September 6, 2002

Mr. Harold W. Keiser Chief Nuclear Officer & President PSEG Nuclear LLC - X04 Post Office Box 236 Hancocks Bridge, NJ 08038

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2, REQUEST FOR ADDITIONAL INFORMATION RE: REQUEST FOR CHANGE TO TECHNICAL SPECIFICATIONS - REFUELING OPERATIONS - FUEL DECAY TIME PRIOR TO COMMENCING CORE ALTERATIONS OR MOVEMENT OF IRRADIATED FUEL (TAC NOS. MB5488 AND MB5489)

Dear Mr. Keiser:

By letter dated June 28, 2002, PSEG Nuclear LLC submitted a request for a revision to Technical Specification (TS) 3/4.9.3, "Decay Time," at the Salem Nuclear Generating Station, Unit Nos. 1 and 2. The proposed TS change would allow fuel movement in the containment to commence 100 hours after reactor subcriticality between October 15th and May 15th.

The U.S. Nuclear Regulatory Commission staff is reviewing your request and has determined that additional information is necessary in order to complete its evaluation. We discussed the enclosed request for additional information (RAI) with your staff during a telephone call on August 9, 2002. During the call, you agreed to respond to this letter within 30 days from the date of this letter. If circumstances result in the need to revise the target date, please contact me at (301) 415-1324, understanding that a delay in your response is likely to adversely affect our review schedule.

Sincerely,

### /**RA**/

Robert J. Fretz, 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: RAI

cc w/encl: See next page

Mr. Harold W. Keiser Chief Nuclear Officer & President PSEG Nuclear LLC - X04 Post Office Box 236 Hancocks Bridge, NJ 08038

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# ACCESSION NUMBER: ML022310155

OFFICE	PDI-2/PM	PDI-2/LA	PDI-2/SC(A)
NAME	RFretz	TLClark	VNerses for JZimmerman
DATE	8/30/02	8/30/02	9/3/02

OFFICIAL RECORD COPY

# **REQUEST FOR ADDITIONAL INFORMATION**

# REQUEST FOR CHANGE TO TECHNICAL SPECIFICATION 3/4.9.3

# **REFUELING OPERATIONS - FUEL DECAY TIME LIMITS**

# SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2

By letter dated June 28, 2002, PSEG Nuclear LLC submitted a request for a revision to Technical Specification (TS) 3/4.9.3, "Decay Time," at the Salem Nuclear Generating Station, Unit Nos. 1 and 2 (Salem). The proposed TS change would allow fuel movement in the containment to commence 100 hours after reactor subcriticality between October 15th and May 15th.

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the radiological analysis descriptions provided in the license amendment request. The staff must make a finding that the Salem analysis inputs, assumptions, and methodologies are consistent with regulatory guidance and the proposed plant operation. The staff must make this finding on the basis of the licensee's analyses since it is the licensee's analyses that will comprise the Salem licensing basis. The staff is reviewing your request and has determined that additional information is necessary in order to complete its evaluation. If you believe that some of this information has already been docketed with the NRC, please provide a specific reference.

- 1. Your submittal indicates that you have re-calculated control room X/Q values using the NRC-sponsored ARCON96 computer code, a change in methodology over that previously used at Salem. The staff has determined that it needs additional information to evaluate your use of the ARCON96 code in order to determine if the calculated X/Q values are acceptable for use in design basis calculations. Please provide the following information:
  - 1.1 A copy, on floppy disk or CD in the ARCON96 data format, the meteorological data used in the ARCON96 code runs.
  - 1.2 A brief confirmation statement that these meteorological data were collected by a meteorological measurements program that meets the guidance of Safety Guide 23 and that is covered by a quality assurance program that meets the requirements of 10 CFR Part 50 Appendix B.
  - 1.3 A tabulation of the ARCON96 inputs used in your analyses. A copy of the actual ARCON96 code input dumps is an acceptable means to provide this information. If the release has been modeled as other than a ground level release, please provide a technical basis for the treatment used.
- 2. The discussion (page 8) of the fuel-handling accident occurring in the fuel-handling building (FHB) identifies three release pathways from the FHB--plant vent, truck bay, and gravity damper-and assigns three flow rates. The discussion implies that the assigned flow rates are based on the assumption of a failure of one FHB exhaust fan.

- 2.1 Please provide a brief explanation of how these flow rates were determined and the impact of not assuming FHB exhaust fan failure on these values.
- 2.2 Please provide a brief explanation of why you believe that the activity released from the pool might not be preferentially drawn to a particular exhaust path.
- 2.1 The discussion on page 8 states that the analysis assumes a release rate of one FHB volume per minute. However, the table notes on page 11 states that the activity is released to the environment at a rate of 21,439 cubic feet per minute (cfm). This flowrate implies a small value for the FHB free volume. Please resolve the apparent inconsistency in these two statements. Also, please explain the parenthetical entry "(0.0 hr)" included with the exclusion area boundary results in the two results tables.
- 3. Your analyses assume a control room unfiltered inleakage of 4,000 cfm. This appears to be an arbitrarily high value used in lieu of a measured value. Please state the basis of the 4,000 cfm unfiltered inleakage assumed in your analyses and provide an explanation of why this value is expected to reasonably bound the actual inleakage.

## **PSEG Nuclear LLC**

#### CC:

Mr. Elbert C. Simpson Senior Vice President & Chief Administrative Officer PSEG Nuclear - N19 P.O. Box 236 Hancocks Bridge, NJ 08038

Mr. John Carlin Vice President - Technical Support PSEG Nuclear - N10 P.O. Box 236 Hancocks Bridge, NJ 08038

Mr. David F. Garchow Vice President - Operations PSEG Nuclear - X10 P.O. Box 236 Hancocks Bridge, NJ 08038

Mr. Gabor Salamon Manager - Nuclear Safety and Licensing PSEG Nuclear - N21 P.O. Box 236 Hancocks Bridge, NJ 08038

Jeffrie J. Keenan, Esquire PSEG Nuclear - N21 P.O. Box 236 Hancocks Bridge, NJ 08038

Ms. R. A. Kankus Joint Owner Affairs PECO Energy Company Nuclear Group Headquarters KSA1-E 200 Exelon Way Kennett Square, PA 19348 Salem Nuclear Generating Station, Unit Nos. 1 and 2

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

Richard Hartung Electric Service Evaluation Board of Regulatory Commissioners 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