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U. S. Nuclear Regulatory Commission
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**90-DAY RESPONSE TO GENERIC LETTER 2004-02
POTENTIAL IMPACT OF DEBRIS BLOCKAGE ON
EMERGENCY RECIRCULATION DURING DESIGN BASIS
ACCIDENTS AT PRESSURIZED-WATER REACTORS
SALEM GENERATING STATION UNITS 1 AND 2
FACILITY OPERATING LICENSE NOS. DPR-70 AND DPR-75
DOCKET NOS. 50-272 AND 50-311**

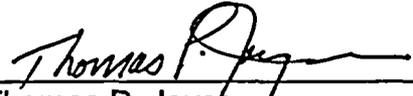
On September 13, 2004 the NRC issued Generic Letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation during Design Basis Accidents at Pressurized-Water Reactors." GL 2004-02 requests that each plant perform an evaluation of the emergency core cooling system (ECCS) and containment spray system (CSS) recirculation functions in light of the information provided in that letter and, if appropriate, take additional actions to ensure system function. Attachment 1 provides the information requested for the 90-day response.

Should you have any questions regarding this submittal, please contact Mr. Michael Mosier at 856-339-5434.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 3/4/05

Sincerely,



Thomas P. Joyce
Site Vice President - Salem

A116

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REQUESTED INFORMATION:

1. **Within 90 days of the date of the safety evaluation report providing the guidance for performing the requested evaluation, addressees are requested to provide information regarding their planned actions and schedule to complete the requested evaluation. The information should include the following:**
 - a) **A description of the methodology that is used or will be used to analyze the susceptibility of the ECCS and CSS recirculation functions for your reactor to the adverse effects identified in this generic letter of post-accident debris blockage and operation with debris-laden fluids identified in this generic letter. Provide the completion date of the analysis that will be performed.**
 - b) **A statement of whether you plan to perform containment walkdown surveillance in support of the analysis of the susceptibility of the ECCS and CSS recirculation functions to the adverse effects of debris blockage identified in this generic letter. Provide justification if no containment walkdown surveillance will be performed. If containment surveillance will be performed, state the planned methodology to be used and the planned completion date.**

Response:

- a) **PSEG Nuclear LLC (PSEG) intends to utilize the deterministic approach described in Nuclear Energy Institute (NEI) 04-07, Pressurized Water Reactor Sump Performance Evaluation Methodology, May 28, 2004, with guidance provided in the NRC's safety evaluation report (SER). Where NEI 04-07 guidance varies from that in the NRC SER¹, the SER guidance will be used. Use of risk informed evaluation methodology, Chapter 6 of NEI 04-07, is not currently planned.**

Several industry efforts are under way to evaluate coating failures, the effects of chemical reactions in containment during a LOCA and the downstream effects of debris-laden fluid. To the extent that information from these efforts becomes available, PSEG will utilize it as part of the analysis. However, if the information from these activities is not available, PSEG will address these issues using appropriate assumptions and methodologies.

¹ Documented in a letter dated December 6, 2004 from Suzanne C. Black (NRC) to Anthony R. Pietrangelo (NEI).

The analysis based on NEI 04-07 and the NRC SER for the current plant configurations will be completed prior to September 1, 2005.

- b) A Containment walkdown in support of the analysis of the susceptibility of the ECCS and CSS recirculation functions to the adverse effects of debris blockage identified in the generic letter was performed for Unit 1 during the spring 2004 outage. The walkdown was performed using guidance provided in NEI 02-01, Condition Assessment Guidelines: Debris Sources Inside PWR Containments, April 2004. This included all latent debris except dust and lint.

A Containment walkdown for Unit 2 in support of the analysis of the susceptibility of the ECCS and CSS recirculation functions to the adverse effects of debris blockage identified in the generic letter will be performed during the spring 2005 outage. The walkdown will be performed using guidance provided in NEI 02-01. In addition, the walkdown will include sampling for latent debris (e.g., dust and lint) using the guidance in NEI 04-07 and the NRC SER.

NEI 02-01 did not provide guidance on latent debris (dust and lint) sampling. This guidance was later provided in NEI 04-07 and the NRC SER. Thus, the latent debris walkdown for Unit 1 did not include sampling for dust and lint. This dust and lint sampling is planned for Unit 2. Unit 2 values will also be used as the Unit 1 dust and lint quantities. Because of the large amount of fibrous insulation debris transported to the sump, the final sump screen area is not sensitive to likely differences between Unit 1 and Unit 2 latent debris. Therefore, sampling of dust and lint for Unit 1 is not planned.