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Accession No. \_\_\_\_\_

Contract Program or Project Title: Fission Product Transport Analyses

Subject of this Document: Monthly Status Report

Type of Document: Letter -- July

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Contract No.: NRC-04-76-293-02

Date of Document: October 18, 1978

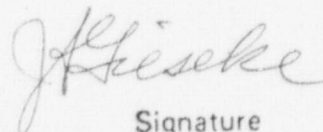
Date Transmitted to NRC: October 18, 1978

NRC Individual and NRC Office or Division to Whom Inquiries Should be Addressed:

Dr. William V. Johnston, Chief  
Fuel Behavior Research Branch  
Division of Reactor Safety Research

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October 18, 1978

Dr. William V. Johnston, Chief  
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U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Dr. Johnston:

Program Title/Activity Identification

Fission Product Transport Analyses.

Current Progress and Technical Highlights

In July, the TRAP-MELT code was essentially completed with the inclusion of vapor condensation on particles and wall surfaces. Work on the functional design of the FPTTF was continued with particular emphasis on the scaling behavior of the mechanisms incorporated in TRAP-MELT. A code was written that calculates deposition velocities and fractions deposited in a single control volume as a function of mechanism.

A work plan for the laboratory scale aerosol deposition experiments was prepared and submitted to NRC. It was decided to use 0.25-inch copper tubing for the test section and to monitor input-output rather than deposition. This permits real-time measurements. H. Jordan attended the presentation to the NRC of the FPTTF design by ORNL on July 26.

Anticipated Accomplishments

The functional design of the FPTTF is expected to be completed in August and the TRAP-MELT sensitivity study is expected to get underway. The aerosol deposition experimental equipment will be completed during the next month.

NRC Research and Technical  
Assistance Report

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

Sincerely,

*James A. Gieseke, Jr.*

James A. Gieseke, Research Leader  
Physical Chemistry, Atmospheric Science,  
and Aerosol Technology Section

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Attachment

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