INTERIM REPORT

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Monthly Highlights

for

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Thermal Hydraulic LMFBR Safety Experiments

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* Work carried out under the auspices of the United States Nuclear Regulatory Commission.

1. Thermal Hydraulic LMFBR Safety Experiments

1.1 Hydrodynamic Characteristics of Two-Phase Dispersed Systems (T. Ginsberg, G.A. Zimmer, J. Klages; J. Chen, Lehigh Univ.)

The first phase of the hydrodynamic dispersion experiments using water and air were completed. Experiments were carried out in the test section which contained no dummy injector tubes. Void fraction and pressure profiles were measured, with superficial air velocities up to approximately 12 times the infinite-medium bubble rise velocity. Photographic observations were also recorded.

A lattice of dummy gas injection tubes was fabricated for the next phase of the experiments. Assembly of the lattice has begun. Preparations are being made for recalibration of the test section.

1.2 Fuel Relocation Studies (G.A. Greene)

A final report is being prepared and will be transmitted to NRC upon completion of printing (a draft will be sent to D. Basdekas earlier). Recommendations for future work in this area are included.

1.3 Transition Phase Technology Assessment (G.A. Greene and T. Ginsberg)

Preparation of a final report, subsequent to the April 22, 1980 Review Group meeting, began.

Distribution Thermal Hydraulic LMFBR Development Program

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