



Westinghouse
Electric Corporation

Energy Systems

Box 355
Pittsburgh Pennsylvania 15230-0355

NSD-NRC-97-5069
DCP/NRC0813
Docket No.: STN-52-003

April 15, 1997

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

ATTENTION: T. R. QUAY

SUBJECT: HEAT EXCHANGER DATA

Dear Mr. Quay:

Your letter of February 19, 1997 requests that Westinghouse compare its AP600 PRHR heat transfer correlations with experimental data obtained using a "C"-tube heat exchanger design to confirm our analytical models.

Westinghouse had previously performed an extensive literature search for data to support the AP600 PRHR heat exchanger correlations used in the safety analysis and submitted the results of that search to the staff in support of RAI 952.94 (Revision 1) in our letter NSD-NRC-96-4660 dated March 6, 1996. Westinghouse has rereviewed these literature sources and has concluded that data is not available in the public domain for a "C"-tube heat exchanger design at thermal conditions for comparison to the AP600 PRHR heat exchanger.

The ROSA-V test facility, which models a passive plant being used by the NRC for confirmatory testing purposes, contains a scaled "C"-tube PRHR heat exchanger. According to the technical staff, this facility can provide data that meets the requirements specified by the staff. Therefore, Westinghouse requests that the NRC provide data applicable to the PRHR performance from the ROSA-V test facility as offered in your letters of January 16, 1997 and February 19, 1997. Specifically, Westinghouse requests that PRHR data be provided from two tests; 1) AP-BO-01, a station blackout and 2) AP-CL-04, a 1/2 inch break in the cold leg. As discussed with the technical review staff, the data from these two tests will be sufficient to meet the staff's requirements to confirm the AP600 PRHR heat exchanger correlations.

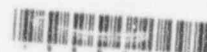
Westinghouse requests the staff provide data from these two ROSA tests which includes the system pressure, PRHR flow, PRHR inlet and outlet fluid temperatures, PRHR tube surface temperatures, and IRWST temperatures as a function of time.

230025

1/0 E004

3156A

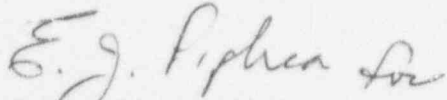
9704230131 970415
PDR ADDCK 05200003
E PDR



April 15, 1997

To meet the milestones delineated in SECY-97-051 to submit the final SSAR and supporting documentation by May 30, 1997, Westinghouse requires this data by May 2, 1997.

Mr. Eugene Piplica, will contact Dr. Levin of the NRC staff to discuss the specifics of the data and electronic media requirements.



Brian A. McIntyre, Manager
Advanced Plant Safety and Licensing

jml

cc: A. Levin - NRC/NRR/RXSB
W. C. Huffman - NRC/NRR/DRPM
N. Liparulo - Westinghouse
E. J. Piplica - Westinghouse