June 21, 2005

Mr. William Levis Senior Vice President & Chief Nuclear Officer PSEG Nuclear, LLC - X04 P.O. Box 236 Hancocks Bridge, NJ 08038

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2, REQUEST FOR ADDITIONAL INFORMATION RE: AMENDMENT REQUEST TO REVISE TECHNICAL SPECIFICATION: EMERGENCY CORE COOLING SYSTEMS Tavg < 350 EF (TAC NOS. MC5909 AND MC5910)

Dear Mr. Levis:

By letter dated February 10, 2005, PSEG Nuclear LCC submitted a request for changes to the Salem Nuclear Generating Station, Unit Nos. 1 and 2 (Salem), Technical Specifications (TSs). The proposed changes would modify TS 3.5.3, "Surveillance Requirement 4.5.3.2 b," to be more permissive and allow operation of the safety injection pump at times other than during testing. For example, this change would permit the use of a safety injection pump to fill the accumulators, which will reduce the amount of time to make the accumulators operable.

The Nuclear Regulatory Commission (NRC) staff has determined that responses to the questions in the enclosure to this letter are necessary in order for the staff to complete its review. The questions in the enclosure were forwarded by fax to Mr. Ralph Donges on May 13, 2005. These questions were discussed in a conference call with Mr. Donges and other members of your staff.

Question 2.a, which related to the pressure-temperature curves in the Salem TSs, has been deleted. The NRC staff has reviewed the information discussed in the conference call and the staff's previous review of the curves, and has determined that the question is not needed.

In order to complete our timely review of your amendment request, we require your response within 30 days from the date of this letter. If you cannot respond within 30 days, please inform us in writing why you cannot respond and provide an alternate response date. This alternate response date must be no later than 60 days from the date of this letter.

W. Lewis

Please note that if you do not respond to this letter within 30 days or provide an acceptable alternate date in writing, we may reject your application for amendment under the provisions of Title 10 of the *Code of Federal Regulations*, Section 2.108. If you have any questions, I can be reached at (301) 415-1321.

Sincerely,

/**RA**/

Stewart N. Bailey, Sr. Project Manager, Section 2 Project Directorate I Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket Nos. 50-272 and 50-311

Enclosure: Request for Additional Information

cc w/encl: See next page

W. Lewis

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Docket Nos. 50-272 and 50-311

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cc w/encl: See next page

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Salem Nuclear Generating Station, Unit Nos. 1 and 2

CC:

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Lower Alloways Creek Township c/o Mary O. Henderson, Clerk Municipal Building, P.O. Box 157 Hancocks Bridge, NJ 08038 Dr. Jill Lipoti, Asst. Director Radiation Protection Programs NJ Department of Environmental Protection and Energy CN 415 Trenton, NJ 08625-0415

Brian Beam Board of Public Utilities 2 Gateway Center, Tenth Floor Newark, NJ 07102

Regional Administrator, Region I U.S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, PA 19406

Senior Resident Inspector Salem Nuclear Generating Station U.S. Nuclear Regulatory Commission Drawer 0509 Hancocks Bridge, NJ 08038

Mr. Carl J. Fricker Plant Manager PSEG Nuclear - N21 P.O. Box 236 Hancocks Bridge, NJ 08038

REQUEST FOR ADDITIONAL INFORMATION

AMENDMENT REQUEST TO REVISE TECHNICAL SPECIFICATION: EMERGENCY CORE

COOLING SYSTEMS Tavg < 350 EF

SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2

DOCKET NOS. 50-272 AND 50-311

By letter [Reference 1] dated February 10, 2005, PSEG Nuclear LLC (PSEG) requested amendments to the Operating Licenses and Technical Specifications (TSs) for Salem Nuclear Generating Station, Unit Nos.1 and 2 with respect to Emergency Core Cooling Systems Tavg < 350 EF.

PSEG's request is to modify TS 3.5.3, "Surveillance Requirement 4.5.3.2 b," to be more permissive by removing the phrase "For testing purposes, . . . " and, with respect to pump isolation valves, inserting the phrase, " . . . in flow paths to the reactor coolant system . . . " The application states that the intent of the proposed change is to " . . . provide increased operational flexibility to operate the safety injection pump at times other than during testing." As an example, the application states that "[t]his change would permit the use of a safety injection pump to fill the accumulators, which will reduce the amount of time to make the accumulators operable."

PSEG states, "[t]he proposed changes are consistent with the content of NUREG-1431, "Standard Technical Specifications Westinghouse Plants." NUREG-1431 contains a requirement in Section 3.4.12, "Low Temperature Overpressure Protection (LTOP) System," to provide overpressure protection in part by having a minimum coolant input capability while the reactor coolant system (RCS) is water solid. In that case, however, the requirement to verify a maximum of one pump is capable of injecting into the RCS is stated in general terms rather than prescriptive requirements of how to achieve that goal. However, NUREG-1431 is a generic document and each section must be taken in context and with regard to potential interaction with other sections.

The staff requests responses to the following questions in order to continue the review of the subject amendment request.

 The application states, "specifying that a safety injection pump or charging pump can be operated only during testing and verified inoperable is unnecessarily prescriptive and limits the ability to operate the pumps in other modes in which low temperature over-pressurization is not an issue." Please explain which modes, in which low temperature over-pressurization is not an issue, are being hindered by this Surveillance Requirement.

- 2. NUREG-1431 Section 3.4.12 contains several other aspects that are not covered in the application.
 - a) Deleted
 - b) NUREG-1431 Section 3.4.12 contains several Actions and Surveillance Requirements. Provide information showing how Salem Unit Nos. 1 and 2 TSs meet or exceed those Actions and Surveillance Requirements. Where Salem Unit Nos. 1 and 2 TSs do not meet or exceed those Actions and Surveillance Requirements, provide information to justify any difference.
- 3. With respect to the No Significant Hazards Consideration determination:
 - a) PSEG's request for a more permissive wording and a stated intention to operate the safety injection pumps to fill accumulators indicates more opportunities for equipment malfunction or human error which would allow more than one pump the capability of injecting into the RCS. Please explain how the conclusion that "...the proposed change will not involve a significant increase in the probability or consequences of an accident previously analyzed," was reached.
 - b) The current TSs do not permit the operation of safety injection or charging pumps, except for testing. The requested change will allow these pumps to run at any or all times. Please explain how this is not a significant change in operations.
- 4. As the current version of Salem TS 3.5.3 only permits the pumps to operate for a limited time, and presumably to not move an appreciable amount of water, what impacts are associated with allowing these pumps to run at any or all times? Are there any restrictions which need to be placed on source(s) from which these pumps could draw in these conditions?
- 5. The current version of Salem TS 3.5.2 identifies specific valves to be verified during the emergency core cooling system train operability verification. Which specific valves would have to be verified closed to ensure a safety injection pump or charging pump can not inject water into the RCS?

REFERENCES

- Letter No. LR-N05-0003, LCR S05-01, Tom Joyce, Salem Generating Station, to Nuclear Regulatory Commission, "Request for Change to Technical Specifications Emergency Core Cooling Systems Tavg < 350 EF for Salem Generating Station - Unit 1 and Unit 2, Docket Nos. 50-272 and 50-311, Facility Operating License Nos. DPR-70 and DPR-75," dated February 10, 2005.
- 2. NUREG 1431, "Standard Technical Specifications Westinghouse Plants."