

August 24, 2004

Mr. A. Christopher Bakken, III  
President & Chief Nuclear Officer  
PSEG Nuclear - X15  
P.O. Box 236  
Hancocks Bridge, NJ 08038

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2, REQUEST FOR ADDITIONAL INFORMATION RE: IMPLEMENTATION OF ALTERNATE SOURCE TERM (TAC NOS. MC3094 AND MC3095)

Dear Mr. Bakken:

By letter dated April 26, 2004, PSEG Nuclear, LLC submitted a request for changes to the Salem Nuclear Generating Station, Units No. 1 and 2, Technical Specifications. The proposed changes would revise the source term used for design basis radiological analysis. The proposed change would also revise certain requirements in the Technical Specifications and Updated Final Safety Analysis Report based on the radiological dose analysis margins obtained in the Alternate Source Term application.

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 Materials and Chemical Engineering Branch to complete its review. Additional information needs, necessary for other branches to complete their review, will be communicated to you as they are identified. The staff requests that you provide responses to the enclosed questions within 30 days in order for the NRC to complete its review in a timely manner. If you have any questions, please contact me at (301) 415-1427.

Sincerely,

***/RA by George F. Wunder for/***

Daniel S. Collins, Sr. Project Manager, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-354

Enclosure: As stated

cc w/encl: See next page

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DATE	8/23/04	8/23/04	8/23/04	8/23/04

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Salem Nuclear Generating Station, Unit Nos. 1 and 2

cc:

Mr. Michael H. Brothers  
Vice President - Site Operations  
PSEG Nuclear - X15  
P.O. Box 236  
Hancocks Bridge, NJ 08038

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

Mr. David F. Garchow  
Vice President - Eng/Tech Support  
PSEG Nuclear - N28  
P.O. Box 236  
Hancocks Bridge, NJ 08038

Mr. Steven Mannon  
Acting Manager - 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

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  
REGARDING PROPOSED ALTERNATIVE TO  
UTILIZE A RISK INFORMED-INSERVICE INSPECTION PLAN  
SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2  
DOCKET NOS. 50-272 AND 50-311

By letter dated April 26, 2004, PSEG Nuclear, LLC submitted a request for changes to the Salem Nuclear Generating Station, Units No. 1 and 2, Technical Specifications. The proposed changes would revise the source term used for design basis radiological analysis. The proposed change would also revise certain requirements in the Technical Specifications and Updated Final Safety Analysis Report based on the radiological dose analysis margins obtained in the Alternate Source Term application. The Nuclear Regulatory Commission (NRC) staff has been reviewing your submittal and has determined that the following additional information is required to complete our review:

1. Section 4.1, pages 12 and 16, in your submittal state that the containment sump water will remain at a pH greater than 7 following a loss of coolant accident (LOCA). Provide a discussion of the assumptions and calculations used to conclude that the pH will remain above 7 for at least 30 days following a LOCA. This discussion should be in sufficient detail for the NRC staff to perform independent calculations and verify the validity of this conclusion. If the calculations were performed manually, discuss the methodology used and provide sample calculations. If the calculations were performed using a computer code, provide a description of the code including input values and how they were determined. Provide the results at different time intervals and discuss the criteria for selecting the intervals.
2. Provide information on the systems used to ensure that after a LOCA the pH of the sump water will stay basic. Your response should include a description of the methodology and the accompanying calculations used in determining the amounts of chemical agents needed to achieve this objective.