



Westinghouse
Electric Corporation

Energy Systems

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NSD-NRC-96-4723
DCP/NRC0515
Docket No.: STN-52-003

May 15, 1996

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

ATTENTION: T. R. QUAY

SUBJECT: AP600 SAMPLE PROBLEMS

Dear Mr. Quay:

Your letter of April 25, 1996 concerning Nuclear Regulatory Commission (NRC) independent confirmatory analysis of Westinghouse AP600 piping systems, identified that there were differences between the results of sample problems analyzed by Westinghouse and the results of the same problems analyzed by Brookhaven National Laboratory. The letter indicated that staff acceptance criteria were not met in some cases and stated that further review and analysis are needed to identify the sources of the differences.

The Westinghouse analysis was performed using the computer code PIPESTRESS developed by DST Computer Services S. A. This program has been bench-marked using NUREG-1677, "Piping Benchmark Problems" with excellent agreement with the results published by the NRC. The PIPESTRESS program is a widely used program in the nuclear industry.

The purpose of these sample problems is to provide the COL applicant with a benchmark with which to compare their own piping analyses to ensure the results meet the range of acceptable values. There is no indication in the NUREG/CR-6414 that any staff acceptance criteria were not met.

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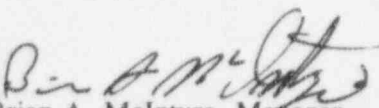
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Westinghouse will provide details of the benchmarking of the PIPESTRESS code during the meeting with the NRC the week of June 3, 1996 and also discuss piping analysis and leak-before-break methodology.

If you have any questions, please contact D. A. Lindgren on (412) 374-4856.


Brian A. McIntyre, Manager
Advanced Plant Safety and Licensing

/nja

cc: D. Jackson, NRC
G. Bagchi, NRC
S. Ho, NRC
N. Liparulo, Westinghouse