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October 12, 1982

Docket No. 50-272

Mr. Richard A. Uderitz, Vice President -
Nuclear

Public Service Electric and Gas Company

Mail Code T15A - P. O. Box 570

Newark, New Jersey 07101

Dear Mr. Uderitz:

The Commission has issued the enclosed Amendment No. 47 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 in response to your request dated October 7, 1982.

The amendment revises the Technical Specifications to permit a one time deferral of the monthly surveillance requirement of Table 4.3-1 for pressurizer water level-high for a period of eight days for Channel I and a period of two days for Channel III. We understand that Channel III will remain in a tripped condition until tested and we require that the interaction between Channels III and I be investigated and eliminated before startup for the next fuel cycle.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

William J. Ross, Project Manager
Operating Reactors Branch No. 1
Division of Licensing

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PDR ADOCK 05000272
P PDR

Enclosures:

1. Amendment No. 47 to DPR-70
2. Safety Evaluation
3. Notice of Issuance

cc w/enclosures:

See next page

SEE PREVIOUS NRC FORM 318 FOR CONCURRENCES*

no legal objection

OFFICE	ORB 1*	ORB 1*	ORB 1*	AD:OR:DL*	OELD*	
SURNAME	CParrish	MPossrs	SVarga	GLAinas	J Moore	
DATE	10/8/82	10/8/82	10/8/82	10/8/82	10/8/82	

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 Division of Licensing

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SURNAME	CParrish	WRoss/rs	SVarga	GLAinas			
DATE	10/7/82	10/7/82	10/7/82	10/8/82	10/8/82		

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Mail Code T15A - P. O. Box 570
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Division of Licensing

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cc w/enclosures:
See next page

OFFICE	ORB 1 CParrish	ORB 1 WRoss	ORB 1 SVarba	AD:OR:DL GZinas	OELD		
SURNAME							
DATE	10/ /82	10/ /82	10/8/82	10/8/82	10/ /82		

Mr. R. A. Uderitz
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Lower Alloways Creek Township
Municipal Hall
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Richard B. McGlynn, Commissioner
Department of Public Utilities
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Regional Administrator - Region I
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Lower Alloways Creek Township
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

PUBLIC SERVICE ELECTRIC AND 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. 47
License No. DPR-70

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Public Service Electric and Gas Company, Philadelphia Electric Company, Delmarva Power and Light Company and Atlantic City Electric Company (the licensees) dated October 7, 1982, 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;
 - 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.

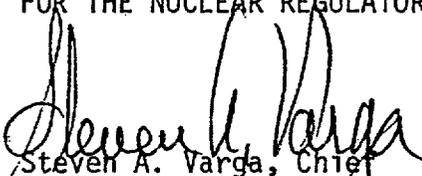
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-70 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 47, 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 the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 12, 1982

ATTACHMENT TO LICENSE AMENDMENT NO. 47

FACILITY OPERATING LICENSE NO. DPR-70

DOCKET NO. 50-272

Revise Appendix A as follows:

Remove Page

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Insert Page

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SALEM - UNIT 1

3/4 3-11

AMENDMENT NO. 47

TABLE 4.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
1. Manual Reactor Trip	N.A.	N.A.	S/U(1)	N.A.
2. Power Range, Neutron Flux	S	D(2), M(3) and Q(6)	M	1, 2
3. Power Range, Neutron Flux, High Positive Rate	N.A.	R	M	1, 2
4. Power Range, Neutron Flux, High Negative Rate	N.A.	R	M	1, 2
5. Intermediate Range, Neutron Flux	S	R(6)	S/U(1)	1, 2 and *
6. Source Range, Neutron Flux	N.A.	R(6)	S/U(1)	2, 3, 4 and 5
7. Overtemperature ΔT	S	R	M	1, 2
8. Overpower ΔT	S	R	M	1, 2
9. Pressurizer Pressure--Low	S	R	M	1, 2
10. Pressurizer Pressure--High	S	R	M	1, 2
*11. Pressurizer Water Level--High	S	R	M	1, 2
12. Loss of Flow - Single Loop	S	R	M	1

*For one time only, the surveillance interval for Channel I is extended eight days and for Channel III, two days.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 47 TO FACILITY OPERATING LICENSE NO. DPR-70

PUBLIC SERVICE ELECTRIC AND GAS COMPANY,
PHILADELPHIA ELECTRIC COMPANY,
DELMARVA POWER AND LIGHT COMPANY, AND
ATLANTIC CITY ELECTRIC COMPANY

SALEM NUCLEAR GENERATING STATION, UNIT NO. 1

DOCKET NO. 50-272

Introduction

Public Service Electric and Gas Company (the licensee) informed the NRC on September 30, 1982, via a telephone conference, that a malfunction occurred in the Pressurizer Water Level-High protection channel for Salem Nuclear Generating Station - Unit 1. This was followed up by a letter to NRC on October 7, 1982. The licensee has requested deferral of the CHANNEL FUNCTIONAL TESTS for Channels I and III until the next refueling outage which is scheduled for October 16, 1982.

Evaluation

Channel III of the Pressurizer Water Level - High protection function malfunctioned and was declared INOPERABLE on September 27, 1982, in conformance with the requirements of the plant Technical Specifications. ACTION NO. 7 of Table 3.3-1 of the Technical Specifications was placed into effect which allows continued POWER OPERATION until the next CHANNEL FUNCTIONAL TEST. This test on Channel III is due to be performed on October 14, 1982, including the 25% extension allowed by Technical Specification 4.0.2. On October 8, 1982, the Pressurizer Water Level - High Channel I CHANNEL FUNCTIONAL TEST is due. This test cannot be accomplished with Channel III in the tripped mode as mandated by ACTION NO. 7.

The licensee has stated that repair of Channel III is possible but that there is a concern that there exists an interaction with Channel I, when Channel III is put into operation, that was experienced on August 27, 1982, and caused a reactor trip.

The Pressurizer Water Level - High protection function is backup system to the Pressurizer Pressure - High trip channel. It requires two of the three channels to actuate in order to achieve a reactor trip. With Channel III in the trip mode, the voting logic has been reduced to 1 out of 2. This change increases plant safety and only reduces plant reliability since a spurious signal in either of the two remaining channels will trip the reactor.

Taking into consideration that this function is not a primary trip, that Channel III will remain in the tripped condition, and that twice daily channel checks will still be conducted, deferral of the CHANNEL FUNCTIONAL TEST for Channels I and III to the scheduled October 16, 1982 Refueling Outage is acceptable.

What is of real concern to the staff is the apparent interaction between Channels I and III. This appears to be counter to IEEE Standard 279-1971. When the plant shuts down, the licensee must investigate not only the cause of failure of Channel III but also the non-independence of channels. The results of the investigation into the channel interaction should be reported to the NRC prior to restart.

Summary

The staff has concluded that there exists acceptable justification to grant the Salem - Unit 1 request to defer the monthly functional tests on Channels I and III of the Pressurizer Water Level - High reactor trip to October 16, 1982. The licensee must, however, investigate the cause of the malfunction of Channel III and the interaction between channels and report to the staff prior to restart.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated, does not create the possibility of an accident of a type different from any evaluated previously, and does not involve a significant reduction in a margin of safety, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: October 12, 1982

Principal Contributors:

M. Wigdor

W. Ross

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-272PUBLIC SERVICE ELECTRIC AND GAS COMPANY,
PHILADELPHIA ELECTRIC COMPANY,
DELMARVA POWER AND LIGHT COMPANY, AND
ATLANTIC CITY ELECTRIC COMPANYNOTICE OF ISSUANCE OF AMENDMENT TO FACILITY
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 47 to Facility Operating License No. DPR-70, issued to Public Service Electric and Gas Company, Philadelphia Electric Company, Delmarva Power and Light Company and Atlantic City Electric Company (the licensees), which revised Technical Specifications for operation of the Salem Nuclear Generating Station, Unit No. 1 (the facility) located in Salem County, New Jersey. The amendment is effective as of the date of issuance.

The amendment revises the Technical Specifications to permit a one time deferral of the monthly surveillance requirement of Table 4.3-1 for pressurizer water level-high for a period of eight days for Channel I and a period of two days for Channel III.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

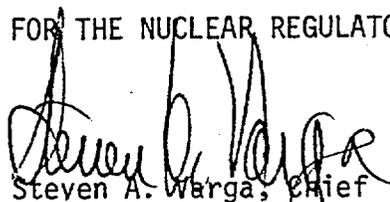
- 2 -

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated October 7, 1982, (2) Amendment No. 47 to License No. DPR-70, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the Salem Free Library, 112 West Broadway, Salem, New Jersey. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 12th day of October 1982.

FOR THE NUCLEAR REGULATORY COMMISSION


Steven A. Warga, Chief
Operating Reactors Branch No. 1
Division of Licensing