



Columbus Laboratories
505 King Avenue
Columbus, Ohio 43201
Telephone (614) 424-6424
Telex 24-5454

October 18, 1978

Dr. William V. Johnston, Chief
Fuel Behavior Research Branch
Division of Reactor Safety Research
Office of Nuclear Regulatory Research
U.S. Nuclear Regulatory Commission
Washington, D.C.

Dear Dr. Johnston:

Program Title/Activity Identification

Fission Product Transport Analyses.

Current Progress and Technical Highlights

During June, the agglomeration subroutine was incorporated in TRAP-MELT and tested satisfactorily. It represents the most sophisticated modification to date, as it requires a detailed mass balance not only of a given species of nuclide but also among species. This circumstance required considerable programming effort, particularly because of the extended core storage techniques of the TRAP codes. The method of approach to the functional design of the FPTTF was worked out during this month and creation of the necessary data base begun.

Anticipated Accomplishments

It is anticipated that TRAP-MELT will be completed (to the extent possible without developmental experiments) during July. The planned sensitivity study can then be begun. Work on the functional design of the FPTTF will continue. Design of the lab-scale experimental facility for developing submicron particle deposition velocities from flows anticipated in the primary system of LWR's during meltdown will be begun in July.

Disclaimer Notice

NOTICE: This informal document contains information of a preliminary nature and was prepared primarily for interim use in light water 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.

NRC Research and Technical
Assistance Report

7812190204

October 18, 1978

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

Sincerely,

Ham Dind, for

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

JAG:ld

Attachment

cc: R. Sherry
J. Norberg
W. Lahs
S. Fabic
L. Shotkin
L. S. Tong
L. Rib
P. Norian, NRR Accident Analysis Branch
D. Bunch, "
R. Meyer, NRR Core Performance Branch
A. Malinauskas, ORNL
J. Dearian, INEL
SACRD, ORNL
NRC Public Document Room

PRELIMINARY

Accession No. _____

Contract Program or Project Title: Fission Product Transport Analyses

Subject of this Document: Monthly Status Report

Type of Document: Letter--June

Author(s), Affiliation and Address: James A. Gieseke, Research Leader
Battelle-Columbus Laboratories
505 King Avenue, Columbus, OH 43201

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

Date of Document: October 18, 1978

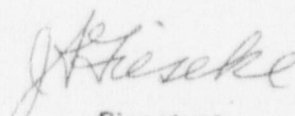
Date Transmitted to NRC: October 18, 1978

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

This document was prepared primarily for preliminary or internal use. It has not received full NRC review and approval. Since there may be substantive changes, this document should not be considered final.

This Document may be made Publicly Available


Signature
(NRC Program or Project Sponsor or
Authorized Contractor Official)

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

PRELIMINARY