

June 22, 1982

Dr. John Larkins
Severe Accident Assessment Branch
Division of Accident Evaluation
Office of Nuclear Regulatory Research
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear John:

Program Title/Activity Identification

Aerosol Measurements and Modeling for Fast Reactor Safety.

Current Progress and Technical Highlights

During May, work proceeded on code validation of HAARM-3 against CSTF and NSPP single species experiments (Subtask 2). An analysis of the suitability of the Student T-Test comparison method is continuing.

Work under Subtask 3, Aerosol Properties Measurements, was again delayed in favor of expediting work on Subtask 4, Code Development/Improvement. Under this task, the MSPEC Manual was completed after some delay to allow inclusion of a correction term for non-Stokesian velocities in the MSPEC Manual version. An additional delay occurred as a result of code numerical problems discovered to occur under certain conditions. These needed to be cleared up before the manual version could be archived and the manual itself released.

Anticipated Accomplishments in June

Work under Tasks 2 and 3 will continue at the present level. Under Task 4 work will proceed with development of MSPEC beyond the manual version. Specifically, a condensation term, conceptually developed earlier, will be programmed into the code and tested for compatibility with the Gear integration method employed in MSPEC.

Disclaimer Notice

NOTICE: This informal document contains information of a preliminary nature and was prepared primarily for interim use in fast breeder reactor programs in the U.S. Thus, it is subject to revision or correction, does not constitute a final report, and should not be cited as a reference in publications.

The estimated and actual cumulative costs are shown in Figure 1.

Sincerely,

James A. Gieseke, Research Leader Physico-Chemical Systems Section

JAG:drr

cc: R. T. Curtis

J. Long (NRR-DPM)

C. N. Kelber

SACRD (ORNL)

NRC Public Document Room (2)

J. Larkins (3)

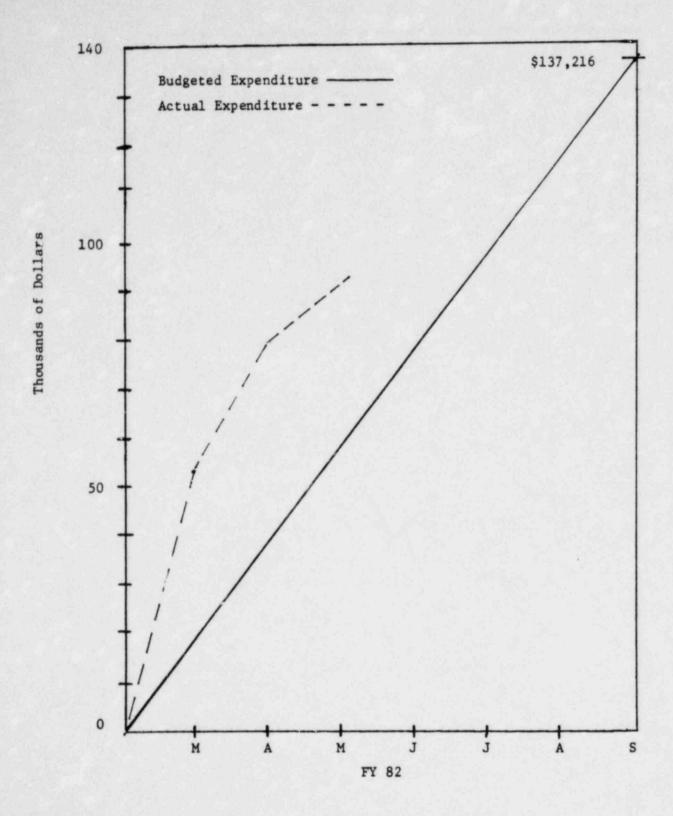


FIGURE 1.