

January 16, 1997

Mr. Nicholas J. Liparulo, Manager
Nuclear Safety and Regulatory Analysis
Nuclear and Advanced Technology Division
Westinghouse Electric Corporation
P.O. Box 355
Pittsburgh, PA 15230

SUBJECT: ANALYSES TO SUPPORT AP600 PASSIVE RESIDUAL HEAT REMOVAL (PRHR) HEAT EXCHANGER HEAT TRANSFER CORRELATIONS

Dear Mr. Liparulo:

The purpose of this letter is to inform you of the Nuclear Regulatory Commission staff's need for additional analyses from Westinghouse in support of the heat transfer correlations being used for the PRHR heat exchanger in the AP600 standard safety analysis report Chapter 15 accident analyses. The staff has reviewed the revised PRHR test program report and related responses to requests for additional information (RAIs) provided by Westinghouse to justify the use of the 3-tube PRHR test data to validate modeling of the "C"-tube AP600 heat exchanger design. The staff has concluded that additional information is needed to support the use of correlations derived from the PRHR test data. The staff, therefore, will request Westinghouse perform additional analyses to confirm that the PRHR test program correlations can adequately and conservatively predict the performance of a "C"-tube heat exchanger. The staff will provide to Westinghouse, in a separate letter, PRHR data from selected tests in the ROSA/AP600 test facility for this purpose. Supporting design and other necessary information will also be provided. The transmittal letter will also discuss the staff's expectations regarding the details of and results from these additional analyses.

If you have any questions regarding this matter, you can contact me at (301) 415-1141.

Sincerely,

original signed by:
William C. Huffman, Project Manager
Standardization Project Directorate
Division of Reactor Program Management
Office of Nuclear Reactor Regulation

Docket No. 52-003

cc: See next page

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Docket No. 52-003
AP600

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