



Program Management Office
102 Addison Road
Windsor, Connecticut 06095

WCAP-17100-P/NP, Revision 1
Project Number 694

January 20, 2011

OG-11-30

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Subject: PWR Owners Group
Submittal of mark-ups for WCAP-17100-P/NP, Revision 1, "PRA Model for the Westinghouse Shut Down Seal," PA-RMSC-0499

References:

1. "PWR Owners Group Submittal of WCAP-17100-P/NP, Revision 0, "PRA Model for the Westinghouse Shut Down Seal," PA-RMSC-0499," OG-09-282, dated July 17, 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 Topical Report WCAP-17100-P/NP, Revision 0, "PRA Model for the Westinghouse Shut Down Seal" (TAC NO. ME1785), November 30, 2008
3. "PWR Owners Group Responses to the NRC Request for Additional Information (RAI) on Topical Report (TR) WCAP-17100-P/NP, Revision 0, "PRA Model for the Westinghouse Shut Down Seal" (PA-RMSC-0499)," OG-10-20, dated January 27, 2010
4. "Submittal of WCAP-17100-P/NP, Revision 1, "PRA Model for the Westinghouse Shut Down Seal," PA-RMSC-0499", OG-10-77, dated February 24, 2010.

The purpose of this letter is to submit mark-ups to Pressurized Water Reactor Owners Group (PWROG) Topical Report (TR) WCAP-17100-P/NP, Revision 1, in accordance with the U.S. Nuclear Regulatory Commission (NRC) TR program for review and acceptance for referencing in regulatory actions. As a result of the Final Design Review of the Westinghouse Shut Down

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Designated as Original
3/17/11
Jonathan Rowley

Seal, some of the statistical treatment of data has changed to more conservative models. In addition, some additional tests were run in order to meet the original reliability goals with the revised, more conservative, statistical treatment of the test data.

Also enclosed is Westinghouse authorization letter CAW-11-3084, (Enclosure 3) accompanying affidavit, Proprietary Information Notice, and Copyright Notice WCAP-17100-P, Revision 1, contains information proprietary to Westinghouse Electric Company LLC; it is supported by an affidavit signed by Westinghouse, owner of the information. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b) (4) of Section 2.390 of the Commission's regulations.

Accordingly, it is respectfully requested that this information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the information listed above or supporting Westinghouse affidavit should reference CAW-11-3084 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance and Plant Licensing, Westinghouse Electric Company LLC, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

TR Classification: The modeling of the behavior of Westinghouse Reactor Coolant Pump (RCP) seals for postulated plant events that result in a loss of all RCP seal cooling has been a continuing issue in regulatory interactions with the industry. The NRC has previously reviewed RCP seal behavior as described in WCAP-15603-A, Rev. 1 "WOG 2000 Reactor Coolant Pump Seal Leakage Model for Westinghouse PWRs" and NRC Information Notice 2005-14, "Fire Protection Findings On Loss Of Seal Cooling To Westinghouse Reactor Coolant Pumps." The installation of the Westinghouse Shut Down Seal changes the seal behavior for these events as described by the Probabilistic Risk Assessment and deterministic models in this topical report. NRC review and approval of these models will resolve many issues related to the seal behavior and greatly reduce future interactions and resource requirements between the industry and the NRC.

Applicability: This Topical Report is applicable to all PWROG members with Westinghouse reactor coolant pumps and includes all Westinghouse NSSS plants plus TMI Unit 1.

Specialized Resource Availability: One PWROG plant has installed the Westinghouse RCP Shut Down Seals and plans to credit the seals in risk-informed processes in 2011. Several other PWROG plants have indicated interest in installing the Shut Down seals later in 2011. This Topical Report is being submitted to the NRC for review and approval in order to conserve utility and NRC resources in reviewing PRA models and deterministic models (e.g., Appendix R to 10 CFR 50) used for regulatory interactions.

This letter transmits Revision 1 of WCAP-17100-P, "PRA Model for the Westinghouse Shut Down Seal Page Change Markups," (Enclosure 1) and Revision 1 of WCAP-17100-NP, "PRA Model for the Westinghouse Shut Down Seal Page Change Markups," (Enclosure 2). Approval of the enclosed Topical Report does not require a change to the standard Technical Specifications.

Correspondence related to this transmittal should be addressed to:

Mr. W. Anthony Nowinowski, Program Manager
PWR Owners Group, Program Management Office
Westinghouse Electric Company LLC
Suite 380, 1000 Westinghouse Drive
Cranberry Township, Pennsylvania 16066.

If you have any questions, please do not hesitate to contact me at (704) 382-8619 or Mr. W. Anthony Nowinowski, Program Manager of the PWR Owners Group, Program Management Office at (412) 374-6855.

Sincerely yours,

T. Zachariah Approving for M. Arey

Melvin L. Arey Jr., Chairman
PWR Owners Group

MLA:TZ:las

cc: PWROG Management Committee
PWROG Risk Management Subcommittee
PWROG Licensing Subcommittee
PWROG Steering Committee
PWROG PMO
J. Gresham, Westinghouse
J. Hodgson, Westinghouse
B. Howard, Westinghouse
B. Kunkel, Westinghouse
M. Lucci, Westinghouse
R. Lutz, Westinghouse
D. Olinksi, Westinghouse
J. Rowley, US NRC

- Enclosure 1. Four copies of WCAP-17100-P, Revision 1, "PRA Model for the Westinghouse Shut Down Seal Page Change Markups" (Proprietary)
- Enclosure 2: Two copies of WCAP-17100-NP, Revision 1, "PRA Model for the Westinghouse Shut Down Seal Page Change Markups" (Non-Proprietary)
- Enclosure 3: One copy of the Application for Withholding, CAW-11-3084 (Non-proprietary) with accompanying affidavit, Proprietary Information Notice and Copyright Notice.