INTERIM REPORT

Accession No. _____

Contract Program or Project Title: Fission Product Transport Analysis
(NRC-04-76-293-02)

Subject of this Document: Monthly Progress Report for July, 1979

Type of Document: Monthly Letter

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Date of Document: August 16, 1979

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Prepared for
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

INTERIM REPORT

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August 16, 1979

Mr. Richard Sherry
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Washington, D.C. 20555

Dear Rick:

Program Title/Activity Identification

Fission Product Transport Analysis.

Current Progress and Technical Highlights

During July the major efforts were concerned with setup of the vapor deposition equipment, analysis of the aerosol deposition data, selection of assumed TMI sequences and analyses, and modifications of the TRAP-MELT code to permit continuation of the uncertainty analysis.

The vapor deposition experiments are nearing start-up with the apparatus assembly and components checkout proceeding smoothly. Preparations are being made for shakedown runs which will be followed immediately by initiation of planned experiments.

The previously noted problems with the TRAP-MELT code in calculating all cases of interest apparently resulted from solution instabilities encountered in the treatment of the particle size distribution. After considerable effort to overcome these problems, a solution seems to be achievable by following the mean particle size rather than the full size distribution. This is the approach used previously in the TRAP c le for LOCA conditions.

Anticipated Accomplishments for August

During August it is anticipated that the vapor deposition experiments will be started, thermal hydraulic and fission product deposition calculations related to TMI accident sequences will be made, and the uncertainty analyses will proceed.

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

Sincerely,

Jim

James A. Gieseke, Research Leader
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JAG:ld

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