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W3F1-2005-0027

May 2, 2005

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Subject: Waterford 3 SES
Docket No. 50-382
License No. NPF-38
Annual Report on Westinghouse Electric Company LLC Combustion
Engineering Emergency Core Cooling System Performance
Evaluation Models

Gentlemen:

Pursuant to 10CFR50.46(a)(3)(ii), Entergy Operations, Inc. (EOI) hereby submits for the Waterford Steam Electric Station Unit 3 an annual evaluation of changes and errors identified in the Westinghouse Electric Company LLC Combustion Engineering Emergency Core Cooling System (ECCS) performance evaluation models used for Loss-of-Coolant Accident (LOCA) analyses. The results of the annual evaluation for the calendar year (CY) 2004 are provided in Attachment 1, CENPD-279, "Annual Report on Combustion Engineering ECCS Performance Evaluation Models for PWRs," Supplement 16, dated March, 2005. Please note that as indicated on the Table of Contents, CENPD-279 contains Appendices A-F, which provides Plant Specific Considerations for Combustion Engineering Pressurized Water Reactors. However, Waterford 3 will only submit page E.2 of Appendix E which provides Waterford 3 plant specific data.

For this reporting period, there was one change in the implementation of the 1999 Evaluation Model (EM) for LBLOCA that affects the cladding temperature calculation. There were no other changes to or errors in the ECCS evaluation models for the PWRs or changes to their operation for CY 2004 that affect the cladding temperature calculation. Waterford 3 uses the 1985 LBLOCA evaluation model. The sum of the absolute magnitude of peak cladding temperature changes for the Large Break LOCA June 1985 evaluation model, from all reports to date (including CY 2004) remained less than 1°F.

There were no errors in the Small Break LOCA S2M methodology identified in 2004. Previous reports identified a Waterford 3 specific effect of a CEFLASH-4AS code error on the SBLOCA Peak Clad Temperature (PCT) of 38°F. Two plant geometry errors were identified after the 10 CFR 50.46 report for CY 2002 was transmitted to the NRC that resulted in a 3°F effect on the analysis. Therefore, the total PCT effect for Waterford 3

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through CY 2004 was 41°F. This applies to earlier S2M SBLOCA analyses, Appendix K power uprate, and Cycles 12 through 13.

No changes or errors were reported by Westinghouse Electric Company LLC in the post-LOCA Long Term Cooling evaluation model. Per the criteria of 10 CFR 50.46, no action beyond this annual report is required.

There are no commitments contained in this submittal. Should you have any questions regarding the attached report, please contact Matt Melancon at (504) 739-6614.

Very truly yours,

A handwritten signature in black ink, appearing to read "R.J. Murillo", written in a cursive style.

R.J. Murillo
Acting Licensing Manager

RJM/PMM/STF/stf

Attachment: CENPD-279, "Annual Report on Combustion Engineering ECCS Performance Evaluation Models for PWRs".

cc: Mr. Bruce S. Mallett
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