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Monthly Highlights

for

May 1982*

Thermal-Hydraulic LMFBR and LWR Safety Experiments
FIN No. A-3024

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1. Thermal-Hydraulic Reactor Safety Experiments -

1.1 Heat Transfer in Core-Concrete Interactions: Liquid-Liquid Heat Transfer (G. A. Greene)

The mercury-water interfacial heat transfer data were analyzed and the results were found to be in good agreement with the previously reported H_g-H₂O data. The mercury-oil data have been taken. Preliminary data analysis indicates the magnitude of the heat transfer coefficient is significantly greater than the KFK Woods metal-oil data. Reasons for this behavior are being considered.

1.2 Heat Transfer in Core-Concrete Interactions: Coolant Layer Heat Transfer (G. A. Greene)

No progress during this reporting period.

1.3 Core Debris Thermal-Hydraulic Phenomenology - Steam Spike Phenomenology (T. Ginsberg)

A series of experiments was carried out with the steam flow turbine meter in place. The experimental conditions were chosen to reproduce those of earlier experiments. Preliminary runs were carried out to evaluate the effect of piping wall temperature on the steam flow measurement and to determine the appropriate temperatures for accurate flow indication.

1.4 General Programmatic Activities

A presentation was made to the AUI Visiting Committee.

Monthly Distribution List

Thermal Hydraulic LMFBR Development Program

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