

July 21, 2006

Ms. Andrea Sterdis, Manager  
Licensing and Customer Interface  
Regulatory Affairs and Standardization  
Westinghouse Electric Company  
Nuclear Power Plants  
P.O. Box 355  
Pittsburgh, PA 15230-0355

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

Hard Copy  
S. Bloom

Internal E-Mail

S Bloom  
S Coffin  
K Manoly  
A Tsirigotis

E-Mail:

tom.miller@hq.doe.gov or  
tom.miller@ nuclear.energy.gov  
mwetterhahn@winston.com  
whorin@winston.com  
gcesare@enercon.com  
sandra.sloan@areva.com  
louis.quintana@ge.com  
steven.hucik@ge.com  
david.hinds@ge.com  
chris.maslak@ge.com  
crpierce@southernco.com  
tomccall@southernco.com  
garry.miller@pgnmail.com  
gzinke@entergy.com  
rclary@scana.com  
pshastings@duke-energy.com  
james1beard@ge.com  
patriciaL.campbell@ge.com  
bob.brown@ge.com  
mark.beaumont@wsms.com  
sfrantz@morganlewis.com  
ksutton@morganlewis.com  
jgutierrez@morganlewis.com  
mgiles@entergy.com  
sterdia@westinghouse

AP 1000

cc:

Mr. W. Edward Cummins  
AP600 and AP1000 Projects  
Westinghouse Electric Company  
P.O. Box 355  
Pittsburgh, PA 15230-0355

Mr. Bradley F. Maurer, Acting Manager  
Regulatory Compliance and Plant Licensing  
Westinghouse Electric Company  
P.O. Box 355  
Pittsburgh, PA 15230

Mr. Barton Z. Cowan, Esq.  
Eckert Seamans Cherin & Mellott, LLC  
600 Grant Street 44<sup>th</sup> Floor  
Pittsburgh, PA 15219

Mr. Charles Brinkman, Director  
Washington Operations  
Westinghouse Electric Company  
12300 Twinbrook Parkway, Suite 330  
Rockville, MD 20852

Mr. Adrian Heymer  
Nuclear Energy Institute  
1776 I Street NW  
Suite 400  
Washington, DC 20006

Mr. David Lochbaum  
Nuclear Safety Engineer  
Union of Concerned Scientists  
1707 H Street NW, Suite 600  
Washington, DC 20006-3919

Mr. Paul Gunter  
Nuclear Information & Resource Service  
1424 16th Street, NW., Suite 404  
Washington, DC 20036

Mr. James Riccio  
Greenpeace  
702 H Street, NW, Suite 300  
Washington, DC 20001

Mr. Ed Wallace, General Manager  
Projects  
PBMR Pty LTD  
PO Box 9396  
Centurion 0046  
Republic of South Africa

Mr. Glenn H. Archinoff  
AECL Technologies  
481 North Frederick Avenue  
Suite 405  
Gaithersburg, MD. 20877

Mr. Gary Wright, Manager  
Office of Nuclear Facility Safety  
Illinois Department of Nuclear Safety  
1035 Outer Park Drive  
Springfield, IL 62704

Mr. Paul Leventhal  
Nuclear Control Institute  
1000 Connecticut Avenue, NW  
Suite 410  
Washington, DC 20036

Mr. Jay M. Gutierrez  
Morgan, Lewis & Bockius, LLP  
1111 Pennsylvania Avenue, NW  
Washington, DC 20004

Mr. Brendan Hoffman  
Research Associate on Nuclear Energy  
Public Citizens Critical Mass Energy  
and Environmental Program  
215 Pennsylvania Avenue, SE  
Washington, DC 20003

Mr. Ronald P. Vijuk  
Manager of Passive Plant Engineering  
AP1000 Project  
Westinghouse Electric Company  
P. O. Box 355  
Pittsburgh, PA 15230-0355

Mr. Russell Bell  
Nuclear Energy Institute  
Suite 400  
1776 I Street, NW  
Washington, DC 20006-3708

Mr. Ron Simard  
6170 Masters Club Drive  
Suwanne, GA 30024

Ms. Sandra Sloan  
Areva NP, Inc.  
3315 Old Forest Road  
P.O. Box 10935  
Lynchburg, VA 24506-0935

Mr. George Alan Zinke  
Project Manager  
Nuclear Business Development  
Entergy Nuclear  
M-ECH-683  
1340 Echelon Parkway  
Jackson, MS 39213

Ms. Marilyn Kray  
Vice President, Special Projects  
Exelon Generation  
200 Exelon Way, KSA3-E  
Kennett Square, PA 19348

Dr. Regis A. Matzie  
Senior Vice President and  
Chief Technology Officer  
Westinghouse Electric Company  
2000 Day Hill Road  
Windsor, CT 06095-0500

Mr. Tom Clements  
6703 Gude Avenue  
Takoma Park, MD 20912

Ms. Lynn Connor  
Doc-Search Associates  
2211 SW 1<sup>st</sup> Avenue #1502  
Portland, OR 97201

Mr. Jerald S. Holm  
Framatome ANP, Inc.  
3315 Old Forest Road  
P.O. Box 10935  
Lynchburg, VA 24506-0935