



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

May 26, 1994

Docket No. 52-003

Mr. Nicholas J. Liparulo
Nuclear Safety and Regulatory Activities
Westinghouse Electric Corporation
P.O. Box 355
Pittsburgh, Pennsylvania 15230

Dear Mr. Liparulo:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION ON THE AP600

As a result of its review of the June 1992 application for design certification of the AP600, the staff has determined that it needs additional information in order to complete its review. The additional information is needed in the area of shutdown operations (Q440.168).^{*} Enclosed is the staff's question. Please respond to this request on a schedule that will support development of the November 1994 draft final safety evaluation report on the AP600 design.

You have requested that portions of the information submitted in the June 1992 application for design certification be exempt from mandatory public disclosure. While the staff has not completed its review of your request in accordance with the requirements of 10 CFR 2.790, that portion of the submitted information is being withheld from public disclosure pending the staff's final determination. The staff concludes that this request for additional information does not contain those portions of the information for which exemption is sought. However, the staff will withhold this letter from public disclosure for 30 calendar days from the date of this letter to allow Westinghouse the opportunity to verify the staff's conclusions. If, after that time, you do not request that all or portions of the information in the enclosures be withheld from public disclosure in accordance with 10 CFR 2.790, this letter will be placed in the NRC's Public Document Room.

This request for additional information affects nine or fewer respondents, and therefore is not subject to review by the Office of Management and Budget under P.L. 96-511.

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^{*}The number in parentheses designates the tracking number assigned to the question.

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PDR ORG NRRB
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Mr. Nicholas J. Liparulo

- 2 -

May 26, 1994

If you have any questions regarding this matter, you can contact me at (301) 504-1120.

Sincerely,

~~Original Signed By:~~

Thomas J. Kenyon, Project Manager
Standardization Project Directorate
Associate Director for Advanced Reactors
and License Renewal
Office of Nuclear Reactor Regulation

Enclosure:
As stated

DISTRIBUTION:

*Central File	PDST R/F	RBorchardt	DCrutchfield
*PDR	MSiemien, OGC	WTravers	RArchitzel
PShea	TKenyon	RHasselberg	JMoore, 15B18
WDean, EDO	GSuh (2), 12E4	SSun, 8E23	CCarpenter, 13E4
ALevin, 8E23	GHsii, 8E23	ACRS (11)(w/o encl)	

* HOLD FOR 30 DAYS

OFC	LA:PDST:ADAR	PM:PDST:ADAR	SC:PDST:ADAR
NAME	PShea <i>PS</i>	TKenyon <i>TK</i>	RArchitzel <i>RA</i>
DATE	05/17/94	05/15/94	05/20/94

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Mr. Nicholas J. Liparulo
Westinghouse Electric Corporation

Docket No. 52-003
AP600

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**REQUEST FOR ADDITIONAL INFORMATION
ON THE WESTINGHOUSE AP600 DESIGN**

- 440.168 Provide a description of how the operator brings the AP600 plant from "safe shutdown" conditions (about 400°F and a few hundred psi) to cold shutdown conditions. Specifically, provide the following information:
- a. If the operator initiates plant cooldown from safe shutdown conditions by using the non-safety active systems, discuss how this evolution is accomplished and the associated thermal-hydraulic phenomena that will occur.
 - b. If the plant is at safe shutdown conditions or is in transition from safe shutdown to cold shutdown and loss of normal (non-safety) RHR occurs, discuss how the operator is to respond, either by bringing the passive safety systems on-line, or by use of alternate non-safety systems.
 - c. The evolutions described in Items a and b above also involve mode changes. Provide assurance that these transitions (swapping systems) can be made smoothly. Describe operator actions (man-machine interface) and thermal-hydraulic system behavior during the mode changes.
 - d. Discuss the method for incorporating actions discussed above into procedures. This discussion should include the basis supported by analysis and testing for proceduralizing the actions. Also, identify plant configurations that may occur during maintenance and alternate decay heat removal methods, and assess their overall effect on the plant. For example, how will RHR be accomplished (1) during loss of active shutdown cooling at cold shutdown with the RCS closed, (2) during midloop operations, and (3) with the RCS open?

Enclosure