

July 21, 2006

Ms. Andrea Sterdis, Manager  
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SUBJECT: WESTINGHOUSE AP1000 COMBINED LICENSE (COL) PRE-APPLICATION  
TECHNICAL REPORT 36 - REQUEST FOR ADDITIONAL INFORMATION (TAC  
NO. MD2109)

Dear Ms. Sterdis:

By letter dated June 5, 2006 (DCP/NRC1749), you submitted AP1000 Technical Report 36, "AP1000 Pressurizer Design," which summarized the design changes for the AP1000 pressurizer. The NRC staff has reviewed the application, and has determined that additional information is required. Our questions are provided in the Enclosure. We discussed these issues with your staff on July 14, 2006. Your staff indicated that you would attempt to provide your response by August 25, 2006.

Please contact me at (301) 415-1313, if you have any other questions on these issues.

Sincerely,

**/RA/**

Steven D. Bloom, Senior Project Manager  
AP1000/EPR Projects Branch  
Division of New Reactor Licensing  
Office of Nuclear Reactor Regulation

Project No. 740

Enclosure: Request for Additional Information

cc w/encl: See next page

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ADAMS ACCESSION NO.: ML061950703

OFFICE	NAPB/PM	NAPB/BC
NAME	SBloom	SCoffin
DATE	07/20/2006	07/20/2006

**OFFICIAL RECORD COPY**

REQUEST FOR ADDITIONAL INFORMATION

WESTINGHOUSE AP1000 DOCUMENT NO. APP-GW-GLR-016, Rev 0

TECHNICAL REPORT 36 - AP1000 PRESSURIZER DESIGN

PROJECT NUMBER 740

1. Section 2.1 of APP-GW-GLR-016, Rev 0 states that the inside diameter (ID) of the pressurizer was increased from 90 inches to 100 inches. Discuss the impact of the change in diameter on pressurizer stresses and pressurizer structural integrity.
2. Table 5.1-2 of APP-GW-GLR-016 indicates that the pressurizer height and (ID) have changed and the volume remained the same. Figure 5.4-5 shows the original pressurizer (ID) equal to 90 inches (to clad). Revised figure 5.4-5 shows the new pressurizer (ID) equal to 100 inches (to base metal). Table 5.1-2 shows that the pressurizer (ID) changes from 90 to 100 inches. Dimensions 90 and 100 inches do not have the same reference. Explain the discrepancy and report (ID) used to calculate pressurizer volumes.
- 3.A What is the pressurizer nominal base metal wall thickness and clad thickness?
- 3.B Provide the ASME code calculation used to establish the required pressurizer minimum wall thickness.
4. Section 2.1 of APP-GW-GLR-016, Rev 0 states that the pressurizer spray capacity was incorrectly shown to be 500 gpm and it has been changed to its corrected value of 700 gpm. Indicate whether this change in spray capacity changes the design transients used to evaluate the pressurizer or the pressurizer spray line. Was the 700 gpm flow rate used in the inadvertent pressurizer spray transient?

Enclosure

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