTAL AWARDS TO HBCUs, BY CATEGORY: FY 2000**

**1. U.S. Nuclear Regulatory Commission**  
**AGENCY**

**2. Irene P. Little /RA/** **Director, Office of Small Business and Civil Rights**  
**NAME/SIGNATURE OF REPRESENTATIVE** **TITLE**

**3. TOTAL UNIVERSE OF FUNDS FOR INSTITUTIONS OF HIGHER EDUCATION (IHEs)**  
**\$5,371,764**

| CATEGORY  | AWARDS TO<br>IHE+ | AWARDS TO<br>HBCUs* | Awards to HBCUs<br>as % of total<br>Awards to IHE |
|---|-------------------|---------------------|---|
| 1. Research & Development   | \$5,371,764       | \$178,764           | 3.3%  |
| 2. Program Evaluation   |                   |                     |   |
| 3. Training   |                   |                     |   |
| 4. Facilities and Equipment   |                   |                     |   |
| 5. Fellowships, Traineeships,<br>Internships, Recruitment, and IPAs |                   |                     |   |
| 6. Student Tuition<br>Assistance, Scholarships,<br>and Other Aid    |                   |                     |   |
| 7. Direct Institutional Subsidies                                   |                   |                     |   |
| 8. Third Party Awards   |                   |                     |   |
| 9. Private Sector Involvement                                       |                   |                     |   |
| 10. Administrative Infrastructure                                   |                   |                     |   |
| 11. Other   |                   |                     |   |
| Total   | \$5,371,764       | \$178,764           | 3.3%  |

**Richard A. Meserve, Chairman, U.S. Nuclear Regulatory Commission**  
**Agency Head (Typed)**

**/RA/**  
**Agency Head (Signature)**

**+IHE = Institutions of Higher Education**

**\*HBCUs = Historically Black Colleges and Universities**

**ENCLOSURE 1, ATTACHMENT A**