

Westinghouse Electric Corporation **Energy Systems**

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NSD-NRC-96-4851 DCP/NRC0630 Docket No.: STN-52-003

October 18, 1996

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

ATTENTION:

T. R. QUAY

SUBJECT:

AP600 NOTRUMP VERIFICATION AND VALIDATION REPORT.

DRAFT SECTION 3

Dear Mr. Quay:

Enclosed is a draft section of the NOTRUMP verification and validation report which is scheduled for completion by December 17, 1996. This draft section is provided in advance of the final V&V report to assist and facilitate the staff review of this document. The enclosed section is in a final form and we anticipate no changes to this document prior to its incorporation into the full report. The enclosed section (Section 3.0, Model Verification and Validation Approach) includes discussion of the following:

- Vertical Flow Drift Flux Model Benchmarking
- Levelizing Drift Flux Model Benchmarking
- Implicit Treatment of Gravitational Head
- Net Volumetric Flow-Based Momentum Equation
- Implicit Bubble Rise Model
- Main Coolant Pump Model
- Fluid Node Stacking Logic

The completion of section 3 of the NOTRUMP V&V report addresses and completes Westinghouse actions toward closure of the following requests for additional information and SDSER open items:

- 440.475, 440.476, 440.477, 440.483, OI 21.6.2.4-7, OI 21.6.2.4-8, OI 21.6.2.4-9, OI 21.6.2.4-13

As discussed at our September 26, 1996 meeting, the NOTRUMP evaluation model no longer includes or credits "birthing logic" and "horizontally stratified flow link" coding discussed in the responses to RAIs 440.470 and 440.478. As such, these RAIs are no longer relevant to the NOTRUMP AP600 modeling and should be closed. Similarly, SDSER open items 21.6.2.4-3 and 21.6.2.4-10 should also be closed.

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Change: NRC POR 1 INP

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Correspondence with respect to the application for withholding should reference AW-96-1023, and should be addressed to Brian A. McIntyre, Manager of Advanced Plant Safety and Licensing, Westinghouse Electric Corporation, P.O. Box 355, Pittsburgh, Pennsylvania, 15230-0355.

Please contact John C. Butler on (412) 374-5268 if you have any questions concerning this transmittal.

Brian A. McIntyre, Manager

Advanced Plant Safety and Licensing

/nja

Enclosures Attachment

T. Kenyon, NRC (w/o Enclosures/Attachments)

B. Huffman, NRC (1E1)

R. Landry, NRC (1E1)

P. Boehnert, ACRS (1E1)

N. J. Liparulo, Westinghouse (w/o Enclosures/Attachments)

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