



Project Number 694
WCAP-16793-NP, Revision 2

October 12, 2011

OG-11-290

U.S. Nuclear Regulatory Commission
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Washington, DC 20555-001

Subject: PWR Owners Group
Submittal of WCAP-16793-NP, Revision 2, "Evaluation of Long-Term Cooling Considering Particulate, Fibrous and Chemical Debris in the Recirculating Fluid," (PA-SEE-0312, Revision 2)

References:

1. "PWR Owners Group Submittal of WCAP-16793-NP, Revision 1, 'Evaluation of Long-Term Cooling Considering Particulate, Fibrous and Chemical Debris in the Recirculating' (PA-SEE-0312)," OG-09-163, dated April 22, 2009.
2. NRC Letter, Jonathan Rowley of NRR to Anthony Nowinowski of the PWR Owners Group Program Management Office, "Request for Additional Information RE: Pressurized Water Reactor Owners Group Tropical Report WCAP-16793-NP, Revision 1, 'Evaluation of Long-Term Cooling Considering Particulate, Fibrous and Chemical Debris in the Recirculating Fluid' (TAC No. ME1234)," January 8, 2010. (ADAMS Accession Number: ML093490855.)
3. "PWROG Response to Request for Additional Information Regarding PWROG Topical Report WCAP-16793-NP, Revision 1, 'Evaluation of Long-Term Cooling Considering Particulate, Fibrous and Chemical Debris in the Recirculating Fluid,' (PA-SEE-0312)," OG-10-45, dated February 9, 2010.
4. "PWROG Supplemental Information: Evaluation of Mixed Cores, Regarding PWROG Topical Report WCAP-16793-NP, Revision 1, 'Evaluation of Long-Term Cooling Considering Particulate, Fibrous and Chemical Debris in the Recirculating Fluid,' (PA-SEE-0312)," OG-10-208, dated June 24, 2010.
5. "PWROG Response to Request for Additional Information Regarding PWROG Topical Report WCAP-16793-NP, Revision 1, 'Evaluation of Long-Term Cooling Considering Particulate, Fibrous and Chemical Debris in the Recirculating Fluid,' (PA-SEE-0312)," OG-10-253, dated August 9, 2010.

Additional copies were
sent to . PM

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The Pressurized Water Reactor Owners Group (PWROG) is requesting formal review of WCAP-16793-NP, Revision 2 (Enclosure 1), in accordance with the Nuclear Regulatory Commission (NRC) licensing topical report program for review and acceptance for referencing in licensing actions. The text in WCAP-16793-NP, Revision 2 has been revised to include responses to NRC RAIs transmitted in January 2010 (Reference 2) and to address questions presented during the resolution of the RAIs. Additionally, updated text defining the guidance regarding the amount of fibrous debris mass that could bypass the sump strainer and not impede core inlet flow is included.

Previously, in April 2009, the Pressurized Water Reactor Owners Group (PWROG) submitted WCAP-16793-NP, Revision 1, "Evaluation of Long-Term Cooling Considering Particulate, Fibrous and Chemical Debris in the Recirculating Fluid," for review and acceptance for referencing in regulatory actions (Reference 1). In January 2010, NRC staff provided a formal Request for Additional Information (RAI) (Reference 2) for WCAP-16793-NP, Revision 1. In February 2010, the PWROG provided responses to these NRC RAIs (Reference 3). In June 2010, the PWROG provided supplemental guidance for utilities that operate both AREVA and Westinghouse fuel (Reference 4). Further, in August 2010, the PWROG provided revised RAIs (Reference 5) that included additional information regarding the calculation of available driving head and utilities operating with various fuel types.

WCAP-16793-NP, Revision 2 includes the previously discussed submittals in the revised text and as appendices to the document. This revision provides methods and information for all PWRs licensed in the U.S. to demonstrate reasonable assurance LTCC is maintained through the vessel, even in the presence of debris in the coolant.

Enclosures include:

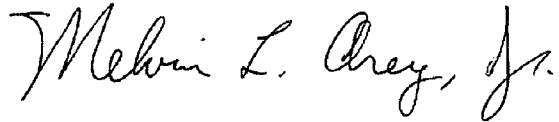
1. Four (4) copies of WCAP-16793-NP, Revision 2, "Evaluation of Long-Term Cooling Considering Particulate, Fibrous and Chemical Debris in the Recirculating Fluid," October 2011, (non-proprietary).

Correspondence related to this transmittal, including requests for additional information, should be addressed to:

Mr. W. Anthony Nowinowski
Manager, PWROG Program Management Office
Westinghouse Electric Company
1000 Westinghouse Drive, Suite 380
Cranberry Township, PA 16066

If you have any questions, please do not hesitate to contact me at 704-382-8619 or Mr. Anthony Nowinowski of the PWROG Program Management Office at 412-374-6855.

Sincerely,

A handwritten signature in black ink that reads "Melvin L. Arey, Jr." in a cursive script.

Melvin L. Arey, Jr., Chairman
PWR Owners Group

Enclosure (1)

MLA:KJN:rfn

cc: PWROG Management Committee
PWROG Steering Committee
PWROG Systems & Equipment Engineering Subcommittee
PWROG Licensing Subcommittee
PWROG PMO
J. Rowley, USNRC
S. Bailey, USNRC
S.L. Baier, Westinghouse
T. D. Croyle, Westinghouse
J. T. Maruschak, Westinghouse
G.A. Thomas, AREVA