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Energy Systems

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DCP/NRC1339
NSD-NRC-98-5662
Docket No.: 52-003

April 7, 1998

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

ATTENTION: T. R. QUAY

SUBJECT: AP600 ADS PHASE B1 TEST ANALYSIS REPORT

Dear Mr. Quay:

Enclosed with this letter is the proprietary copy of the AP600 Automatic Depressurization System Phase B1 Test Analysis Report, WCAP-14305, Revision 3. Table 1 provides a list of changes made in this revision of WCAP-14305, made in response to NRC staff comments. Pending feedback from the ongoing NRC review and detailed checking of support calculations, no future revisions are planned.

Also enclosed with this letter are three copies of the non-proprietary version of this report, WCAP-14306, Revision 2.

The Westinghouse Electric Company, a division of CBS Corporation ("Westinghouse"), copyright notice, proprietary information notice, application for withholding and affidavit are also attached.

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Correspondence with respect to the application for withholding should reference AW-98-1227, and should be addressed to Brian A. McIntyre, Manager of Advanced Plant Safety and Licensing, Westinghouse Electric Company, a division of CBS Corporation ("Westinghouse"), P.O. Box 355, Pittsburgh, Pennsylvania, 15230-0355.

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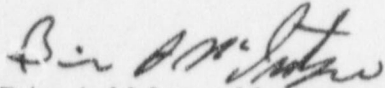
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March 7, 1998

Please contact Eugene J. Piplica on (412) 374-5310 if you have any questions concerning this transmittal.



Brian A. McIntyre, Manager
Advanced Plant Safety and Licensing

jml

Enclosures

cc: W. Huffman, NRC (Enclosure)
N. J. Liparulo, Westinghouse)w/o Enclosure)
A. E. Levin, NRC (Enclosure)
P. A. Boehnert (10 Enclosures)

TABLE 1 CHANGE PAGE LISTING FOR ADS PHASE B1 TAR REV. 3	
p 1-2	Typographical error in first sentence corrected so that it reads, "... accomplished by an isolation valve..."
p 1-4	First sentence in last paragraph revised to state, "A simple energy equation was used..."
p 1-5	Last sentence in first paragraph revised for clarification.
p 1-6	Paragraph revised for clarification and reference to subsection 4.4.1 changed to 4.4.4.
p 2-18	Footnote under Table 2-9 deleted.
p 2-19	Last sentence in Section 2.6 revised and reference to subsection 4.4.1 added for clarification.
p 2-23	"..., and is confirmed to be ~21 in. ² " added to the last sentence in subsection 2.6.3.
p 2-25 and 2-27	Discussion of how the measured resistance of the ADS valve/piping package with all three stages operating, was considered in the AP600 safety analysis; added for clarification.
p 2-27 and 2-28	The word "non-choked" added to each sentence in subsection 2.8.2, for clarification.
p 3-2 and 3-3	ΔP typographical errors corrected.
p 3-3	Reference to Section 1.9, "Hydraulic Resistance Model," in the "NOTRUMP Final Validation Report for AP600" added to document the basis for using the Martinelli-Nelson two-phase flow ΔP multiplier.
pp 4-12 and 4-13	Definition of terms and subscript corrections.
p 4-13	Sentences describing content of Table 4-5 simplified for clarification.
p 4-14	The words "non-choked, two-phase" added to the first sentence in the last paragraph of subsection 4.4.2 for clarification.
p 4-34	Title of second column in Table 4-6 modified for clarification.
p 5-1	"This underprediction has been considered in the AP600 Safety Analysis." - Added to second paragraph for clarification.
p 5-1	The last sentence in the fourth paragraph revised for clarification to read, "...non-choked, two-phase ADS flow rates."
p 6-1	Reference 14 added.

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