

April 20, 1998

Mr. Harold W. Keiser
Executive Vice President-
Nuclear Business Unit
Public Service Electric & Gas
Company
Post Office Box 236
Hancocks Bridge, NJ 08038

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNIT NO. 1 (TAC NO. M99821)

Dear Mr. Keiser:

The Commission has issued the enclosed Amendment No. 210 to Facility Operating License No. DPR-70 for the Salem Nuclear Generating Station, Unit No. 1. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated October 14, 1997, as supplemented on March 26, 1998.

This amendment revises TS 3.4.6.3, "Primary Coolant System Pressure Isolation Valves Limiting Condition for Operation," to add additional pressure isolation valves, establish the operability and testing requirements for the pressure isolation valves, and make this section more consistent with Salem Unit 2 TSs.

A copy of our safety evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

/s/

Patrick D. Milano, Senior Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-272

Enclosures: 1. Amendment No. 210 to
License No. DPR-70
2. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION

Docket File	RCapra	GHill(2)	JLinville, RGN-I
PUBLIC	TClark	RWessman	THarris (E-Mail SE)
PDI-2 Reading	PMilano	WBeckner	
JZwolinski	OGC	ACRS	*Previously Concurred

OFFICE	PDI-2/PM	PDI-2/LA	EMEB/C*	OGC	PDI-2/D
NAME	PMilano:rb	TClark	RWessman	C. Malco	RCapra
DATE	4/19/98	4/19/98	03/16/98	4/17/98	4/20/98

OFFICIAL RECORD COPY
DOCUMENT NAME: SA99821.AMD

9804240305 980420
PDR ADOCK 05000272
P PDR

RECEIVED FILE CONTROL COPY



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 20, 1998

Mr. Harold W. Keiser
Executive Vice President-
Nuclear Business Unit
Public Service Electric & Gas
Company
Post Office Box 236
Hancocks Bridge, NJ 08038

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNIT NO. 1 (TAC NO. M99821)

Dear Mr. Keiser:

The Commission has issued the enclosed Amendment No. 210 to Facility Operating License No. DPR-70 for the Salem Nuclear Generating Station, Unit No. 1. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated October 14, 1997, as supplemented on March 26, 1998.

This amendment revises TS 3.4.6.3, "Primary Coolant System Pressure Isolation Valves Limiting Condition for Operation," to add additional pressure isolation valves, establish the operability and testing requirements for the pressure isolation valves, and make this section more consistent with Salem Unit 2 TSs.

A copy of our safety evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick D. Milano", is written over a horizontal line.

Patrick D. Milano, Senior Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-272

Enclosures: 1. Amendment No. 210 to
License No. DPR-70
2. Safety Evaluation

cc w/encls: See next page

Mr. Harold W. Keiser
Public Service Electric & Gas
Company

cc:

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

General Manager - Salem Operations
Salem Nuclear Generating Station
P.O. Box 236
Hancocks Bridge, NJ 08038

Mr. Louis Storz
Sr. Vice President - Nuclear Operations
Nuclear Department
P.O. Box 236
Hancocks Bridge, NJ 08038

Senior Resident Inspector
Salem Nuclear Generating Station
U.S. Nuclear Regulatory Commission
Drawer 0509
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

Maryland Office of People's Counsel
6 St. Paul Street, 21st Floor
Suite 2102
Baltimore, MD 21202

Ms. R. A. Kankus
Joint Owner Affairs
PECO Energy Company
965 Chesterbrook Blvd., 63C-5
Wayne, PA 19087

Mr. Elbert Simpson
Senior Vice President-
Nuclear Engineering
Nuclear Department
P.O. Box 236
Hancocks Bridge, NJ 08038

Salem Nuclear Generating Station,
Units 1 and 2

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

Lower Alloways Creek Township
c/o Mary O. Henderson, Clerk
Municipal Building, P.O. Box 157
Hancocks Bridge, NJ 08038

Manager-Licensing and Regulation
Nuclear Busienss Unit - N21
P.O. Box 236
Hancocks Bridge, NJ 08038

Mr. David Wersan
Assistant Consumer Advocate
Office of Consumer Advocate
1425 Strawberry Square
Harrisburg, PA 17120

Manager - Joint Generation
Atlantic Energy
6801 Black Horse Pike
Egg Harbor Twp., NJ 08234-4130

Carl D. Schaefer
External Operations - Nuclear
Delmarva Power & Light Company
P.O. Box 231
Wilmington, DE 19899

Public Service Commission of Maryland
Engineering Division
Chief Engineer
6 St. Paul Centre
Baltimore, MD 21202-6806



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

PUBLIC SERVICE ELECTRIC & GAS COMPANY

PHILADELPHIA ELECTRIC COMPANY

DELMARVA POWER AND LIGHT COMPANY

ATLANTIC CITY ELECTRIC COMPANY

DOCKET NO. 50-272

SALEM NUCLEAR GENERATING STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 210
License No. DPR-70

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The application for amendment filed by the Public Service Electric & Gas Company, Philadelphia Electric Company, Delmarva Power and Light Company and Atlantic City Electric Company (the licensees) dated October 14, 1997, as supplemented on March 26, 1998, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-70 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 210, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance to be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Bartholomew C. Buckley for

Robert A. Capra, Director
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: April 20, 1998

ATTACHMENT TO LICENSE AMENDMENT NO. 210

FACILITY OPERATING LICENSE NO. DPR-70

DOCKET NO. 50-272

Revise Appendix A as follows:

Remove Pages

3/4 4-16a
3/4 4-16b
3/4 4-16c

Insert Pages

3/4 4-16a
3/4 4-16b
3/4 4-16c

REACTOR COOLANT SYSTEM

PRIMARY COOLANT SYSTEM PRESSURE ISOLATION VALVES LIMITING CONDITION FOR OPERATION

3.4.6.3 Reactor Coolant System Pressure Isolation Valves specified in Table 4.4-4 shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

- a. With any Reactor Coolant System Pressure Isolation Valve leakage greater than the specified limit in Table 4.4-4, isolate the high pressure portion of the affected system from the low pressure portion within 4 hours by use of at least two closed manual or deactivated automatic valves, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

=====

4.4.6.3 Each Reactor Coolant System Pressure Isolation Valve specified in Table 4.4-4 shall be demonstrated OPERABLE pursuant to Specification 4.0.5, except that in lieu of any leakage testing required by Specification 4.0.5, each valve shall be demonstrated OPERABLE by verifying leakage to be within its limit:

- a. At least once per 18 months.
- b. Prior to entering MODE 2 whenever the plant has been in COLD SHUTDOWN for 72 hours or more and if leakage testing has not been performed in the previous 9 months.
- c. Prior to returning the valve to service following maintenance repair or replacement work on the valve.
- d. For the Residual Heat Removal and Safety Injection Systems hot and cold leg injection valves and accumulator valves listed in Table 4.4-4 the testing will be done within 24 hours following valve actuation due to automatic or manual action or flow through the valve. For all other systems testing will be done once per refueling.

The provisions of specification 4.0.4 are not applicable for entry into MODE 3 or 4.

TABLE 4.4-4

REACTOR COOLANT SYSTEM PRESSURE ISOLATION VALVES

<u>System</u>	<u>Valve No.</u>	Maximum (a) (b)
		<u>Allowable Leakage</u>
Low Pressure Safety Injection		≤ 5.0 GPM each valve
Loop 11, cold leg	11SJ56	≤ 5.0 GPM each valve
	11SJ43	≤ 5.0 GPM each valve
Loop 12, cold leg	12SJ56	≤ 5.0 GPM each valve
	12SJ43	≤ 5.0 GPM each valve
Loop 13, cold leg	13SJ56	≤ 5.0 GPM each valve
	13SJ43	≤ 5.0 GPM each valve
Loop 13, hot leg	13SJ156	≤ 5.0 GPM each valve
	13RH27	≤ 5.0 GPM each valve
Loop 14, cold leg	14SJ56	≤ 5.0 GPM each valve
	14SJ43	≤ 5.0 GPM each valve
Loop 14, hot leg	14SJ156	≤ 5.0 GPM each valve
	14RH27	≤ 5.0 GPM each valve
Intermediate Pressure Safety Injection		≤ 5.0 GPM each valve
Loop 11, cold leg	11SJ144	≤ 5.0 GPM each valve
Loop 11, hot leg	11SJ156	≤ 5.0 GPM each valve
	11SJ139	≤ 5.0 GPM each valve
Loop 12, cold leg	12SJ144	≤ 5.0 GPM each valve
Loop 12, hot leg	12SJ156	≤ 5.0 GPM each valve
	12SJ139	≤ 5.0 GPM each valve
Loop 13, cold leg	13SJ144	≤ 5.0 GPM each valve
Loop 13, hot leg	13SJ156	≤ 5.0 GPM each valve
	13SJ139	≤ 5.0 GPM each valve
Loop 14, cold leg	14SJ144	≤ 5.0 GPM each valve
Loop 14, hot leg	14SJ156	≤ 5.0 GPM each valve
	14SJ139	≤ 5.0 GPM each valve
Safety Injection Accumulators to cold leg		
loop 11, cold leg	11SJ55	≤ 5.0 GPM each valve
loop 12, cold leg	12SJ55	≤ 5.0 GPM each valve
loop 13, cold leg	13SJ55	≤ 5.0 GPM each valve
loop 14, cold leg	14SJ55	≤ 5.0 GPM each valve
Safety Injection Boron Injection to cold legs		
loop 11, cold leg	11SJ17	≤ 5.0 GPM each valve
loop 12, cold leg	12SJ17	≤ 5.0 GPM each valve
loop 13, cold leg	13SJ17	≤ 5.0 GPM each valve
loop 14, cold leg	14SJ17	≤ 5.0 GPM each valve
	1SJ150	≤ 5.0 GPM each valve
RHR Suction		
loop 11	1RH1	≤ 5.0 GPM each valve
loop 11	1RH2	≤ 5.0 GPM each valve

TABLE 4.4-4 (CONT'D)

- (a)
 - 1. Leakage rates less than or equal to 1.0 gpm are considered acceptable. However, for initial tests, or tests following valve repair or replacement, leakage rates less than or equal to 5.0 gpm are considered acceptable.
 - 2. Leakage rates greater than 1.0 gpm but less than or equal to 5.0 gpm are considered acceptable if the latest measured rate has not exceeded the rate determined by the previous test by an amount that reduces the margin between measured leakage rate and the maximum permissible rate of 5.0 gpm by 50% or greater.
 - 3. Leakage rates greater than 1.0 gpm but less than or equal to 5.0 gpm are considered unacceptable if the latest measured rate exceeded the rate determined by the previous test by an amount that reduces the margin between measured leakage rate and the maximum permissible rate of 5.0 gpm by 50% or greater.
 - 4. Leakage rates greater than 5.0 gpm are considered unacceptable.
- (b) Minimum differential test pressure shall not be less than 150 psid.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 210 TO FACILITY OPERATING LICENSE NO. DPR-70

PUBLIC SERVICE ELECTRIC & GAS COMPANY

PHILADELPHIA ELECTRIC COMPANY

DELMARVA POWER AND LIGHT COMPANY

ATLANTIC CITY ELECTRIC COMPANY

SALEM NUCLEAR GENERATING STATION, UNIT NO. 1

DOCKET NO. 50-272

1.0 INTRODUCTION

By letter dated October 14, 1997, as supplemented on March 26, 1998, the Public Service Electric & Gas Company (the licensee) submitted a request for changes to the Salem Nuclear Generating Station, Unit No. 1, Technical Specifications (TSs). The requested changes would revise TS 3.4.6.3, "Primary Coolant System Pressure Isolation Valves Limiting Condition for Operation," to add additional pressure isolation valves, establish the operability and testing requirements for the pressure isolation valves, and make this section more consistent with Salem Unit 2 TSs. The March 26, 1998, letter provided clarifying information that did not change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

The purpose of the pressure isolation valves is to ensure the integrity of the Reactor Coolant System (RCS). These valves separate the high pressure RCS from piping systems that are rated at lower pressures than the RCS, minimizing the probability of an inter-system loss of coolant accident.

The proposed revision makes the Salem Unit 1 TS 3.4.6.3 more consistent with the corresponding Salem Unit 2 TS and more consistent with the intent of NUREG-1431, "Standard Technical Specifications Westinghouse Plants," Revision 1 (Westinghouse STS). Providing more consistency between the two units is desirable from a human factors standpoint. Most of the changes are editorial in nature; however, the following three changes are more substantive:

- (1) Eleven reactor coolant system pressure isolation valves have been added to Table 4.4-4.
- (2) The current TSs require leak testing of the valves each time the plant is placed in cold shutdown for 72 hours if testing has not been performed in the previous 12 months; the proposed revision changes the 12 months to 9 months.

- (3) A requirement has been added to test any hot and cold leg injection valves in the residual heat removal (RHR) and safety injection (SI) systems and safety injection accumulator isolation valves within 24 hours following valve actuation due to automatic or manual action or flow through the valve.

The proposed change adds valves to the list of pressure isolation valves in TS Table 4.4-4 that, although were included in the Salem Inservice Test Program, were not covered by the TSs. The proposed change to the surveillance test requirement of TS 4.4.6.3.a.2 has been reduced from within the previous 12 months to a more conservative 9 month period that provides added assurance that the valves will maintain their isolation capability. Additionally, the new requirement to test the RHR and SI valves within 24 hours after actuation is an added requirement that is not currently in the TSs and is consistent with the Unit 2 TSs. The other changes involve formatting and rewording that the staff considers to be editorial in nature and provides better clarification and consistency with the requirements that should be presented in the Limiting Conditions for Operation, Action statements, and Surveillance Requirements. Likewise the use of the word "OPERABLE" rather than "operational" provides a term that is defined in TS 1.18.

Therefore, the staff finds the proposed amendment acceptable because it (a) provides more consistency between Unit 1 and Unit 2 TSs, (b) is more conservative than the existing TSs, and (c) is consistent with the intent of the Westinghouse STS.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New Jersey State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (62 FR 61845). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: P. Milano

Date: April 20, 1998