

August 5, 2003

Mr. Roy A. Anderson  
President & Chief Nuclear Officer  
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: CHANGES TO TECHNICAL  
SPECIFICATIONS FOR PRESSURE SENSOR RESPONSE TIME TESTING  
(TAC NOS. MB8448 AND MB8449)

Dear Mr. Anderson:

By letter dated April 11, 2003, PSEG Nuclear, LLC (PSEG) submitted a request to modify the Salem Nuclear Generating Station, Unit Nos. 1 and 2, Technical Specifications Surveillance Requirements and Bases regarding response time testing of the Engineered Safety Features Actuation System and the Reactor Trip System.

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 July 29, 2003. During the call, PSEG agreed to respond to the enclosed RAI 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.

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

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PUBLIC	PDI-2 Reading	JClifford	EMarinos	GMeyer, RGN-I
ACRS	OGC	RFretz	VHall	CRaynor

ACCESSION NUMBER: ML032170031

\* RAI Input received via memo

OFFICE	PDI-2/PM	PDI-2/LA	EEIB/SC*	PDI-2/SC
NAME	RFretz	CRaynor	EMarinos	JClifford
DATE	7/29/03	7/30/03	06/11/03	8/4/03

OFFICIAL RECORD COPY

PSEG Nuclear, LLC

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Salem Nuclear Generating Station,  
Unit Nos. 1 and 2

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U.S. Nuclear Regulatory Commission  
Drawer 0509  
Hancocks Bridge, NJ 08038

REQUEST FOR ADDITIONAL INFORMATION  
REGARDING PROPOSED CHANGES TO TECHNICAL SPECIFICATIONS FOR  
PRESSURE SENSOR RESPONSE TIME TESTING  
SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2

By letter dated April 11, 2003, PSEG Nuclear, LLC (PSEG) submitted a request to modify the Salem Nuclear Generating Station, Unit Nos. 1 and 2, Technical Specifications (TSs) Surveillance Requirements and Bases regarding response time testing (RTT) of the Engineered Safety Features Actuation System (ESFAS) and the Reactor Trip System (RTS). The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing your request and has determined that additional information is necessary in order to complete its evaluation.

1. In order to verify that the bounding response times for each protective function are allocated in accordance with topical report WCAP-13632-P-A, Revision 2, "Elimination of Pressure Sensor Response Time Testing Requirements," and that each sensor is accounted for, please provide a listing of the bounding values for each sensor for all RTS and ESFAS functions where RTT is being eliminated. Additionally, provide the method and analysis used in determining sensor response times. The listing should be in table format, and any of the following tables could serve as a guide:
  - Duke Energy Corporation response to an RAI, Catawba Nuclear Station, Tables 1 and 2 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML020440424)
  - Carolina Power and Light request for license amendment, Shearon Harris Nuclear Power Plant, Enclosure 1, Tables 1 and 2 (ADAMS Accession No. ML022520060)
  - South Carolina Electric and Gas Company request for license amendment, Virgil C. Summer Nuclear Station, Attachment 2, Tables on Pages 3 through 7 (ADAMS Accession No. ML003703671)
2. The Safety Evaluation (SE) for topical report WCAP-13632-P-A, Revision 2, states that utilities should perform a RTT on transmitters and switches that use capillary tubes after initial installation, and after any maintenance or modification activity that could damage the capillary tubes. In addition, the SE identifies a concern that the potentiometers for sensors with variable damping could be inadvertently changed during maintenance activities, thereby affecting response times. In order for the NRC staff to complete its review, please identify all the sensors for which RTT is to be eliminated that:
  - a. use capillary tubes
  - b. use variable damping.

Also, verify that appropriate plant procedures, and/or administrative controls, will be in place prior to implementation of the proposed TS change to ensure that the damping potentiometer cannot be inadvertently changed.

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3. PSEG states that surveillance testing procedures will be reviewed, and/or revised, to meet action (2) of the alternative approach to drift monitoring for Rosemount transmitters. Please verify that the appropriate surveillance testing procedures will be revised prior to implementation of the proposed TS change.
4. "Insert A" of Attachment 2 differs from the wording used in WCAP-13632-P-A, Revision 2. Specifically, the reference to WCAP-13632-P-A, Revision 2, as a methodology "in the overall verification of the channel response time for specific sensors identified in the WCAP" was deleted, and the sentence "[r]esponse time verification for other sensor types must be demonstrated by test" was deleted. In addition, there appears to be a typographical error on line 12 of the insert. WCAP-13632-P-A, Revision 2, is referred to as WCAP-13632-P-A, "Revision 1." Please explain the reasons deviating from the approved text, and provide a correction for the reference to the WCAP.
5. The NRC staff has identified the following typographical errors in PSEG's TS Amendment request. Please correct these mistakes:
  - Pages 2 and 3, in Section 4 of Attachment 1: While referring to variable damping, PSEG uses the word dampening. This is done twice in this section.
  - Page 4, line 8, in Section 4 of Attachment 1: The NRC SE on WCAP 13632-P-A, Revision 2, is dated September 5, 1995. PSEG lists this date as September 8, 1995.