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Assistance Report 8004090324

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Monthly Highlights

for

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Thermal Hydraulic LMFBR Safety Experiments

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NRC Research and Technical Assistance Report

- 1. Thermal Hydraulic LMFBR Safety Experiments
- 1.1 <u>Hydrodynamic Characteristics of Two-Phase Dispersed Systems</u> (T. Ginsberg, J. Klages; J.C. Chen, Lehigh University)

The first series of two-phase void fraction measurements were made with the gamma densitometer system. An axial traverse, at the center of the front face of the column was made, along with several lateral traverses at several axial locations. Air bypass around the porous plate was observed, resulting in a non-ideal bubbly flow regime. The plate has been removed and an improved seal-ing method is being devised.

1.4 Fuel Relocation Studies (G.A. Greene)

Preparation of a final report continued.

1.5 Heat Transfer in Internally Heated Boiling Pools (G.A. Greene)

The Rayleigh number for convection in internally heated non-boiling pools was identified from the dimensionless boundary layer equations as

The local heat transfer data from non-boiling pools will be correlated to this parameter.

1.6 Technology Assessment Report (G.A. Greene, T. Ginsberg; M.S. Kazimi, (MIT))

Preparation of a final report continued.

Distribution Thermal Hydraulic LMFBR Development Program

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