



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

NOV 30 1979

MEMORANDUM FOR: Michael A. Parsont, Chief, Radiological Health Standards Branch, OSD  
FROM: Daniel R. Muller, Acting Director, DSE  
SUBJECT: INFORMATION ON RESEARCH RELATED TO HEALTH EFFECTS OF IONIZING RADIATION (NRR-3467)

In response to your memorandum of November 19, 1979 for H.R. Denton, W.E. Kreger, and W.H. Regan, Jr., of NRR, we herein list the action projects stimulated by NRR that relate to the above subject, primarily in the category of human exposure pathways.

- 1. Modeling of Environmental Exposure Pathways and Consequent Radiation Doses in Reactor Accident Situations - B-2158, Performed at Battelle Pacific Northwest Laboratories (PNL).

Phase III. Use code to perform site-specific dose calculations and sensitivity analyses, and recommend to NRC codes and parameters to be used in NEPA evaluations

\$130K for FY 1980 - Contact: S. Acharya

- 2. I-131 Pathway Behavior Under Stored Feed Conditions - B-2175-9. PNL.

A study to determine pathways by which radioiodine in reactor effluents can transfer to cow or goat milk even though the animals are not on pasture but are on stored feed.

\$40K for FY 1980 - Contact: S. Acharya

- 3. Projection Models for Health Effects Assessment in Populations Exposed to Radioactive and Nonradioactive Pollutants. A-2059. Argonne National Laboratory.

The FY 80 effort will address the probability density functions for number of births, and the incorporation of the basic uncertainty surrounding the dose-response functions associated with DEMPAC. Other aspects of stage 1, 3 and 4 efforts of the project will be completed.

\$140K for FY 1980 - Contact: R. Gotchy

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4. Extension of SKYSHINE II. B-1199, Radiation Research Associates.

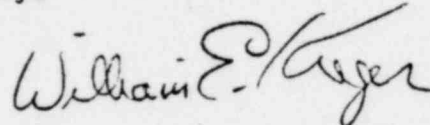
This project will update the  $\gamma$  and neutron scatter code to calculate problems of reflection of radiation within structures, transmission through walls, etc., to provide a broader capability for calculating direct and scattered dose to offsite people from inplant sources.

\$10K, FY 1980 - Contact: S. Acharya

5. Dosimetry and Biotransport Models to Implement ALARA - Terrestrial Food Chain Model. B-0188, Oak Ridge National Lab.

Goal is to create a framework within which structural variations and refinement in terrestrial food chain models can be evaluated.

\$133K, FY 1980 - Contact: S. Acharya



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cc: WEKreger  
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