SAFETY EVALUATION REPORT
FOR
D. C. COOK UNIT 1
LARGE BREAK LOCA RE-ANALYSIS
USING BART-WREFLOOD

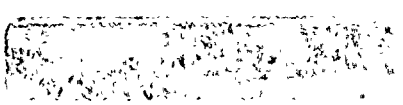
In reference 1, the licensee submitted a LOCA analysis for D. C. Cook Unit 1 to support the current technical specification value of Fq = 2.10. This analysis used BART-WREFLOOD for thermal hydraulic analysis during the reflood phase of the LOCA. The corrected and revised input methodology was used. The worst case identified in reference 1 was the so-called Max SI case with Cd = 0.6. No other break sizes, were presented for Max SI. At the NRC's request, the licensee requested Westinghouse to perform Max SI analyses for Cd = 0.4 and 0.8. This was done and the results are as follows.

LOCA Analysis Results
Max SI

BREAK Cd	PCT(°F)
0.4	2107
0.6	2154
0.8	2046

Thus it was confirmed that Cd=0.6 was the worst case.

The staff also questioned the impact on K(z) of using BART-WREFLOOD. The licensee and Westinghouse reviewed "spot-check" analyses with BART-WREFLOOD for top-peaked cases and determined that the existing K(z) curves would not be adversely affected.



Based on these results the staff finds the new analyses using BART-WREFLOOD to support an Fq = 2.10 to be acceptable.

Dated: August 26, 1985

Principal Contributor:

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