

INTERIM REPORT

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Baseline Test Series"

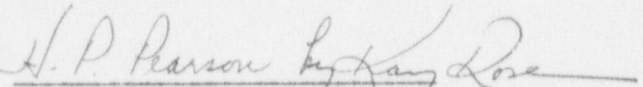
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Prepared for
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INTERIM REPORT

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**EG&G**

Idaho, Inc.

P. O. Box 1625
Idaho Falls, Idaho 83401

September 11, 1978

Mr. R. E. Tiller, Director
Reactor Operations and Programs Division
Idaho Operations Office - DOE
Idaho Falls, ID 83401

TRANSMITTAL OF QUICK LOOK REPORT FOR SEMISCALE MOD-3 GRAVITY REFLOOD
TEST S-07-5 (WR-S-78-019) - DJO-116-78

- Ref. (a) J. M. Cozzuol, Quick Look Report for Semiscale Mod-3
Test S-07-3 Baseline Test Series, WR-S-78-017, EG&G
Idaho, Inc. (August 1978)
- (b) Semiscale Program, Semiscale EOS Appendix 7, WR-S-78-002,
EG&G Idaho, Inc. (March 1978)

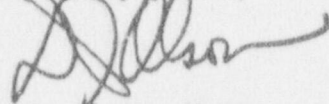
Dear Mr. Tiller:

Attached is the quick look report for Semiscale Mod-3 Test S-07-5 which was run August 23, 1978. Test S-07-5 was the fifth experiment conducted in the Semiscale Mod-3 baseline test series (Test Series 7). The initial conditions were derived from the end of refill conditions in Test S-07-3 (Reference (a)). The containment pressure was 138 kPa, average initial temperature in the core high power zone was 970 K, and the initial peak power density was 1.33 KW/m. The core power decay was programmed to follow the ANS + 20% decay curve.

As indicated in Reference (b), the objectives of Test S-07-5 were to determine the system thermal-hydraulic behavior under reflood conditions expected to occur during an integral 200% cold leg break test in the Mod-3 system, to gain insight into the effect of initial conditions on reflood behavior, provide information on downcomer and upper plenum hydraulic behavior, and to provide data for code evaluation.

The objectives of Test S-07-5 were met and the results of a preliminary analysis of the experimental data are presented in the attached quick look report.

Very truly yours,



D. J. Olson, Manager
Semiscale Program

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Attachment:
As Stated

NRC Research and Technical
Assistance Report

R. E. Tiller
DJO-116-78
September 11, 1978
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