

GENERAL ELECTRIC

NUCLEAR ENERGY
BUSINESS GROUP

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SUBJECT: CONTRACT NO. NRC-04-76-215
FURTHER EVALUATION AND INTERPRETATION OF BD/ECC-1A DATA

REFERENCE: BWR BD/ECC Program Forty-Fourth Monthly Report, June 1979

Gentlemen:

Enclosed please find three recently completed evaluations of BD/ECC-1A test data as follows:

- (1) Summary of TLTA Tests with ECC Injection - This attachment documents the BD/ECC-1A data observations, evaluations and conclusions presented at the last regular PMG Meeting. Phenomena controlling the TLTA thermal-hydraulic and bundle heatup response are identified and discussed. Comparisons of test results with and without ECC injection and a summary of the peak and low power bundle tests are also provided.
- (2) TLTA Break Flow Study - Attachment 2 presents the results from mass and energy balances for comparable tests with and without ECC injection. These results show increased liquid entrainment in the blowdown flow which results in a lower volumetric discharge flow and hence a lower depressurization rate for the test with ECC injection.
- (3) Evaluation of TLTA Separator Pressure Drop - Attachment 3 provides analysis of steam separator pressure drop data. These results substantiate that flow through the separator was lower for the test with ECC injection and provide further support for the conclusions reached in the Break Flow Study.

Very truly yours,

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cc: BD/ECC Program Monthly Report
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