NUCLEAR ENERGY BUSINESS OPERATIONS . GENERAL ELECTRIC COMPANY SAN JOSE, CALIFORNIA 95125



T. I. E. NO.	84NED042
TITLE CO	re Spray Sparger Crack
Analysis	for Edwin I. Hatch
Nuclear	Power Station, Unit 1

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## ERRATA And ADDENDA SHEET

NO \_\_\_\_\_ December 1984

DATE

NOTE: Correct all copies of the applicable publication as specified below.

REFERENCES INSTRUCTIONS (SECTION, PAGE PARAGRAPH, LINE) ITEM (CORRECTIONS AND ADDITIONS) 1 Page 4-8 Replace page 4-8 with new page 4-8 (Change bar in right-hand margin indicates area where report has been revised.) 8502200295 850212 PDR ADOCK 05000321 ŝ PDR

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## Table 4-1

## KEY PHENOMENA RELATED TO CORE SPRAY COOLING PERFORMANCE

Phenomena	Analytical Assumptions Used in the Current Reload Analysis	Realistic Assumptions
Upper Plenum Inventory	Conservatively assumed to not interact or contribute to core reflood during LOCA transient	Pool of water present throughout transient assures coolant delivery to all fuel bundles (supported by Large Scale Tests)
Counter Current Flow Limiting No CCFL breakdow	Saturated water in upper plenum above core	Some subcooling and less CCFL occurs. A residual pool of water remains during and after core reflooding. (supported by Large Scale Tests)
	No CCFL breakdown	Breakdown of CCFL shortly after spray initiation causes rapid reflooding (supported by Large Scale Tests)
Core heat transfer	Limited spray cooling after blowdown (Appendix K credit only)	Steam cooling contribution as much as 10 times greater than Appendix K spray cooling
Decay Heat	1971 ANS + 20% specified by Appendix K	1979 ANS (GE has submitted a technical basis as a part of the Standard Plant docket which is based on the 1979 ANS decay heat correlation)

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Figure 4-1. Hatch Unit 1 DBA (Limiting LOCA) Analysis