

March 11, 2007

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 31 - REQUEST FOR ADDITIONAL INFORMATION
(TAC NO. MD2695)

Dear Ms. Sterdis:

By letter dated July 31, 2006 (DCP/NRC1766), you submitted AP1000 Technical Report 31, "Reactor Internals Material Changes for the AP1000 Plant," which provided information related to changing the materials for certain reactor vessel internals components. The U.S. Nuclear Regulatory Commission staff has reviewed the report, and has determined that additional information is required. Our questions are provided in the enclosure. We discussed these issues with your staff on February 1, 2007. Your staff indicated that you would attempt to provide your response by March 16, 2007.

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 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Project No. 740

Enclosure:
Request for Additional Information

cc w/encl: See next page

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 31 - REQUEST FOR ADDITIONAL INFORMATION
(TAC NO. MD2695)

Dear Ms. Sterdis:

By letter dated July 31, 2006 (DCP/NRC1766), you submitted AP1000 Technical Report 31, "Reactor Internals Material Changes for the AP1000 Plant," which provided information related to changing the materials for certain reactor vessel internals components. The U.S. Nuclear Regulatory Commission staff has reviewed the report, and has determined that additional information is required. Our questions are provided in the enclosure. We discussed these issues with your staff on February 1, 2007. Your staff indicated that you would attempt to provide your response by March 16, 2007.

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 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Project No. 740

Enclosure:
Request for Additional Information

cc w/encl: See next page

ADAMS ACCESSION NO.: ML070540106

OFFICE	DNRL/NWE1:LA	DNRL/NWE1:PM	DNRL/NWE1:BC
NAME	KGoldstein	SBloom	SCoffin
DATE	02/28/07	02/28/07	03/11/07

OFFICIAL RECORD COPY

REQUEST FOR ADDITIONAL INFORMATION

WESTINGHOUSE AP1000 WCAP-16624-P, Rev 0

REACTOR INTERNALS MATERIALS CHANGES FOR THE AP1000 PLANT

PROJECT NUMBER 740

- TR31-1 Westinghouse's WCAP-16624-P report, "Reactor Internals Materials Changes for the AP1000 Plant," Revision 1, proposes to change the materials for certain reactor vessel internals (RVI) components to include "high" carbon stainless steels (SS), Type 304 and Type 304H, as well as low carbon Type 304L SS. The applicant has proposed markups to the AP1000 Design Control Document (DCD), Section 4.5.2.1, to include these additional stainless steel materials for use in the construction of RVI components. DCD Section 4.5.2.1 does not currently specify Type 304, 304H, and 304L SS as constructional materials for RVI components.
- a. Section 1.2 of WCAP-16624-P states that DCD Section 4.5.2.1 currently specifies Type 304LN SS for construction of RVI components; however, RVI components were designed using Types 304, 304H, and 304L SS. Please clarify whether the AP1000 design was changed after the issuance of the DCD to include Types 304, 304H, and 304 L SS.
 - b. Based on the proposed RVI materials changes, please list the materials of construction (Type 304, 304H, 304L, 304LN SS, or other) for each RVI component.
- TR31-2 Section 3 of WCAP-16624-P states that Westinghouse has not experienced stress corrosion cracking issues with Type 304, 304H, and 304L SS. High carbon SS, Type 304 and 304H may experience greater sensitization to environmental degradation due to welding. Please discuss whether other forms of environmental degradation have been assessed for Type 304 and 304H SS, where welding would result in grain boundary sensitization.

Enclosure

AP 1000 Mailing List

cc:

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

Mr. Barton Z. Cowan, Esq.
Eckert Seamans Cherin & Mellott, LLC
600 Grant Street 44th 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. 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

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

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

Ms. Sarah J. Lynch - (Meeting Notice Only)
Senior Analyst
Natural Resources and Environment
441 G St. NW
Washington, DC 20548

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
James1.Beard@ge.com
patriciaL.campbell@ge.com
bob.brown@ge.com
erg-xl@cox.net
mark.beaumont@wsms.com
sfrantz@morganlewis.com
ksutton@morganlewis.com
jgutierrez@morganlewis.com
mgiles@entergy.com
sterdia@westinghouse.com
cristina.lonescu@pgnmail.com
gwcurtis2@tva.gov
robert.kitchen@pgnmail.com
mike_moran@fpl.com
amonroe@scana.com
george.stramback@gene.ge.com
david.lewis@pillsburylaw.com
paul.gaukler@pillsburylaw.com
john.o'neill@pillsburylaw.com
matias.travieso-diaz@pillsburylaw.com
maria.webb@pillsburylaw.com
roberta.swain@ge.com
cwaltman@roe.com
lindg1da@westinghouse.com
rgrumbir@comcast.net
junichi_uchiyama@mhi.co.jp
lynchs@gao.gov - (Meeting Notice Only)